# Litigation and Science

**Genetics in the Courts**. HENRY M. BUTZEL. Mellen, Lewiston, NY, 1987. xxii, 801 pp. $89.95. Studies in Health and Human Services, vol. 9.

It is a commonplace of discourse about law and science that courts become enmeshed in a web of concepts they cannot understand or properly apply when they try to use the latest scientific developments to aid their decision-making. Unfortunately, they often have little choice but to make the effort. Our society, as de Tocqueville noted, sooner or later turns most moral questions into legal ones, and that tendency has not ended—quite the contrary is true—with the phenomenal growth of applied science, of science intersecting with our litigious society. Litigiousness necessarily leads to more judicial decisions, for the courts are expected to decide the concrete cases that come before them. "We can't understand the issues" might state a fact that leads to bad results, but it is not considered an adequate excuse for refusing to decide.

Thus it should have come as no surprise to Henry M. Butzel, who has written a massive volume entitled *Genetics in the Courts*, that courts that need to understand aspects of the science of genetics in order to decide the cases before them often evince only limited comprehension of the scientific issues involved. Butzel, in fact, admits that the gap between a rapidly moving science and a stumbling, misinformed legal system is an inevitable one; but at the same time, he repeatedly urges the education of judges to a better understanding of the scientific issues that come before them. No one could quarrel with the notion that it is better if judges understand the issues before them than if they don't. Butzel's own treatment—and it is a comprehensive one—suggests, however, that what he urges is impractical. Geneticists themselves, he reminds the reader over and over, have sharp disagreements—on "what is meant by 'intelligence' in a genetic sense" (p. 149); on "the exact processes of evolution" (p. 458); or on whether "there is a strong correlation in criminal behavior between . . . adopted children and their natural fathers" (p. 610).

This is not, of course, meant to challenge the proposition that there are in genetics, as in all areas of scientific endeavor, areas of substantial agreement. Courts, however, rarely have difficulty in applying scientific principles that are widely accepted; expert witnesses, administrative agencies, and other outsiders are of enormous assistance in this task. The problem, rather, is the difficulties they face when called upon to choose between competing theories, to act in areas on the frontier of a scientific field, for then they are often faced with batteries of experts staking out starkly different positions. In such cases, in other words, the courts must do more than try to apply known and understood concepts to the factual situations before them; they must select the proper concept to apply, notwithstanding the sometimes bitter debate in the scientific community over which is a better theory. Certainly it is true, as Butzel notes in apparent surprise, that "an all important factor in any law suit involving genetics . . . may be not just the facts, but also the court in which it is brought!" (p. 736). But lawyers have known this and struggled with it for generations. No one should expect that the growing litigation calling upon judges to apply a scientific knowledge they do not possess would make matters better.

That, however, is not a major criticism of Butzel's work, because recommendations for alleviating the problems he sees are not the main part of his work. *Genetics in the Courts* is meant primarily as a reference or teaching tool, a computer-aided compendium of virtually every case Butzel was able to discover in which the courts have been called upon to answer a question by drawing in part on aspects of genetic theory. Thus the book includes issues for which a detailed knowledge of genetic science is not needed—cases, for example, on whether adoptive children should be permitted to learn the identities of their birth-parents—and cases in which the knowledge is arguably crucial—cases, for example, on the proof of paternity or on forensic evidence in criminal cases. As a tool for reference, the book is potentially quite useful, for Butzel has discovered any number of cases, some of them quite obscure, that illustrate or emphasize interesting points of law. As a teaching tool, however, it is somewhat weaker, not because a course could not sensibly be organized around it—on the contrary, the organization is fine—but because the book contains many of the mistakes that are common when those who are not lawyers write books about the law.

For example, in discussing *Little v. Streater*, a 1981 Supreme Court case involving blood-grouping tests as a means of excluding paternity, Butzel concludes that the decision prohibited the states "from exclusion of blood tests on the grounds that the accused is not able to pay for them" (p. 386). This summary omits the two salient features of the case: that the paternity action was brought by the state, not by a private individual; and that, as a matter of state law, an exclusion of paternity through blood-grouping tests was binding on the court. The holding, in other words, was much narrower than the proposition Butzel puts forward.

A second example is *McLean v. Arkansas Board of Education*, the first court challenge to a statute requiring the teaching of so-called scientific creationism in public school classrooms as a "balance" to the teaching of evolution. Initially, Butzel shows some confusion between the trial court's opinion and the action of the Court of Appeals, but that is almost certainly an error in editing. More interesting is his comment that the basis for decision was "not the question of First Amendment rights, but . . . whether creation science was a religion" (p. 446). He notes, correctly, that the judge apparently decided "that creation science cannot be legally found to be true science" (p. 451), but this is undoubtedly the most criticized aspect of the case, for that was not the legal question presented. The precise question, and the only one, was whether the teaching of scientific creationism violated the Establishment Clause of the First Amendment. In other words, the basis of the decision actually *was* "a question of First Amendment rights."

There are other errors like these, and even some legal terms defined incompletely in the glossary that ends the book, and the flaws are important ones. They are not fatal to the enterprise of gathering together all the case law dealing in any way with genetics, but they do call into question the book's ultimate usefulness as a teaching tool. Probably Butzel would have benefited from collaboration with a lawyer in completing the manuscript; then some of the more egregious misstatements would certainly have been avoided. That conclusion helps illustrate the truth of a part of his central message. Judges and lawyers, he says, should be educated by experts when they venture by necessity into the field of science. Similarly, scientists should be educated by experts when they venture by choice into the field of law.

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