

## Next Steps in the Schön Affair

**T**here has now been time to examine the findings of the Beasley Committee, the group assigned by Bell Laboratories to investigate charges of falsification in the work of a research group in which Jan Hendrik Schön was a leading participant. The report analyzes the work presented in 25 papers by Schön and various combinations of 20 colleagues. The task was a monumental challenge, and the committee met it admirably. Its conclusion, that Schön is guilty of multiple instances of scientific misconduct, is convincing. The committee also cleared all coauthors of scientific misconduct.

That does not settle the matter. Public interest in the case is intense: The research was an international effort, involving coauthors from several countries, and Bell Labs has earned a record for excellence. The work was published in a number of journals—including, prominently, this one. Strong interest of this kind yields hard questions. In response to one that is frequently asked: *Science* has a standing policy that all authors of a paper must agree to its retraction. Bell Laboratories is working with all coauthors to get such agreements for each challenged paper. If neither they nor we can secure them, we will move promptly to give notice, linked to the published papers, that the work has come under such serious question that it cannot be relied on.

We have been asked whether this sad incident has given us doubts about how well the peer review process at *Science* works. Unhappy experiences should generate efforts to learn from them, and we will use the report to evaluate what we might have done differently in these cases. That said, we would reiterate that it is asking too much of peer review to expect it to immunize us against clever fraud. In other respects, our faith in our quality-control process remains solid. Reporters have also told us that individual scientists have charged us with being too interested in “flashy” papers, and thus overeager to publish these. That is nonsense. We do want important papers of high quality, and our peer reviewers told us in no uncertain terms that these were both.

There's another critical question, and it's one the Beasley committee raised but left hanging, after questioning whether the coauthors exercised “appropriate professional responsibility” in ensuring the validity of the papers' claims. In dealing with authorship issues in other institutional roles, I have encountered vigorous arguments on both sides of this question. One claims that given the interdisciplinary nature of science and the coparticipation of people with various specialties in a project, each author cannot be expected to take responsibility for the validity of the results. Another asserts that because all coauthors receive professional credit for the entire product, all should share the consequences if it is invalid.

It's plain that the Beasley Committee struggled honorably with this problem. But its difficulty is well attested by some of its own language with respect to coauthor conduct: “There is no implication here of scientific misconduct; the issue is one of professional responsibility.” That sounds like a distinction without a difference: This is, after all, about science. How could a clear failure of “professional responsibility” in a scientific matter not raise the issue of scientific misconduct?

The difficulty the committee encounters in this domain reflects, as their report recognized, the absence of a community consensus about the nagging issue of coauthor responsibility. It's hard to find a silver lining in the cloud cast by the Schön affair, but it would be good if it were to trigger a thoughtful examination of the issue. The committee said it did “not endorse the view that each co-author is responsible for the entirety of a collaborative endeavor . . .” Well, isn't each one getting part of the credit? And if the benefits are enjoyed jointly and severally by all authors, then shouldn't the liability be joint and several too? The answer has to come in the form of a decision by the scientific community, which now needs to attend to the task. The Ethics Committee of the Panel on Public Affairs of the American Physical Society is well suited to the challenge, and the Beasley report has supplied it with good starting material.

**The hard question is this: If the benefits of authorship are enjoyed jointly and severally by all the authors, shouldn't the liability be shared in the same way?**

**Donald Kennedy**