wants to buy is imported. It has been to a considerable extent the vitality of American science that has provided the techniques and inventions that other countries have developed, particularly in Asia, and that have displaced American manufacturing superiority. Many American patents were bought, hat in hand and for the asking price, from American companies that did not want to make the long-range effort necessary to develop them into products for the market.

The difficulty seems systemic and philosophical, rooted in the next-quarter's-bottom-line mentality of corporate America. To try to change that mind-set to something more forward looking seems both difficult and dangerous, because the commitment to it is deep, sincere and irrational. But physicists only accept at their peril the widespread notion, seemingly very prevalent in Congress, that it is somehow their fault—for not being "practical" enough—that American industry has lost its edge. Maybe for a few decades the smart people went into physics, leaving the corporations and the agencies to be run by those who weren't up to the job.

David Montgomery
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Right to Reply? Writer Replies

Jack Sandweiss, the editor of *Physical Review Letters*, concludes his defense of *PRL*'s selection policy (April 1994, page 15) by stating that the journal is seeking to make the system work even better. May we suggest introducing something many would consider essential for any scientific journal, but which is apparently missing from present *PRL* policy—a guaranteed right of reply in the journal to criticism published in *PRL*? It is necessary to ask for this right to apply whether or not the criticism is designated as a "comment." According to correspondence we have had with *PRL* editors regarding a comment on one of our *PRL* papers, current procedure allows a comment to be "restyled" as a "stand-alone letter," thus permitting a response forwarded as a reply to this "letter" to be rejected as though it were itself a comment.

The benefits of right of reply are self-evident. Criticism is fine. A strong reply might refute the criticism. A weak reply would tend to endorse it. In either case, understanding —which is after all the reason for the journal's existence—should move forward. As things stand, absence of a reply could reasonably be taken to imply that the authors of the original work have no response to make, even when they may in fact have attempted vigorously to respond to what they see as misunderstandings and factual errors.

Duncan Bryant
Robert Bingham
Rutherford Appleton Laboratory
Chilton, Didcot, Oxfordshire, UK
Umberto de Angelis
University of Naples
Naples, Italy

Sandweiss replies: The general question of comments and replies is one of those areas in which different desiderata are most often in conflict. The present policy in *Physical Review Letters* requires that a comment either correct or criticize the letter to which it refers. Clearly such corrections or criticisms are important to the readers of the journal. Comments that extend or amplify the letter would also be of value, but the practical complications have led us to exclude such comments.

When a comment is received, the authors of the "target" paper have the right to see the comment before it is published and to submit a reply. The comment and the reply are subject to peer review and may or may not be accepted. In most cases, but not all, a published comment is accompanied by a reply. When a regular letter criticizes a target paper, the comment–reply format is not used, but the authors of the target paper have the right to submit a comment on the critical letter.

Duncan Bryant and his colleagues believe that those authors should have a guaranteed right of a published response, which means that there would be no peer review of the response. We believe that this is not in the best interests of physics, nor is it the best use of space in *Physical Review Letters*. The referees and the editors may be convinced that nothing is added to the discussion by the response. Finally, I note that the authors of any response that is rejected have the right to appeal that decision to a divisional associate editor and, if necessary, to the editor-in-chief of the American Physical Society's publications.

Jack Sandweiss
Physical Review Letters
Ridge, New York

Reflections on Adel, Lawrence

Seeing the account of the death of Arthur Adel (May, page 83) reminded me of an incident during the summer of 1933. I was then a beginning graduate student at the University of Michigan, which was well known for its summer program in physics.

Ernest O. Lawrence, who had received the Nobel Prize for his work on the cyclotron, was at Michigan helping the staff and students construct and assemble the university's new cyclotron. One evening Adel was giving a lecture based on the research he had completed for his PhD. His topic was the composition of planetary atmospheres. In the course of his lecture he used the word "albedo." In a room packed with senior staff members, graduate students and a few Nobel Prize winners, Lawrence said: "Excuse me. I should have known, but what does 'albedo' mean?"

That incident taught me a lesson that has stayed with me, although of course it was not so intended. Will Rogers remarked, "You know everybody is ignorant, only on different subjects." It is a lesson we could all take to heart.

Virgil E. Bottom
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Why Do Vines Twine?

The May 1995 issue (page 26) carried interesting information about how a baseball curves. Now I would like to read a similar article about why "twining vines" twine. It has nothing to do with the Coriolis force; neither is it determined by touch. Who knows?

Grote Reber
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Correction

September, page 89—George Smoot was incorrectly identified as "COBE project director" in the review of Alan Dressler's *Voyage to the Great Attractor*. John Mather directed COBE as project scientist; Smoot was principal investigator on the differential microwave radiometer. ■