

letters

Judging by events at this University, there remains little doubt that union representations and collective bargaining operate in the interests of the majority, favoring the preservation and growth of academic mediocrity. As the acid erodes, principles of integrity and distinguished scholarship must inevitably suffer or flee elsewhere. According to the current union model, installed at this University, it seems clear that scientists will be the principal victims.

Unless we have the courage and foresight to fight for academic freedom, what has happened already in the public schools will undoubtedly become widespread in colleges and universities. The loss will be tragic and the nation will suffer irreversible harm.

EDWARD R. HARRISON
University of Massachusetts
Amherst, Massachusetts

References

1. J. Walsh, *Science* **220**, 1026 (1983). E. R. Harrison, "Threat to Academic Freedom," *Chronicle for Higher Education*, 1 June 1983.

Help for general meetings

In his retiring address as president of APS (April, page 35), Maurice Goldhaber laments the decline in attendance at APS general scientific meetings while noting that specialized meetings have increased in attendance. He goes on to deplore "the tendency to fragmentation that this reflects, because a good deal of the strength of a scientist comes from being not just a specialist but also a generalist." At the risk of seeming old-fashioned, I concur with this sentiment; I would therefore like to offer the following suggestion, which might perhaps encourage increased attendance at the general meetings.

Each year, at one of the large APS meetings (New York or Washington), there might be a special session devoted to "The State of Physics," where the major developments in the field during the preceding 12 months are summarized and presented in a way to appeal to the nonspecialist, as in a typical physics-department colloquium. More specifically, the session could consist of four invited talks with the speakers being the chairmen of the respective APS divisions whose research highlights are being summarized. Each year, a different group of four divisions (out of the eleven APS divisions) could be represented. In their state of physics addresses, the speakers might also outline near-future goals in their fields to look forward to as a result of the

recent developments presented.

This innovation to enhance our physics world-view would likely increase attendance at the general APS meeting by at least one specialist, with my presence.

MORRIS PRIPSTEIN
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9/83

More on weight

The letter from Francis Throw (July, page 98) contains a sentence to which I would like to respond. The sentence concerns usage of the word "weight," and is, "After all, the word had already been current for centuries before Newton said ' $F=ma$.' That reminded me of a limerick I wrote twenty years ago, so here it is:

I wrote that it was a great day
When Newton said, " F is ma ."
Alas, he did not;
He said, " F is p -dot"
And my doctorate drifted away.

Other than that, I agree with the writer's suggestions, and wish him well.

JOSEF G. SOLOMON
Roosevelt, New Jersey

9/83

Let 100 flowers bloom

"Power tends to corrupt; absolute power corrupts absolutely." Yet we in the "rigorous" sciences routinely lay enormous burdens of power on editors and referees of our journals.

Consider the anonymous referee. We all know horror stories, fact or fiction, about how that position can be abused. I like this one, more fact than fiction, which shows how things can go awry even if all persons behave in a manner to satisfy Diogenes himself.

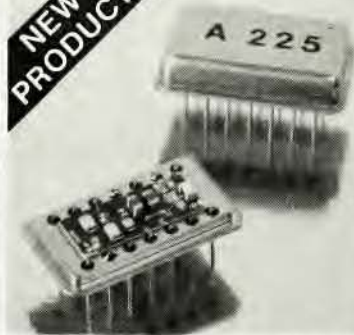
Referee A says: "Reject this article; the results are wrong." Referee B says: "Reject this article; the results are not new." Impeccably inscrutable editor transmits this melange to author. Author suspects superposition of A and B is at best incoherent and at worst tends to cancel rather than add. But she can't make the experiment; she has no coordinates for A and B. Editor ignores suggestion that he could do the experiment and says "Look, these guys are experts (your peers!). Surely you don't ask me to challenge them when they're unanimous!"

But arguments for anonymity are strong, too; no one expects established journals to tinker much with the status

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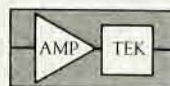
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quo. (The "double blind" option recently adopted by *Physical Review* is a brave step, but it makes only a tiny correction in the imbalance of power.) Still, journals proliferate and physicists love to try new ideas, so one dares to hope for change. I call for establishment, under a provisional five-year charter, of *Physical Review E*: "*Let 100 Flowers Bloom Physics*," as a test bed for innovation in science journalism. Here's how it might work:

An article accepted for PR E gets, on a separate line after name(s) of author(s), "accepted by Personage." Here "Personage" is the name of one and only one (no committees!) member of the PR E editorial board. Addenda, errata and comments will cite this article as if it had appeared in a journal called "*Physical Review E (Personage)*." If an accepted article in PR E insults your intelligence, you might hassle the Personage associated with it; you'll be gentle, though, lest you get put on the board yourself. If, as has happened in some medical journals, an accepted article is later exposed as fraud, Personage will expect to feel real heat.

An article rejected by PR E and then abandoned by its author(s) disappears without a trace. Up to this point, one can fly "single" or "double blind." If not so abandoned, the title, author(s), abstract and "rejected by Personage" appear in a "rejected articles" section of PR E. This section is not indexed. Comments, errata and other references to rejected articles are forbidden. The board may adopt other measures to help fame and fortune elude authors in this section, though not by ridicule. A subscriber wanting to read a rejected article petitions the editor-in-chief (tearout form provided). This person, considering the weight and number of such requests, decides either to send out individual copies or to promote the article to a "subscriber's choice" section of PR E. Personage may append a rebuttal to an article so promoted or decline to be further associated with it. In the unlikely event that a promoted article is later cited by the Nobel committee, Personage may assume that somebody will search through the unindexed abstracts and expose him.

With bad judgment so difficult to hide, there will surely be articles for which neither a "reject" nor an "accept" vote can be found. These are what it's all about, and the only constraint on editorial policy is that they should be treated better than rejected and worse than accepted articles.

"How're we doing?" is an always-relevant question at PR E. Frequent reports describe how material is moving through the pipeline and how the

various sections compare in the Science Citation Index. The Letters department of PHYSICS TODAY bulges with gripes and suggestions for PR E. Altogether, one foresees five indecorous, even raucous years. So delightful, in fact, that we'll wonder how life was possible before PR E.

Obviously I'm not serious about the name; something more sober than *Let 100 flowers bloom* must be found. I put it in only to remind us all that noble endeavors can just fail. But some of you need no reminder; you're itching to jump in and tell me PR E can't work. Feel free. To start the discussion, let's try to agree on the maximum credible disaster for the experiment.

Some will say it is this: An invidious author will vie for a "rejected article" just to get that name and assassinate Personage. If that's a serious possibility, then the scheme is dead. But I don't believe it. A guy who can afford a Mafia hit contract can afford a spy to penetrate secrets in the editor's office; referees are not now dropping like flies.

If you follow me on that, an alert editorial board can handle lesser abuses. An author floods "rejected articles" with abstracts on triodynamics? Limit how often a person may appear in that section. A subscriber stuffs the ballot box with phony petitions for a rejected article? The editor-in-chief was not born yesterday. And so on.

So the maximum credible (to me) disaster is that five years later we've all learned that the now-existing system for sharing power is the best one possible. Some persons already know that, of course. For them the maximum credible benefit of the experiment is the chance to crow "I told you so." But some of us don't know it yet; for us even a failure is worth the effort. But hey, physics fans! What if there is a better way?

R. W. HARTUNG

East Lansing, Michigan

9/83

Complaints from abroad

PHYSICS TODAY has, on a few occasions in the past, published letters from readers giving accounts of adverse circumstances encountered in accepting positions abroad. In so doing, you render a great service to the scientific community.

We very much regret to have to report certain experiences encountered at the Institute of Astronomy of the Swiss Federal Institute of Technology (ETH) in Zurich, Switzerland. We have both, independently, encountered very serious situations involving misrepresentation and professional discourtesy which would, no doubt, come as a shock

to the many people who believe, as we once did, that Switzerland is a country with impeccable standards of honesty and integrity.

We emphasize that we are not concerned with sensationalism and, for this reason, we will not attempt to detail the long list of unpleasant incidents to which we were subjected; the following two examples should make the situation abundantly clear. Prior to our acceptance of positions, we were both given verbal assurances, from the head of the Radio Astronomy Group acting on behalf of the head of the Institute, that our stipends would be good by Swiss standards and commensurate with the senior positions that we already held. Stipends at ETH are based upon fixed salary scales with additions which, in principle, reflect scientific seniority, age, family size and so on. After we had been at ETH for a few weeks, we discovered that we were both receiving salaries comparable to that of a technician in the Institute who was still working on his doctorate. One of us (Spicer) went to ETH with the promise that he would receive support to initiate and to head a Plasma Astrophysics Group within the Institute of Astronomy. The other (Barrow) went to work on an experimental project with the understanding that equipment and support would be available. Neither of these assurances proved to be true.

We both endeavored to have these matters rectified, working our way through the appropriate administrative hierarchy until we eventually reached the president of ETH. At each stage, we encountered no more than token interest and negative reaction. Only after the first threat of legal action did Spicer eventually receive a significant salary adjustment. Barrow did not take legal action and so never received any significant salary increase. Even though we were both able to establish, beyond all reasonable doubt, that the blame for these misrepresentations and other discourtesies lay with the head of the Institute of Astronomy and the head of the Radio Astronomy Group, no action was taken; not even an apology was forthcoming. We were left with the impression that we were dealing with an old-fashioned club in which all of the Swiss and a few privileged German-speaking foreigners were life members. Other foreigners were merely tolerated as intruders to be used as cheaply as possible, an attitude which is not uncommon in other fields of endeavor in Zurich.

To give some idea of the seriousness of these matters, Spicer went to ETH on a regular appointment but resigned after little more than one year. He took legal action against ETH, who eventually made an out-of-court settle-