What's a Scientific Journal For?

Opinions about what scientific journals like ours are for, and what sort of things should and should not be published in them, seem to range between two poles. People at one pole opine that the *Journal* should primarily serve as an *archives*; people at the other think that it should primarily serve as a *forum*. Some see a tension between these views.

Before I became editor, someone took the trouble to remind me of the importance of maintaining the archival nature of the *Journal*, and thereby its dignity. I hadn't been thinking of dignity as a desirable and distinguishing attribute among journals or that such dignity is a function of their archival nature. But there it was, so I looked it up. "Archives" denotes a body of records and the place where they are kept, a repository of information worth, by its nature, keeping and preserving. It connotes a serious place and a serious undertaking. The word "archives" thus conveys a certain dusty dignity. Witness the many scientific journals whose names begin with "*Archives of* . . .," as if they provide a repository of truth to be consulted for generations to come.

My guess is that these attributions go back a long way, to when literacy was confined to an elite and manuscripts were precious. The written word was serious, authoritative, powerful, and often sacred. Those who could decipher and interpret it deserved respect. Texts were taken to heart and discussed repeatedly over a long time. Moses could say, in response to a question from the audience when he presented the tablets to the Israelites, "As a matter of fact, it is written in stone." Serious discourse included the challenge "Where is it written?" and the response "There it is in black and white."

These associations were diluted by the flood of text brought on by printing and were overwhelmed as the secular replaced the sacred, but a residue of reverence remained and still remains. The ease of publication and the spread of literacy allowed for the incursion of still more impiety and irreverence. Old values carried by the written word needed to be protected—the serious from the frivolous, the cosmic from the mundane,

the lasting from the fleeting—and preserved. But times changed and printed text became generally ephemeral, for the masses, even for entertainment.

We all want our work and our words to be taken very seriously and to be seen as providing deep truth, as being important, and as being worth preserving for future generations. The secular vehicle we rely on as scientists to help maintain the dignity of our words, now that publication itself is inadequate, is *gravitas*. By convention, and myth, we stick to the impersonal, the objective, the disciplined, the consequential—and their presumed association with *veritas*. Not just "There it is in black and white," but "There it is, with many authors and in passive voice, in a respectable journal, in language not to be understood by the uninitiated, and with statistics to bear witness to its significance." Doesn't hurt to throw in a little Latin occasionally either.

There are several problems with this approach. The first is that it doesn't work, and, consequently, the rest don't matter. Scientific papers are in fact ephemeral anyway; their half-life in collective memory, with rare exceptions, even in historical reviews, is remarkably short. Your paper, even if it is the sensation of the year, is very unlikely to be cited with praise 20 years from now and even more unlikely to be cited with criticism. This seems to be getting worse with the accelerating rate of progress, or at least of publication, and papers online don't even bother to go back more than a few years (I just overheard a young scientist refer to a "classic paper of 1998").

Even if we accept the view that scientific journals should primarily serve as archives, the question arises: "archives of what?" Archives of fact or truth, per se, is difficult (and likely impossible) to achieve. Of results? Of lore? Of development of ideas, of information and its integration, of issues and their resolution or reshaping? Of the feel of the work in the field? Of the experience and concerns of people in the field? The idea of journal as archives thus extended moves toward the idea of the journal as forum.



I looked up "forum" too. "Forum" denotes the marketplace or public square of an ancient Roman city and, of greatest relevance here, a means through which discussions of matters of public interest can be conducted. The latter and related usages tend to refer to serious matters and formal arrangements, but the original meaning adds a layer of busy bright bustle and noise. There is a connotation of exchange and, to me, of vitality, very much to be desired, in association with serious business. There is even room for some misunderstanding, some shouting, some whimsy, as the business proceeds. A good journal should provide such a place of exchange and a means through which discussions of matters of interest can be conducted (indeed, it should foment such discussion) as the business of science proceeds.

I believe the dignity of the *Journal*, insofar as that phrase has any meaning, derives from the quality of the science it presents. Yes, I want articles in the *Journal*

to be cited 20 years from now, but I want, even more, that it be read today (and cited next year). I believe that the *Journal* should serve as archives that explicitly include the extensions listed above, and a forum for exchange of information and views and for the expression of our field's and our subscribers' vitality. To that end, I will commission pieces of various kinds other than reports of original research (such as reviews, historical pieces, commentaries, technical comments, and perspectives), and I invite you to submit other material, in addition to reports of original research, that you believe would be of interest to the readers of the *Journal of Biological Rhythms* (such as those mentioned, as well as letters containing facts, suggestions, criticism, whimsy, or opinion).

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