

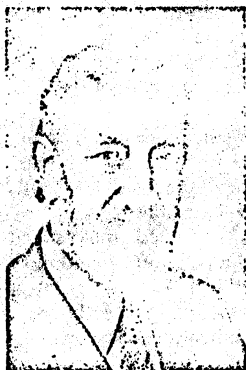
Scientific Journals: An Endangered Species¹

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Are scientific journals an endangered species? I will express my opinion in the current idiom: *you'd better believe it.*

In my position with the American Society for Microbiology, I am responsible for the management of nine scientific journals. In 1975, we published about 18,000 text pages in these nine journals and another 3,000 pages of books. For the past 15 years, I have spent most of my waking hours thinking, worrying, and scheming about ways to pay the costs of producing the ASM publications.



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Let us look at this cost problem, because it is the *cost* that is endangering the species.

In 1965, it cost our Society \$452,384 to produce its publications. In 1975, the cost was about \$2.6 million. True, there has been a substantial increase in the number of pages published, from 7,000 in 1965 to 21,000 in 1975; however, with more pages in more publications, we can and do attract more subscribers (income). But what is endangering us is the tremendous increase in the *cost per page*. In our basic journals, the per-page manufacturing cost has gone up by 30% in just the past two years. As most of you know, the primary culprit in recent years has been the skyrocketing cost of paper, greatly exacerbating the debilitating effects of our Nation's woeful inflationary problems.

These increased per-page costs certainly do *not* attract increased numbers of subscribers. On the contrary, these costs, which represent the largest expense component in journal publishing, must in large measure be matched by income from subscriptions, which is the largest income component in journal publishing. And, as subscription prices go up, the number of subscribers tends to go down.

The nonmember subscription price for the *Journal of Bacteriology* in 1965 was \$28; now

it is \$90. If present trends continue, it is quite possible that another trebling of the rate will be required in the next 10 years, giving a 1985 subscription price of about \$270. At such a price, the last of the individual subscribers will have long since been priced out of the market, as will all but the larger institutions.

But will these trends continue? If they do, the scientific journal as we know it today, that is, as a package of research papers which is distributed each month directly into the hands of many of the individuals who are peers of the authors and into virtually all of the departments and laboratories involved with similar research, will no longer be endangered; it will be extinct.

So let us examine any alternatives that might be available whereby we might reverse the current trends.

First, however, we should ask the question: should the scientific journal as we know it be preserved, or should we assume that a new and better (and more economic) system of scientific communication will become available to us?

One rather interesting answer to this question has been offered by Professor Hubert Lechevalier, of Rutgers University, in a Letter to the Editor of *ASM News* in a recent issue (February 1976). Dr. Lechevalier says:

Obviously the only solution to our publication problem is to stop publishing. This, of course, is about as easy to do as it is for the USA and the USSR to stop meddling in other countries' affairs.

The proposal that I have the honor to draw to the attention of the members of our Society may not be perfect but still may have some merit. In the USA we should disseminate information only through *The New York Times*. If this newspaper would devote only one page a day to microbiology, our problems would be solved. Of course, I don't mean a full page, but only what would be left after advertisements of microbiological products would have been assured.

With the limited space available, *The New York Times* reporters would be forced to practice brevity, a virtue which so far has escaped them, thus leading as a by-product to an improvement in the quality of this outstanding newspaper.

At the risk of offending several of my colleagues on this panel, and obviously the good Professor Lechevalier, I will give my opinion without qualifiers: the scientific journal, and

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