Journals Fear Damaging Decline in Page Charge Revenues

Executives of some of the nation's most prominent scientific journals are concerned that indirect effects of budget cuts imposed on the scientific community this year may drive their publications into the red and thus force them to reduce the volume of research reports which they can publish. Their concern is provoked by indications that many institutions, granting agencies, and grantees—hardpressed by the budget squeeze—may refuse to honor the so-called "page charges" which provide a major source of income for many journals. The page charges are voluntary, but most institutions, companies, and agencies supporting research have honored them in the past.

Evidence is fragmentary, but there are indications that payment of page charges to some journals is on the decline. David Gushee, publications manager for the American Chemical Society, reports that nine ACS journals have recently been collecting only 65 to 67 percent of the page charges levied, compared with a 75 percent rate in most recent years. And H. William Koch, director of the American Institute of Physics, says that six AIP-owned journals have experienced a "slow decline" in the percentage of page charges honored—from an average of 78 percent last year to an average of 75.2 percent in the first 8 months of 1968.

No one seems certain at this point that the apparent downtrend is significant, but concerned editors have held two emergency meetings on the matter and have expressed fears that the recent decline in honoring of page charges is a harbinger of a much more precipitous drop to come. The AIP and its member societies, which pioneered the page charge concept in the 1930's and which collected \$2.5 million in page charges last year, seem particularly worried. S. A. Goudsmit, editor-in-chief of the American Physical Society publications, The Physical Review and Physical Review Letters, warned in a recent editorial that failure to honor page charges "will have a disastrous effect on the continuation of our journals" because "about 70 percent of the cost of publishing comes from page charges and only 30 percent from subscriptions." Publishers of various journals in biology, mathematics, and earth sciences told Science they have not yet detected a clear-cut downtrend, but they, too, are concerned about what the near future may bring.

Much of the concern stems from indications that the major parties involved in paying page charges—namely the research institutions, the granting agencies, and the individual investigators—have concluded that page charges are a relatively painless area for making budget cuts. They apparently reason that the journals will publish the articles even without payment, or that a deferral of publication until budget problems ease is tolerable.

Gordon L. Walker, executive director of the American Mathematical Society, says more than 50 mathematics departments have told him that neither they nor their institutions will pay publication charges this year. And F. Peter Woodford, chairman of the Council of Biology Editors, says that "lower echelon" officials at the National Institutes of Health, in the course of negotiating grant reductions this year, have been recommending the elimi-

nation of page charges. Even without such advice, Woodford adds, "on grounds of sheer common sense, individual grantees could figure for themselves that this might be an area of least pain for cutting."

Widespread refusal to pay page charges could affect a large number of journals. A 1966 survey of 362 journals, conducted for the National Science Foundation by Charles W. Shilling, of George Washington University's School of Medicine, found that 76 levied page charges while 17 others charged for "excess" pages. The charges ranged from \$6 to \$60 per page, and journals reported collection rates ranging from roughly 50 percent to more than 80 percent. Payment was generally made by a federal granting agency or by an investigator's university department, or, rarely, by a university administration. (Science does not levy page charges.)

The rationale for making page charges is that no research can be considered complete until the results are a matter of record, and that publication serves not only the reader, who must pay for his subscription, but also the author and his institution or sponsoring agency. Moreover, without page charges, many journals would have to increase their subscription rates markedly, thus driving away readers, reducing the flow of information, and further aggravating the financial problem. Most editors estimate that page charges represent less than 1 or 2 percent of the cost of the research being reported.

Editors queried by Science insist that the payment or nonpayment of page charges has never affected editorial acceptance or handling of articles, but they hint that this policy may change in the near future. No editor has yet taken drastic steps to compensate for lost page-charge revenue, but some journals are demanding to know at an earlier stage in manuscript handling whether page charges will be honored—and the implication is that too many refusals will provoke strong action. In an editorial prepared for Physics Today, Koch, the AIP director, warns that "AIP and its member societies may have to reject articles on financial grounds, to avoid very serious deficits, by making the payment of page charges mandatory."

Steps being considered by various editors include limiting the number of pages available for nonpaying articles; reducing the size of the journal by rejecting more papers or backlogging them; increasing subscription rates and charges for reprints or other services; using society dues or reserve funds to cover deficits; and obtaining "one-shot" gifts from industry or government to tide them over the crisis. Some publishing officials talk wistfully of obtaining firmer support from the federal government, but most editors seem to shy away from direct federal subsidies for fear it would lead to government control of the journals.

It probably won't be known for several months whether page charge defaults constitute as serious a problem as many editors fear. But with inflation continuing to drive up the cost of publishing, and with a drop in scientific advertising this year (also influenced by the budget cut), even a small decline in page-charge revenues could hurt,—Philip M. Boffey

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