
Citation Searches Can Be Powerful Tools In Combating Redundant Publication

Reprinted from *THE SCIENTIST*® 7(8):12, 19 April 1993.

Recently in *The Scientist* ("Vigilant Science Journal Editors Fight Redundancy," March 8, 1993, page 1), writer Paul McCarthy focused on a widespread and apparently growing concern among publishing professionals: the attempt by some scientists, as McCarthy put it, to "add heft to their c.v.'s" by getting two or more articles into print that are based on a single research finding. He made the point that today's highly competitive job market has exacerbated the ongoing duplicate publishing problem by making many of these investigators downright gluttonous in their efforts to rack up long lists of publishing credits.

The article correctly pointed out that the problem is by no means a new one. This situation has existed for a long time; it can't simply be chalked off as a transient byproduct of a depressed job market, reduced grants, or the increasing number of scientific journals being published.

Actually, the problem of redundant publication—intentional and otherwise—has been plaguing the science community for more than a quarter-century, and its presence certainly has not been confined to the United States. Its prevalence in

Great Britain, for example, was the subject of a classic 1964 study by John Martyn, then research director of the Association of Special Libraries and Information Bureaux. In Martyn's survey, 25 percent of U.K. scientists reported unwitting duplication of research already reported in the literature (J. Martyn, "Unintentional duplication of research," *New Scientist*, 377:388, 1964).

To me, the problem of redundant and even plagiaristic publication was evident back in the 1950s, when I was launching the Institute for Scientific Information (ISI). In fact, it motivated some of my earliest experiments with the *Science Citation Index (SCI)* (E. Garfield, "Citation Indexes for Science," *Science*, 122:108-11, 1955). Ten years later, my follow-up report in *Science* (144:649-54, 1964) referred to a published apology in the *Journal of Biological Chemistry* (237:3315, 1962) by R.H. Mazur, a researcher specializing in the detection of peptides, nucleotides, and other compounds.

Mazur had the distasteful task of stating publicly that he and his colleagues had inadvertently published a duplication of a detection method reported in 1958 by D.P. Schwartz

and M.J. Pallansch in *Analytical Chemistry* (30:219). Subsequently, in an essay published in the July 28, 1971, edition of *Current Contents*, I showed how Mazur and his associates—or their editor—could have used the *SCI* to determine the prior publication's existence. Had they used any of six papers cited in common as starting points for both research reports, a citation search would have exposed the duplication.

Authors and editors today could perform a similar procedure using the *SCI* to significantly reduce the occurrence of redundancy, be it intentional or unwitting. Even better, compared with the old days, the double-checking could be accomplished much more easily using either the *SCI*'s on-line version, *SCISEARCH*, or its CD-ROM version.

In the case of putative plagiarism or similar outright duplications, conducting a boolean search of several cited references would retrieve a series of related records. This process

is easy enough and should be part of the journal editor's routine preparation of a text for publication; it also would serve authors well, in my opinion, to run such a search prior to submitting a paper to a journal—or, better yet, before fully embarking on a research project.

In the *Current Contents* essay mentioned previously, I remarked: "No reputable scientist wants to duplicate unwittingly the work of another.... There is little enough time and money to learn the endless mysteries of nature without unintentionally repeating work already done." My advice, of course, is directed at those reputable scientists.

As for the few disreputable investigators who thrive on redundant publication—they probably won't listen in any case. But they might consider that the failure to cite other authors might mean that their own work will be missed in a citation search.