Incomplete Citations and Other Sources of Bibliographic Chaos

Shoddy citations cost *everyone* time, money, and energy. In the average library and research lab, an incredible percentage of staff time is expended in completing incomplete citations\* at the expense of more productive tasks for professional librarians and technicians who are in increasingly short supply.

Unquestionably, the most frequent single cause of this enormous waste is the journal publisher. Not only is there no universally accepted form for bibliographic citations, but there is a high degree of irresponsibility, especially in printing of reprints, Almost every week I receive reprints of journal articles which not only do not provide the correct citation at the beginning of the article, but do not even provide enough information so that the citation can be figured out and typed at the top. This means that each time the paper is cited or mentioned, a whole chain of library research activity is generated. Someone has to provide the missing volume numbers, page numbers, etc.

I mention volume and page numbers because these are the elements of information most frequently omitted. It is a pity that many journal editors do not appreciate a fundamental notion of information theory, that the application of *redundancy* is necessary for error-free codes. The volume number is an added degree of redundancy which reduces the possibility of error or offsets the effect of errors, which are especially frequent in the cited year.

In computer and library systems, the volume-year correlation also offsets the effect of an ambiguous journal abbreviation. AUST J PHYS 1967, 1955 may mean the Austrian Journal of Physics,

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page 1967, year 1955, or Australian J of Physiology, page 1955, year 1967, etc., etc. Simple probability considerations make it rare for two similarly abbreviated journals to use the same volume number in the same year.

On the more positive side, dozens of forward-looking journals include the necessary citation at the head of each article. Others do not begin articles on the tail end of other reports. Incidentally, this practice has been shown to be more costly anyhow since changes must be made in running off reprints. The amount of space saved, in comparison to the problems raised, is simply unjustified.

Even a large circulation journal such as *Science*, published as a service to members of AAAS, ought to consider the cost to the entire scientific community of such practices. Editors might also consider that the availability of copying machines makes it *more* likely that a reader will Xerox the entire article if he has to Xerox one page of that article to save another article which begins at the middle of the last page of the article he wants.

Since an average of half a page may be involved, in a more liberal practice, we can forgive the economy-minded editor on this point. However, to abbreviate citations to the point of obscurity is unforgiveable and is, among others, a major source of bibliographic chaos.

 It is significant that attempts to document this intuitive assertion failed to produce even a single supporting statement. As a result, this topic has been suggested as a doctoral dissertation project to a library school student.