

# THE INFORMATION SCIENTIST

---

December 13, 1968

*Reprinted from New Scientist Vol. 39, (No. 614), p. 565-6 (Sept. 12, 1968)*

## NUMERICAL VS. ALPHABETIC ORDER FOR CITED REFERENCES

Sir,—In discussing citation practices of journals, O'Donoghue (1) claims that he has never met anyone who preferred the numbered arrangement of papers in scientific journals. May I introduce him to someone who has? It's all quite pragmatic. It is faster to search a sequentially numbered list than it is to scan an alphabetical list of names. Secondly, as I found when the *Science Citation Index* was first developed (2) the portion of a paper which is most often scanned first, after the title, is the bibliography or the footnotes. This may be a purely vainglorious exercise or it may be the reader's quick and easy method of determining what literature has been drawn upon by the author. Apparently, and often justifiably, one's approach to reading an article is fashioned by the literature that is cited. Whatever the causes of this phenomenon, the quickest method for directing the reader to the paper which cites a particular author or paper is by superscript or parenthesized number. Citation scanning was done long before the *Science Citation Index*, but now the *SCI* is a generally available library tool, it is not irrelevant to mention that numbered bibliographies in papers can greatly facilitate retrieval of information. Having found a pertinent paper through an *SCI* search, and having the paper in hand, one often wants to locate quickly the sentence or paragraph in which the starting reference is cited. This can save a great deal of time. After reading the specific sentence or paragraph, the reader

may or may not choose to read the entire paper. If the searcher is a librarian, he can circle the key sentence for his client. All of this may seem like so much bibliographical footsy work, but many existing methods of bibliographical citation have evolved. Not all of them were created by irresponsible journal editors.

I could not agree more with Prowse (3) that the omission of article titles from cited references is scandalous. This particular practice of condensing citations saves citation indexers a great deal of scanning time. However, the reader is the loser. As I pointed out in *Science* (4) several years ago, the journal does not really save space by this practice as the author frequently rewords his sentences to convey the information contained in the missing title.

1. P. N. O'Donoghue, "Citations", *New Scientist*, Vol. 37, p. 321 (1968).
2. E. Garfield, "Citation Indexes for Science", *Science*, Vol. 122, p. 108-111 (1955).
3. G. A. Prowse, "Listing Works", *New Scientist*, Vol. 36, p. 729 (1967).
4. E. Garfield, "Citations in Popular and Interpretive Science Writing," *Science*, Vol. 141, p. 392 (1963).

*E. Garfield*

*Institute for Scientific Information  
325 Chestnut Street  
Philadelphia  
Pennsylvania 19106  
USA*