Letters to the Editor

The myth of the vicious circle of citation

Dear Sir.

In his recent letter [1] about evaluating research using citation indexes Blaise Cronin sounds a note of caution which is perhaps justified, but his choice of the paper by Matter and Broms [2] as an example of the 'dissenting literature' is rather unfortunate: apart from the extensive confusion in these authors' assertions regarding the philosophy they impute to citation indexing, their 'evidence' is so riddled with inaccuracies that it is doubtful whether it actually was ISI databases that they consulted.

Dr. Cronin cites one of the article's illustrations, the case of de Saussure: Matter and Broms claim that de Saussure's status as an internationally recognised thinker is not reflected in the citation indexes since they found only 25 citations of his work: perhaps their terminal missed out the zero, because—using their same command—I found ten times that number. Elsewhere, these authors claim that a search for references to Nicolas Bourbaki produced 10 citations; our search produced over 2700. When they tried "to test Garfield's Indexes" by tracing citations to semiotic schools, the paper states that they "found them almost invisible": this finding might have greater validity if they had used the appropriate index, the Arts and Humanities Citation Index, where, in a single year (1982), I found 239 citations of Mukarovsky, 118 of Propp, and 701 of Barthes-all perfectly visible, if one looks in the right place. I could continue, but I hope these examples will suffice to show that those same new schools of thought which Matter and Broms claim are not properly identifiable via citation indexes are in fact very strongly represented.

Although it would not be easy to sort out Matter and Broms' confusion as regards the nature and purpose of citation indexing, ISI is now working on new software for its databases which will at least make the search procedure so simple that not even these authors could have missed the citations they were looking for.

The editors of the *Tidskrist for Dokumentation* invited Dr. Garfield to prepare a rebuttal: this invitation was declined, partly because of the difficulty (impossibility?) of disentangling just what these authors were trying to say; but also because it was thought better not to rescue the paper from oblivion by citing it. Having drawn attention to it once, perhaps you can increase the article's citation count by one and help correct any misleading impression that may have been created by Dr. Cronin's letter.

Yours sincerely

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References

- [1] B. Cronin, The vicious circle of citation, Journal of Information Science 6(5) (1983) 187-188.
- [2] G.A. Matter and B. Broms, The myth of Garfield and citation indexing. *Tidskrist for Dokumentation* 39(1) (1983) 1-8.

Dear Sir.

Michel (J. Information Sci. 5 (4) (1982) 131–135) and now Cronin (J. Information Sci. 6 (5) (1983) 187–188) perpetuate a myth about citation analysis which is now aptly called the vicious circle

North-Holland Journal of Information Science 8 (1984) 89-92 of citation. The fact is that the Science Citation Index * (SCI*) does not cause French science or articles in the French language to be undercited. In fact, we have identified many superstar papers published in French. We have also identified many more 'Citation Classics' written by French authors in English. Several French scientists have claimed that use of French rather than English was the cause of significant delay in the acceptance and citation of their work.

If the SCI were more comprehensive in its treatment of French journals or any other group. what indeed would be the effect? Since we select journals partly on the basis of their impact factors, we would be adding to our database journals which would lower even further the average impact of French (or Indian or Russian) articles. Since it is the low-impact French journals themselves that usually do not adequately cite other French journals enough to significantly improve their impact, there is indeed a vicious circle. It is true that the inclusion of more non-English journals would improve the citation counts for selected articles in other languages. While there are not definitive studies to cite. I would expect however that most of these articles are also heavily cited in English language journals.

I invite JIS readers to test this hypothesis by trying to identify a candidate 'Citation Classic' from a non-English language journal that is not also well-cited in SCI covered journals.

In case your readers are not familiar with the 'Citation Classics' section of Current Contents' (CC'), I suggest they examine a recent issue of Current Contents. We have published over 1500 commentaries by the authors of these 'Classics'. I

will be glad to provide reprints of my last essay on this subject [1].

Global assessments as well as national assessments, based on ISI databases, have proven to be remarkably accurate. Of course, the addition of more source material to our databases would give a more precise census of publications but the percentages by language or other parameters which we calculate [2] match the figures obtained from other databases like CAS or BIOSIS. Undoubtedly we could add more low impact French or Soviet journals to our database, but this would not serve the needs of most SCI users. While we can and do add more material from Current Contents to the online version of SCI called SCISEARCH ", we believe it is preferable to keep the size of SCI manageable. Annual coverage regularly exceeds 500 000 publications which provide about 9 000 000 cited references per year.

Yours sincerely

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References

- E. Garfield, 'Citation Classics'—Four years of the human side of science, Current Contents (22) (1981) 5-16.
- [2] E. Garfield, Third world research. Part 1. Where it is published, and how often it is cited, Current Contents (33) (1983) 5-15: Third world research. Part 2. High impact journals, most-cited articles, and most active areas of research. Current Contents (34) (1983) 5-16

Of paradigms and theories

Dear Sir.

In his citation study, Gregory (J. Information Sci. 7 (1983) 73-80) equates "the fundamental belief by a consensus of researchers associated with this hypothesis" with "such a belief being known as a paradigm" and cites Kuhn. While the concept of paradigm was intuitively attractive, Kuhn, in a post script to the 2nd edition of his work [1]

eliminated it and made appropriate changes in terminology to account for these changes. In this post script, Kuhn specifically states that he is not discussing theory choice. "Scientists themselves would say they share a theory or set of theories, and I shall be glad if the term can ultimately be recaptured for this use. As currently used in phil-