

**The Endless Quest for Timeliness—  
A Fourth Quarterly *Science Citation Index***

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Timeliness is an ISI® characteristic in which we take special pride. Back in 1964 when the first commercial version of the *Science Citation Index*® was launched, the up-to-date coverage of *SCI*®'s quarterly and annual indexes was considered remarkable. By then we had been publishing *Current Contents*® on a weekly schedule for eight years, so this did not seem especially remarkable to us.

The size of the indexing job involved, however, has quadrupled in the 14 years since *SCI* started. In 1964 a typical quarterly index included 35,000 source articles. In 1979 *SCI* quarterlies will each cover about 135,000 source items per issue. And the number of references per source article has also increased significantly. For example, in biochemistry the average number of references per paper has increased 50%. Quarterly *SCI Citation* and *Source Indexes* now cover more than an annual did 14 years ago! Also, *SCI* did not have a *Permuterm*® *Subject Index* in 1964.<sup>1</sup> The size of a typical quarterly *SCI*, therefore, is now almost ten times what it was in the early 60's.

Furthermore, we have always guaranteed to index 95% of all

journal issues which have publication dates falling within the period indexed in each annual cumulation. *SCI* is supposed to be a *calendar-year* index. The 5% not in the annual are published so late that we have to include them in the next year's index. However, covering 95% means we must delay our closeout until late January or early February in order to accommodate late journals. Some rather important journals appear a month or so late on a regular basis. There are also inevitable postal delays even with air delivery.

The resultant delay in publishing *SCI* then gives rise to complaints from librarians and users for whom the timeliness of the index is one of its most valuable features. This situation is further complicated by the fact that many users misinterpret the date on the cover (which shows the indexing period) as the publication date of the index. They ask why we don't practice what we preach about the necessity for publishing on time.<sup>2</sup>

One reason that subscribers are more concerned these days with "lateness" is the advent of SCISEARCH® and other on-line information facilities. These ser-

ception of "up-to-date coverage." The immediate access to information which SCISEARCH now provides makes the frequent user conscious of and therefore impatient with the necessary delay between the end of an indexing period and the publication of the printed index.

The result of this is that by May or June (when we ordinarily publish the *SCI* annual) it *seems* like forever to our subscribers since they received anything. After all, they received the last (July-September) quarterly in November or December.

Therefore, for the 1979 *SCI*, ISI is taking important steps to provide more timely service for its clients. As a first step we are going to publish a fourth quarterly covering the October-December period formerly absorbed by the annual index. This quarterly will appear in late February or early March.

We had considered publishing a fourth quarterly in the past. But so long as we could deliver the annual within a month or so after the fourth quarterly would have appeared, the quarterly would have wasted money. Now, as we face the increasing time requirements of processing a larger and larger *SCI*, there is no doubt that a fourth quarterly can be delivered to users at least 90 days before the annual.

There are several reasons for this. The quarterlies are "perfect" bound in stiff paper, whereas cloth binding is required for the more permanent annuals. The time required to perform this laborious

the fact that the annual is four times as large, the handling of our special lightweight paper is very involved. Besides this labor of binding, a lot of computer and photocomposing work is required before the annual is printed. And if you add to this the extra editing we do for an annual there is no question that we would sacrifice quality if we rushed to get the annual out much earlier.

As a second step, we will modify our cutoff dates for the new four quarterly. Those journals will be included which are received by the end of the indexing period. We will no longer wait for the tardy journals. Their issues will be indexed the next quarterly covering January-March receipts. On the other hand, the annual will be published later, in June or July of each year. This additional time to compose the annual will permit us to improve manual and machine editing procedures to raise its quality. It will also enable us to step up our quality control procedures.

The third step will be the use of publication date (similar to that of a journal issue) on every *SCI* quarterly and annual. Subscribers can then judge our promptness in delivering our indexes by this standard.

As a final step to improve the timeliness of our services, we are reevaluating our present shipping methods, especially to overseas locations. We will no longer use slow-boats to anywhere, even though the weight of our annual *SCI* shipments is enough to fill a sizable cargo vessel. Air shipment

natively, an optimal combination of air-cargo and surface facilities such as we use for *Current Contents* each week.

A special advantage to our users is the effective reduction in cost of *SCI* which addition of a fourth quarterly makes possible. Since the annual will not cover any more material than the quarterly indexes, the four separate quarterlies can then be used as a second set for satellite or departmental libraries. However, the annual indexes do contain considerable editing improvements and corrections, as well as the annual *Journal Citation Reports*<sup>®</sup> and reader guides.

In effect, the consumer will receive two indexes for the price of one. Although it is not so fast or convenient to search four quarterlies as it is to use an annual cumulation, it is better than doing an incomplete search. Since we supplied only three quarterlies in the past, most libraries discarded their quarterlies when the annual arrived. However, when they receive their 1979 annual, they will be able to put this extra set to good use.

Of course, the last word on timeliness for *SCI* has not yet been said. The next step "obviously" is to issue *SCI* every two months, or six times per year. While this would mean searching more issues by the time the annual appears, it is certainly more timely. Indeed, why stop there? Why not a monthly *SCI*? One could push this argument all the way towards daily publication. Indeed, I made such a proposal to the

in conjunction with the idea of a daily newspaper of science.<sup>3</sup> The on-line availability of SCISEARCH might seem to obviate the need for more frequent issues of *SCI*. But why should users be forced to use an on-line system? In some parts of the world such systems may not be available for at least a decade.

Another way to give quick and easy access to the recent literature is to cumulate the *Weekly Subject Indexes (WSI)* to *Current Contents* on a monthly basis. Now that these appear in all six editions of *CC*<sup>®</sup> and are being used by many readers, there is considerable interest in such a cumulation. We are evaluating the possibility, especially for *CC/Life Sciences*, the largest of our six editions.

However, before a monthly cumulation of *WSI* would be feasible, ISI would need to devise better methods for controlling the specificity of the indexing procedures used. In a weekly issue you may not object to finding five or six entries under a particular indexing term. In a monthly issue you might not be so happy to find twenty-five, unless they were subdivided somehow. This problem is avoided in *SCI*'s *Permuterm Indexes* by the pairing of title-words to make two-level indexing entries. But this requires an amount of space difficult to justify in a weekly *CC* or even a monthly cumulation of the *WSI*.

We are now in the process of modifying our vocabulary control procedures so we can watch on a *daily* basis for phrases in titles that should be treated in the *Weekly*

terms. This improves specificity in searching.

Thus, while timeliness is our major preoccupation at ISI, we have to keep in mind other factors which may slow the user down. It does no good for us to turn out our indexes faster if it takes you forever to use them. I have no doubt that in the future readers will expect articles to

basis—a real-time system as it were. At that point the quest for timeliness may take on a different dimension. I hope our fast performance in indexing will set an example for journals to process manuscripts faster and reduce further lag between research and public's access to information.

#### REFERENCES

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