RESPONSIBILITIES OF AUTHORS, EDITORS, PUBLISHERS AND DOCUMENTALISTS IN QUICK TRANSFER OF INFORMATION

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Indicates the vital necessity and importance of quick transfer of published information. Points out that this transmission is a chain-like procedure which has been aptly termed as 'Information Transfer Chain' by the President's Science Advisory Committee. Discusses the fundamental responsibilities of the various people involved in this chain. Examines the existing practices which ultimately hampers the speedy and effective communication of information. Suggests some feasible methods for effecting improvement in existing practices.

INTRODUCTION

A common practice adopted now-a-days in almost every article on documentation is to highlight the problem of literature explosion and to point out the inability of the scientist to keep himself up-to-date with the current developments in his discipline. Whilst it is true that it is well nigh impossible to read everything that is published in one's field of activity, it is, nevertheless, essential to be aware of the latest developments and trends in the field; lest his knowledge would become obsolete and result in possibly mediocre efforts.

For the scientist, to be abreast of his times in his field of activity, he needs to be informed, most effectively. To do so calls for a system of information services that should provide the scientist with pertinent information as soon as it is available. The system, simple as it appears, involves at least four parties who bear the responsibilities for quick dissemination of information from the source to the user. The four parties are the Author, Editor, Publisher and Documentalist who form the connecting links in the information transfer chain.

Before an analysis is made of the role and responsibilities of these four parties in the chain, it would be apt to quote Prof Derek J de Solla Price[1], who puts:-

"It is probable that 80% of all scientific papers can be had from about 1000 periodicals and 80% of chemical papers would come from the biggest specialist journals, less than 100 in number, and even that better than 95% of the chemical literature could be had from less than 200 of the most eminent journals".

This clearly indicates that among the 50,000 scientific and technical periodicals, only 1000 periodicals cover 80% of useful literature. Therefore, literature explosion is not such a serious problem. The main indication in Prof Solla Price's statement is the enormous scope for selection. Therefore, if proper selection is made, the scientist will be able to read the selected literature in his field of specialisation, thereby greatly reducing the degree of obsolescence. The main problem of literature explosion is to bring pertinent published information to the notice of respective users within the shortest possible time. However, the required information is scattered in various types of publications and this has to be located, collected, stored, retrieved and disseminated, which, in essence is 'documentation'.

Several people are involved in the processing of information right from the creator of thought, the author, and the various agencies in between the author and the actual user. This entire information process is chain-like and has been aptly called 'Information Transfer Chain' in the President's Science Advisory Committee Report[2]. This chain which is shown diagramatically (see p.188) operates like a switching system.

The ultimate aim of this procedure is to connect the user to the proper information as quickly and effectively as possible. It, therefore, becomes apparent that people involved in this chain bear equal responsibilities for quicker dissemination of information.
1 RESPONSIBILITIES OF THE AUTHOR

Construction of Titles

The tendency of authors to give fancy titles to articles should be minimised, if not altogether stopped. The author should construct the title using 'meaty' words in the title so as to make it self-expressive. This practice is vital for many reasons. First, some abstracting and indexing periodicals like 'Chemical Titles' provide subject index through Keyword-in-Context and other Keyword indexing methods. Keywords are selected and permuted only from the title of the articles indexed. Second, the user comes across only the title of the article in indexing periodicals and bibliographical references which are supposed to aid his literature selection by revealing the thought content of the article for further study. Thus if the title is not self-expressive there is a great danger of missing the articles by the concerned user.

Preparation of Abstract

All the salient features of the article should be presented in the abstract. In some author abstracts it is found that the author claims several things while not all of them are actually to be found in the article. This practice greatly misleads the user. It is, therefore, essential that the author has to provide an indicative/informative abstract to the article for the following reasons:

(a) to assist the user in deciding whether or not he should read the original article; and
(b) to act as a substitute for the original article in case the original is not available.

One of the reasons for the inadequacies in author abstracts is that authors are not trained in the techniques of preparing abstracts. These shortcomings in the content of the abstract thus stand against their direct inclusion in national and international abstracting periodicals. In an endeavour to facilitate better abstracting, Unesco initiated and sponsored an international conference on Science Abstracting in 1949. An important outcome of the Conference was the publication of a guide for the preparation of synoposes [3]. Some of the important rules from 'Guide for the preparation and publication of synoposes' are:

(a) Synopses should comprise a brief and factual summary of the content and conclusions of the paper. It
should enable the busy reader to decide more surely than he can from the mere title of the paper whether it merits his reading;

(b) Synopses should be intelligible in itself without reference to the paper;

(c) Synopses should, only in exceptional cases, exceed 200 words.

At present there is six months to one year time lag in reporting published information in abstracting periodicals. Several reasons such as inadequacies in author abstracts cause this delay. If the authors practise all the rules of the guide, the time lag could be appreciably reduced.

Presentation of the Article

The effective communication of the thought content of the article to a great extent depends upon the method of its presentation. Therefore, the author should lay great emphasis on the manner in which the article is presented. The author should make a clear demarcation between the various parts of the article such as introduction and text (text could be further divided into different subheadings), Summary, Conclusions, Bibliographical References, Appendix, and arrange them in a logical sequence. Interspersing the article with diagrams, charts or tables will enhance understanding of the article.

To bring all articles to conform to some standard mode of presentation, the International Organisation for Standardisation (ISO) brought out its recommendations which could be modified according to local conditions and needs. If the ISO recommendations are practiced, communication of information at international level could be streamlined.

Bibliographical Citations and their Presentation

In the field of research, fundamental or applied, new developments and innovations are generally the result of existing knowledge in that particular area. This clearly indicates that existing knowledge facilitates the formulation of new thoughts or helps lead to new developments. It is, therefore, necessary that in all articles wherein already recorded information has been used, the references to those should be given mainly to show the association of ideas between his and past literature. Citation of recorded information is also necessary for the following reasons:

(a) to provide a list of relevant documents on the subject concerned for further study;

(b) to show the authenticity of any statement that has been made in the text;

(c) to acknowledge the sources consulted and to show that listed items have been used as source documents.

From these reasons it will be observed that each cited bibliographical references (BR) carries a message. It is therefore necessary that citations should be communicated clearly. But normally authors are instructed to cite BR according to publishers' pattern. Authors are often required to restrict information in BR to a minimum because of space limitations in the periodical. To counter these difficulties several plans, have been suggested, particularly by McCasland, Reid (Sigil System) and Charles Bishop (Coden System). All these plans formulated a code with information such as Title (host periodical), volume and page number in its extreme abbreviated form.

These plans were criticised by Dr. Boaz, who pointed out that a single printing mistake would mean a total loss of information. Also, these plans violate the basic tenets of citing BR.

Therefore each cited BR should be complete in itself. But presently there is no uniform practice followed in citing BR. Some journals provide author and locus while in some only locus is given. Authors and periodicals who provide incomplete information regarding BR are defeating the very purpose of BR, since the principle function of BR is to provide a list of relevant documents which could be profitably used by the user to select documents useful from his point of view. Further, if complete information in a BR such as author, title, locus, inclusive pagination is provided, it not only helps the user in selection but also gives an idea of cost involved for its procurement, if it is not available locally.

ISO soon took up this problem and formulated recommendations which were issued as ISO/R77 which were later adopted by British Standards and Indian Standards in their publications BS 1629/1959 and IS 3281/1963 respectively.
In this context cooperation between the publishers and authors is of utmost importance. Authors, unfortunately, are bound by the practice followed by the periodical to which they submit their papers for publication. It is, therefore, necessary that publishers change their practice, if cited BR have to be purposeful, and the best means is for publishers and authors to follow the recommendations given in 'Bibliographical References' (ISO/R77).

The recent exploitation of the BR emphasizes the extreme importance of quoting references - these are Bibliographic Coupling and Citation Index. Bibliographic Coupling which was developed by MM Kessler [4], is an objective study of finding out the relation between two or more papers on the basis of their bibliographic citations in common. The utility of this study is to find out the possibility of listing all the articles together on the basis of their coupling strength which reveals the relevancy of the thought content or association of ideas. Citation index, which is part of 'Science Citation Index' developed by Eugene Garfield[5] is a kind of subject index in a new dimension, to the selected sources of literature. It is an ordered list of cited articles each of which is accompanied by a list of citing articles.

Abbreviation of Titles of Periodicals

The titles of periodicals form an important part in bibliographical citations. The Standards for BR recommend abbreviation of the title of the periodical. The main object of abbreviating the title is to save some linear space. It is also argued that the primary purpose of abbreviation is economic from the point-of-view of scientists and that it saves time and effort of the user. However, the authors can take full advantage of the recommendations made by different standards to abbreviate the title of the periodical, but the abbreviations thus made should be self-evident and be easily decodified by the users.

So far several standards to facilitate a uniform code of practice to abbreviate titles have been published. Notable of these are the IS/18 and ISO/R4. Besides, American Chemical Society and World List of Scientific Periodicals (WLSP) have formulated their own standards. In fact ISO recommendations are based on WLSP practice. ISO has also suggested to various countries to modify ISO/R4 to suit their own requirements. With the availability of these standards, authors should follow any of these and in this context, cooperation of publishers is very much required. Publishers, instead of establishing their own method of abbreviation, should adopt any one of these standards. This will greatly avoid confusion and difficulties to everyone involved in the 'Information Transfer Chain'.

Listing Bibliographical References

There is no uniform practice followed in the order of listing BR. Some periodicals list author's surnames in alphabetical order, while others list chronologically. The former method serves little purpose. The useful order would be the one wherein items of the BR are referred to in the text. Each referred item may be numbered serially and then arranged accordingly at the end of the article. As far as possible, citing BR as a footnote or within the text of the article should be minimized, if not avoided altogether. It will be more useful if all citations are consolidated together and given at the end of the article.

'Keywords' for the article

It will be observed that the author cannot use all the keywords pertinent to the article in the title. But it will be useful if authors supply all important keywords apart from those used in the title. This will be particularly useful in providing subject index to the article. In order to quickly prepare subject index and to provide all possible approaches to the user, authors should choose keyterms from the standard subject headings or Thesaurii. AIEEE, AICheE and WRU have brought out 'thesaurus in the field of Engineering, Chemical Engineering, and Metallurgy respectively.

Implementation of the 'Code'

A liaison Committee was set up by FID/ICSU/IFLA/ISO/UNESCO to study and devise international measures to improve the present position regarding scientific information and its publication. The committee observed that absence of universally accepted discipline for drafting and publishing scientific information was one of the reasons that caused unnecessary additions to the volume
of documents published and to the expenditure involved in printing, abstracting, listing and locating them.

According to proposals made by the International Council for Scientific Union (ICSU) Abstracting Board, the Liaison Committee issued a code entitled 'Code for Good Practice for Scientific Publications [6, 7]. The rules laid down in this code should be obviously morally binding on every author of scientific publication and its editor. The vital importance of adopting uniform international standard in documentary scientific information is emphasized. The standard which is applicable universally will make it possible to arrive at a single method of drafting author's summaries, a single code for abbreviating periodical titles, a single code for BR citations and a single code for transliteration of characters of one alphabet into those of others.

The 'Code for Good Practice' has been published by Unesco with the conviction that observance of the rules of the code will enhance the value of the information contained therein and reduce the enormous expenditure incurred by scientific and technical documentation centres of all countries. Some of the important rules of this code are that:

a) All original texts shall be accompanied by an abstract, to be compiled by the author himself.

b) Abstracts shall be drawn up in conformity with the 'Guide for the preparation of synopses' (Unesco document NS/37D 10a).

c) The category of the paper should be specified as stated below:
   1. an original scientific paper;
   2. a short communication; and
   3. a subject review article.

d) The text shall fully describe the methods employed and significant results obtained.

e) Explicit reference shall be made to any work previously published in order to evaluate how the presented text fits into the general picture of scientific progress.

f) The international rules governing the abbreviations of titles of periodicals, the order of bibliographical references, symbols and abbreviations, transliteration, terminology and the layout of articles should be followed.

2 RESPONSIBILITIES OF EDITORS & PUBLISHERS

Non-self-expressive Titles

Publishers should reject, if they find the title of the article is not revealing the thought content of the document or should ask the author to retitle it. Also, the responsibility of publishers is to see that the article is carrying synopsis and bibliographical references. Although, it is the responsibility of the editors and referees to ascertain the quality of the synopsis and adequacy of bibliographical citations, the publishers at any cost, should not accept articles for publication which carry no synopsis.

Sub Standard Articles

Publishers should not approve the articles which are sub-standard. This is one of the ways of controlling the exponential growth of literature. This point has been clearly brought out in the Unesco document 'Code for good practice'. Also, the Presidents' Science Advisory Committee suggested to the authors to refrain from unnecessary publication. The Committee felt that the inadequate means of switching between information systems is one of the causes for redundant publications. If the switching device - title announcements, abstracts, referral services - were fast and efficient, the redundancy could be eliminated. However, the publishers with strict editorial policy should establish good standards and any contribution below that standard should be discouraged.

Page-proof Articles to Secondary Publications

The responsibility of publishers is to send the page-proof copies of articles to the abstracting and indexing periodicals, so that the time delay between the publication of the original articles in the primary periodicals and its inclusion in the abstracting and indexing periodicals will be minimised. This is the actual recommendation made by the International Council for Scientific Union (ICSU) Abstracting Board.
Announcement of Accepted Articles

The publishers should announce in periodicals, the article accepted for publication in the subsequent issue. This is most desirable as there is a considerable amount of delay in the publication of articles. If the publishers follow the above said practice, it can definitely provide manifold advantages such as creating current awareness, minimizing duplications etc.

RESPONSIBILITIES OF EDITORS

Synopses

Synopses (also called homotopic abstract) is a term adopted by the Royal Society of London and by the Unesco International Conference on Science Abstracting, 1949, to describe an authors' summary of a scientific paper which is published simultaneously with the paper itself, after editorial scrutiny. As has already been indicated, that the authors are not trained in the techniques of abstracting and also they view the article from their personal angle. This necessitates the editor to delete or supplement information and publish it under his responsibility.

Bibliographical References

This is the most important item and the basic purpose of this has already been indicated. Editors must ensure that it fulfills the basic purpose and check each cited item for its correctness and adequacy. Normally, the citing author commits mistakes in giving Volume Number, Issue Number, Date of Publication and sometimes the title of the host periodical itself. All these items are to be checked carefully and corrected if necessary.

Order of Listing Including Mode of Citation

Editors have to check the order of listing of bibliographical references including its mode of citation. As has already been indicated, alphabetization according to surnames of the authors serve little purpose. Hence the recommended method has to be strictly followed.

Reformation of Contents Page

Processing of technical information can be further quickened, if editors and publishers reform the contents page. The existing practices with regard to providing information in the contents page vary widely and there is no uniform practice. Contents page is an important part in a periodical for the documentalist so far as the current awareness service is considered. The current awareness service will be most effective only when the contents page is complete in itself. Therefore, the role to be played by editors and publishers in reformation of the contents page is vital and they have to consider the following items for incorporation in the contents page, if not already being done.

(a) Title of the periodical;
(b) Volume Number, Issue Number, Date of Publication;
(c) Inclusive pagination for each article;
(d) Dividing the contents page into broad subject headings.

Some of the periodicals do not indicate the title of the periodical on the contents page. This is a great handicap, since some documentation centres at local level or national level are bringing out "current awareness list" by just procuring contents pages in advance. If the contents page is not indicating the title of the periodical, then the documentation centres have to procure the title page also to identify the contents page.

Or, according to the recommendations made by the International Conference on Science Abstracting sponsored by Unesco, if the synopses of all the articles appearing in a single issue are printed together either inside the cover or with advertisements on the back in such a way that it can be cut without mutilating the pages of the journal, then it can be easily detached and circulated among scientists. Apart from these, if the contents page is divided according to broad subject headings, it will be further useful in scanning through the contents quickly.

Some journals are providing classification numbers at the top of respective articles and almost all periodicals provide synopses. If editors and publishers could provide these details in the contents page itself (which they can do without wastage of space as it will be only change of place), it would be most useful for the documentalist as he can bring out current awareness list in a classified form with abstracts within the shortest possible time.
Some current awareness services like 'Current Contents', are providing author directory with the intention of establishing contact between the author and the user. This work can be quickened if the author's address is also provided in the contents page.

Location of Contents Page

There is no fixed place for the contents page in a periodical. Some publishers print the contents on front cover, while others on the recto of back cover. But providing the contents page in this manner, especially on the front cover may cause difficulty in getting good photoduplicated copy for the purpose of current awareness service. This is due to colour contrast. Therefore, it is always better to provide contents page in a separate sheet inside the periodical with all the required details.

3 RESPONSIBILITIES OF THE DOCUMENTALIST

Creating Current Awareness

The documentalist shares greatest responsibility in the quick dissemination of information, or, to speak, in switching information between the author and the user. In fact, the documentalist has to create the current awareness in the concerned field among the scientists. He has to constantly study the requirements of his clientele and as soon as the required information is published, it should be brought to the notice of the respective users within the shortest possible time.

This can be accomplished, by procuring the advanced contents page of the relevant periodicals as soon as they are published and circulating it in the form of photo copies or mimeograph. These services which are project-oriented services and are also termed as Selective Dissemination Service at local level. At local service library, reprographic equipment is not held as they are very expensive and also they will not be in a position to procure advance contents page by air mail. In such cases, the current awareness service has to be rendered as soon as the periodicals are received in the library. The contents page of important periodicals could be typed, omitting puffs if any, in the alphabetical order by the title of the periodical and quickly circulated in the mimeographed form.

The current awareness list can take any form such as, contents-by-journal, arrangement of title under broad subject heading (e.g. Index Medicus) etc. Quickness is the essence of such services. The current awareness list based on contents-by-journal type is found to be the quickest method in bringing the published information to the notice of the potential user. Any attempt at classifying articles and providing feature headings including supporting indexes hampers the speedy dissemination of information. Delay is caused by attempting to provide a comprehensive coverage. In fact, the current awareness service is a kind of temporary palliative for the user before he gets a comprehensive coverage of the items in a classified form. This point has been brought out by Mr PL Broadhurst[8] and he called it as one of the 'public palliatives'. The author actually recommended three public palliatives for the scientist which are, current awareness service, KWIC indexing and Citation indexing.

Circulation of Periodicals

Some of the local service libraries forward the current issues of the periodicals itself to the scientist for current awareness purpose. There are several methods existing at present for routing of periodicals such as circular routing, radial routing etc. There are several drawbacks in such practices. For example, in circular routing, the periodical may be stuck up at one place and all the time the documentalist should be constantly vigilant and see that the periodicals are moving. In the case of radial routing also, the documentalist has to be vigilant and get back the periodicals and pass it on to the next user. In both these practices the time required is considerable and by the time the periodical reaches the last user, the currentness of periodicals themselves may be lost. The appropriate method would be to circulate a few copies of the contents page.

Pursuing Editors and Publishers

The documentalist should pursue the editors and publishers to facilitate speedy dissemination of information. It is felt that existing practices work at cross-purposes. Editors and publishers must be made to follow the code regarding the following particulars of an article.

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(a) Presentation of articles;
(b) Contents pages (including its occurrence in the periodical);
(c) Titles of the articles;
(d) Synopses;
(e) Bibliographical references, its order of citation and the mode of citation; and
(f) Place of occurrence of bibliographical references.

4 CONCLUSION

Thus, if all the responsibilities of the various groups are carried out properly, the time lag prevailing in bringing the published information to the notice of potential users can be minimized, though not completely eliminated. Also, the effective utilisation of published information can remarkably be enhanced. This undoubtedly eliminates duplication and stimulates further research which ultimately facilitates in bringing the economic growth of the country.

REFERENCES


