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JDoc60 series: information research over six decades

Summary
Describes a series of eight review articles, published to mark the sixtieth anniversary of the *Journal of Documentation*, which give a commentary on the significance and impact of eleven articles which have appeared in the *Journal* over six decades.

This issue of *Journal of Documentation* includes the last of a series marking the 60th anniversary of the *Journal*.

The 50th anniversary was marked by the publication of a book (Vickery 1994), with six chapters, each written by an expert and reviewing one aspect of developments in information research over five decades, with emphasis on papers published in *JDoc*. The topics covered in that book were: information needs and users; bibliographic records and catalogues; classifications and thesauri; quantitative methods in documentation; and libraries and their management.

For the 60th anniversary, it was decided to take a slightly different approach. A series of articles from the journal, spanning its six decades, were chosen as particularly influential, significance, or relevant to present-day concerns - partly on the basis of objective impact measures, and partly by expert assessment. A subject expert was asked to write a personal assessment of the impact and significance of each of these articles. These were published in *JDoc*, at intervals throughout 2004-2006, with a reprint of the original article, and - where appropriate - a response from the original author.

It was originally envisaged that there would be six papers reviewed, one from each decade. Matters did not evolve so tidily, however, and it seemed better to allow deviations from this, in order to allow the most interesting materials to be presented, provided that all six decades were covered. In the event, eight reviews have been published, covering eleven original articles.

It is pleasing to note a link with the 50th anniversary book, in that two chapters authors of that book are reviewers in this series (Alan Gilchrist and Steve Robertson), while another chapter author, and the editor of the book, are the authors of reviewed papers (Tom Wilson and Brian Vickery).

The 1940s and 1990s are represented by a single review, by Marianna Tax Choldin (2005), who compares problems and issues facing European libraries in the aftermath of the 1939-45 war, and of the collapse of the Soviet Union. She reviews three *JDoc* papers from 1945:
>   Dorothy Comins
>   The Joint Committee on Books for devastated libraries
>
>   Maria Danilewicz
>   The post-war problems of continental libraries'
>
>   Harry Miller Lydenberg
>   The library rehabilitation programme of the American Library Association

and contrasts these with a 1994 paper
>   Lothar Mertens
>   A state secret - dissertations in the German Democratic Republic

She calls for more studies and publications on the changing issues facing libraries, with respect to problems of censorship, freedom of information, and a balancing of the needs of intellectual freedom and national security.

For the 1950s, Paul Sturges (2005) assesses a 1956 article:
>   Barbara Kyle

Privilege and public provision in the intellectual welfare state

Drawing on Kyle's thoughts on the special library in the 1950s - which he notes as one of many worthwhile *JDoc* articles to have lacked a strong theoretical basis - Sturges evokes doubts about the extent to which the information professions are truly united, despite trends towards the amalgamation of professional bodies.

Two articles were chosen from the 1960s, both from the latter part of the decade.

Jack Meadows (2004) reviews his own 1967 paper:
        Jack Meadows
        The citation characteristics of astronomical research literature

Taking the opportunity to update his study of decrease in usage with age of the astronomy literature, he reflects on the meaning and significance of such bibliometric findings, making the observation - which, like many perceptive comments, is self-evident once it has been made - that physical libraries are spatially limited while digital libraries are temporally limited.

Ronald Rousseau (2005) assesses another bibliometrically-oriented paper, from 1969:
        Robert Fairthorne
        Empirical hyperbolic distributions (Bradford-Zipf-Mandelbrot) for bibliometric description and prediction

Fairthorne's paper was a wide-ranging review of a number of distributions, and one of the first to show the essential equivalence of these empirical power laws, and demonstrate their very wide applicability within information science. As Rousseau notes, it described the self-similar nature of the phenomena described, long before the concept became a 'hyped' topic.

There are three original articles from the 1970s, all from the first years of that decade.

Birger HjÝrland and Karsten Nissen Pedersen (2005) comment on an article from 1970:
        Karen Sparck Jones
        Some thoughts on classification for information retrieval

They reflect on Sparck Jones' call for a substantive theory of classification to underlie computerised information retrieval, and her eight-fold typology of classification. Both this review and Sparck Jones' reply (2005) address the need for the philosophical presumptions - essentially a contrast between positivist and pragmatist positions - and for the tension between theoretical considerations and practical needs, which underlie classification and other retrieval processes, to be made explicit.

Alan Gilchrist (2006) assesses a 1971 paper:
        Brian Vickery
        Structure and function in retrieval languages

Vickery's original paper was a summary and typology of languages and vocabularies used for information retrieval - subject headings, thesauri and the like - in terms of their intended purpose, and of their structure and organisation. Gilchrist comments that his review is not so much an update of the original as 'a comment on a vastly changed world in which [Vickery's] analysis still has much validity'. The vastly changed world, of course, is that of almost exclusively digital information; Vickery's examples were given partly in terms of % inch by 3 inch index cards.

In the third of the commentaries on original articles from the 1970s, Steve Robertson (2004) considers an article from 1972:
        Karen Sparck Jones
        A statistical interpretation of term specificity and its application in retrieval

In her original article, Sparck Jones proposed a heuristic measure of term specificity for probabilistic retrieval known as 'inverse document frequency' (IDF). Robertson shows that there are good theoretical reasons for using such a measure, and emphasises its importance as the core of most of the ranking methods used by search engines, particularly on the world wide web. Sparck Jones' response (2004) notes that it took 25 years for a 'simple, obvious, useful idea to reach the real world'.

Finally, for the 1980s, I reviewed a paper from 1981 (Bawden 2006):

Tom Wilson
On user studies and information needs

noting that this article foreshadowed a number of recent developments and concerns, including the nature of information itself, of information needs, and of information science as a discipline, as well as the value of models for information seeking and information behaviour, and the most appropriate research methods for investigating them. Wilson's response (2006) addresses a number of issues concerned with the future of research into information seeking and information behaviour, and the need for an expansion of the context of information science, rather than the defence of a shrinking specialism.

It is intriguing to note the, entirely unplanned, clustering of papers judged to have particular significance dating from around the end of the 1960s and beginning of the 1970s, and to speculate why this emerges. Perhaps this was truly a particularly innovative period for information science; specifically British information science, since all these original authors are British. Perhaps the thirty year gap - approximating a generation - is the time needed for the full significance of papers to be appreciated. Or perhaps is was an intellectually formative period for our expert commentators, who naturally chose publications from that time.

It is also notable that two original papers are from one author, Karen Sparck Jones. Again entirely unplanned, this is a reflection of her influence on the field.

These articles, commentaries and responses cover the whole spectrum of the information sciences, from its interface with computer science to that with the wider social sciences, and from the theoretical and mathematical to the practical and professional. They should serve as a source of inspiration and ideas for many years to come.

David Bawden

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