

## BOOK REVIEW

K. Sparck Jones (Ed.). *Information Retrieval Experiment*. London: Butterworth & Co. (Publishers) Ltd. 1981. 352 pp. £25.00. ISBN: 0 408 10648 4.

This volume summarizes all research on information retrieval systems performed during the past two decades. Karen Sparck Jones, with characteristic energy, planned the project, persuaded 12 of the most active researchers also to contribute, and edited the outcome. The 14 papers are arranged in three sections—on Testing in General, on Types of Test and on Actual Tests—each section being editorially introduced. A bibliography and an index round off the volume.

How is this volume to be regarded? Full and critical accounts by Sparck Jones, Lynne Evans and Gerard Salton of work done and of the modest results achieved together constitute an authoritative progress report. Robertson and van Rijsbergen provide a compact basic methodology, the outcome of rigorous thought and careful testing. Specific types of test on specific types of system are described by Lancaster, Barraclough, Keen, Oddy, Heine and Bill Cooper to provide a compendium of approaches. Belkin, by widening IR experiment to embrace the private cognitive processes of users, not surprisingly discovers 'ineffable' concepts. But, in the next paper, Jean Tague firmly marshals all the more 'effable' variables of IR experiment into a compact manual indispensable to all future workers.

However, operating systems remain unchanged by all the work reported here. No compelling programme of future work emerges. Some of the contributors, one senses, are pausing to take stock of IR experiment and its place in the next decade of information research.

It is time to take stock. In the mid-1960s, the Swets model and other papers showed me how feeble is the signal/noise ratio in IR experiment, how poor is the quality of the basic data (dependent on the subjective judgment of indexers and users, unchecked and maybe uncheckable) and how unmanageable are the many interacting variables. The clatter of IR systems is almost audible.

These index-sorting systems are theoretically crude but useful and cheap general-purpose devices. They are robustly impervious to refinement. In Kuhn's terms, they present technical *puzzles* in documentation, not *problems* in information or cognitive science. The only result reported here which has potential generality outside the IR context is the recall/precision relationship. It calls for deeper analysis in objective studies at the level of texts. It appears to be another manifestation of a fundamental law of information science which also underlies the Bradford law of bibliography.

Karen Sparck Jones has made it possible for all concerned to take stock. The monitoring of operating systems has to be continued. But otherwise I hope to see some of the rare analytical skills at present engaged in IR experiment committed to more creative objectives. We need a science of information and *real* information systems which exploit the technologies now available.

B. C. Brookes  
London

# Information Technology: Research and Development

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Heaps, H.S. (1978) *Information Retrieval: Computational and theoretical aspects*. New York: Academic Press.
- (c) *papers from conference proceedings, etc.*  
Hawkins, C.J.B. (1980) Developments in raw technology. *Microprocessors and intelligence*. (L.J. Anthony, ed.) pp 1–14. London: ASLIB.
- (d) *research report*  
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