information retrieval, as for example the impact of recent evolutions which have already induced a complete revision of the notion of document, for example.

We are also convinced that the logical approach provides a better way to encompass the fundamental aspects of information retrieval, this conviction being enforced by the proved expressive power of the first models that have been proposed using this approach. A conviction which is further enforced by the new insights that the logical approach provides even about existing retrieval models, which may help in improving them in a coherent way as we have seen for the Boolean model.

This conviction is also based on the necessity to cope with the fast evolution of the very notion of document, which becomes increasingly complex both in nature and in structure, and to cope also correlatively with the fast evolving needs of the users.

Of course much remains to be done in developing operational systems based on the logical approach, both at the theoretical level and at the implementation level. In our opinion most efforts must bear on the design of an operational logic for information retrieval which could establish an acceptable bound between the expressive power of logic considering effectiveness, and application requirements considering efficiency. We are strongly encouraged in this research direction by an obvious fact: the most successful retrieval systems that are available by now are fundamentally based on Boolean logic, a not very effective but highly efficient operational logic.

REFERENCES

- C. Berrut, Indexing medical reports: the RIME approach. Information Processing and Management, 26 (1), 93-109 (1990).
- D. C. Blair, Language and Representation in Information Retrieval. Elsevier Science Publishers. (1990).
- 3. Y. Chiaramella, B. Defude, M. F. Bruandet and D. Kerkouba, *Iota: a full text information retrieval system*. ACM-SIGIR Conference on Research and Development in Information Retrieval, Conference Proceedings, F. Rabitti, ed, pp. 207–213, Pisa (1986).
- 4. Y. Chiaramella and B. Defude. A prototype of an intelligent system for Information Retrieval: IOTA. In *Information Processing and Management*, 23 (4), 285-303 (1987)
- 5. Y. Chiaramella and J. Nie, A retrieval model based on an extended modal logic and its application to the RIME experimental approach, ACM-SIGIR International Conference on Research and Development in Information Retrieval, Conference Proceedings. pp. 25-43, Brussels (1990).
- 6. W. B. Croft and R. H. Thompson, 13R: A new approach to the design of document retrieval systems. In *Journal of the American Society for Information Science*, 38 (6), 389-404 (1987).
- 7. D. Kerkouba, Indexation automatique et aspects structurels des textes. In Proceedings of the RIAO 85 International Conference, Grenoble, pp. 227-249 (1985).
- 8. S. C. Kleene, *Mathematical Logic*. John Wiley & Sons (1967).

- 9. R. Kowalski, *Logic for Problem Solving*. North Holland (1979).
- M. Minsky, Semantic Information Processing. M. Minsky Ed. MIT Press, Cambridge Ma. (1968).
- J. Nie, An information retrieval model based on modal logic. In *Information Processing and Management*, 25 (5), 477-49 (1989).
- J. Nie, Un modèle logique général pour les Systèmes de Recherche d'Informations: Application au prototype RIME. Ph.D. thesis, Université Joseph Fourier, Grenoble I (1990).
- 13. G. Salton and M. J. McGill, Introduction to Modern Information Retrieval, New York, McGraw-Hill (1983).
- R. C. Schank and R. P. Abelson, Scripts Plans Goals and Understanding – An inquiry into Human Knowledge Structures. Lawrence Erlbaum Associates, Hillsdale N.J. (1977).
- 15. T. M. T. Sembok and C. J. Van Rijsbergen, SILOL: A simple logical-linguistic document retrieval system; *Information processing and management*, 26, 111-134 (1990).
- A. Smeaton, Natural language processing in information retrieval. Special Issue, *Information Processing and Management*, 25 (1990).
- 17. C. J. Van Rijsbergen, A non-classical logic for information retrieval. *The Computer Journal*, **29**, 481–485 (1986a).
- C. J. Van Rijsbergen, A new theoretical framework for information retrieval. Proceedings of 1986 – ACM Conference on Research and Development in Information Retrieval, Pisa, pp. 194–200 (1986b).

Announcement

6-10 JULY 1992

BNCOD-10, The Tenth British National Conference on Databases, King's College, Aberdeen University

Conference Announcement

The Tenth British National Conference on Databases (BNCOD-10) is to be held at King's College, Aberdeen from 6 to 8 July 1992. The conference attracts high-quality papers from the academic community in Britain, Europe and throughout the world. Papers are published in book form and may be purchased by libraries and individuals.

There are a number of invited speakers, and we are delighted that Michael L. Brodie (GTE Lab., Mass.) has agreed to be one of them. He is well known for his interests in Data Modelling, AI and Distributed Systems.

King's College, Aberdeen University

Founded in 1485, the University is the fifth oldest in the United Kingdom, sited at what is now known as Old Aberdeen, about two miles from Aberdeen's centre. The oldest building is King's College Chapel, built shortly after the foundation and surmounted by its famous crown. The conference will be taking place in the Meston building, a few hundred yards from the Chapel and cobbled High Street which is the centre of Old Aberdeen. The region is famous for its castles, and it is planned to hold the conference dinner in one of these.

The first international conference on database research to be held in the U.K. was held in Aberdeen in July 1980. Its success led to the series of BNCOD conferences, and it seems appropriate that the tenth such conference should be held in Aberdeen.

The city is by the sea and is quite far north, which makes for long summer evenings. It is said that you can see well enough to play golf until midnight in mid-summer on any of the many famous local courses. There are frequent flights to London (Gatwick and Heathrow), Birmingham, Glasgow and Manchester; there are also direct flights to Paris and Amsterdam. The city is two and a half hours from Edinburgh by train or car.

If you have any queries, please contact the Conference Organisers:

Professor Peter Gray or Dr Rob Lucas, BNCOD-10, Department of Computing Science, King's College, Aberdeen AB9 2UB, Scotland. Tel: 0224 272296. Fax: 0224 487048. E-mail:bncod10@uk.ac.abdn.csd.