ABSTRACT

An Hypertext Interface for Information Retrieval

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Hypertext for multimedia and full text documents is being rapidly developed on all fronts. For bibliographic information retrieval the applications are promising but pose several difficulties. The first is that most bibliographic databases consist of millions of distinct records as opposed to hundreds or thousands of documents in most hypertext systems. One solution used in some hypertext systems is to restrict the domain by immediately performing a Boolean search. While this is effective, it just takes us back to the standard retrieval system.

The system currently being developed starts with a set of contexts which give different views of the current database. The contexts include authors, subject classification, titles, journals, series, thesaurus and abstracts. The user can then browse within each view and gradually restrict or expand the search in many different directions. The underlying retrieval capabilities of the system will not be much different from the standard Boolean system but the structure of the search and the presentation of records will take advantage of all the techniques of hypertext. One of the unique features of this system will be to switch from one view of the data to another with a simple click of the mouse or choice from a menu.

Another capability of this system will be to allow users to add their own links and sets in order to create their own views of the data. These views will be saved for later recall as either working views or as starting points for further exploration of the data base. This will facilitate multiple short sessions and allow users to gradually impose their own structure on the database. One problem this creates is how to process new records which are added to the database. Eventually the system will remind the user when a view is retrieved that there are some possible new links. This will be accomplished by matching new records with those already in the view.

Views will be displayed in two formats, as a list of sets of documents and as a simplified network of nodes and links of sets (a set may consist of only one document). The users will be able to label both nodes and links with their own names.

Currently a prototype system is being implemented on a microcomputer and will be used as a frontend and interface to the School of Library and Information Science's Library online catalog.