

to enable the user to see the correspondence between his/her selected terms and the actual contents of each book.

Search by Analogy

In the search by analogy the user's need is explored by asking for examples of earlier "good" books in order to find "something similar." Prototypes thus identified can be analysed to identify new search terms for a subsequent analytical search. If search by analogy is selected, another room is entered which shows a book containing a title or author index for the database (figure

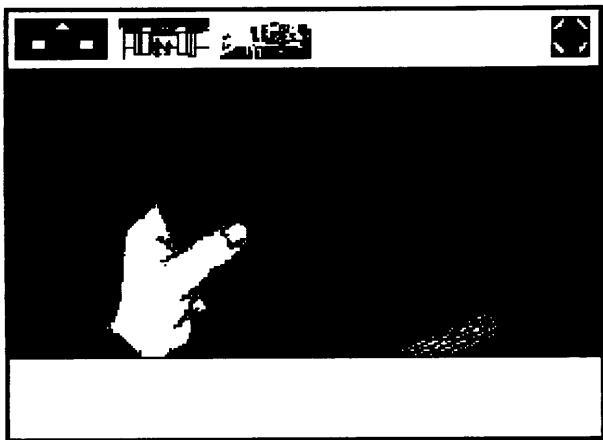


Fig. 10: Shows the user's model book which is used for a search for similar books. The user can identify the model book from either the name of the author or the title of the model book.

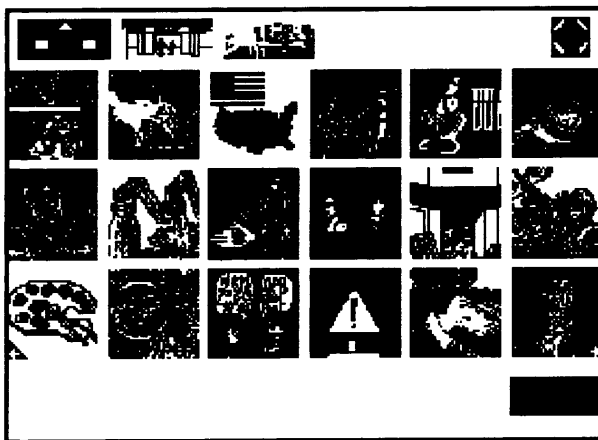


Fig. 11: Shows the menu for the strategy of browsing through icons. Six pages of icons represent the book content of the database. Each icon represents a semantic network of associatively related keywords belonging to several different dimensions of the classification and book indexing shown in figure 3 and 9. Thus each icon represents an associatively related semantic network, which can be combined with another semantic network by selecting another icon with its associated keywords. This then results in a complex Boolean search with a quite high number of keywords. The result of the search is seen in the book case in the right corner at the bottom.

10). This can be opened to help the user identify his/her model book. After selection of a book, the system will automatically attempt to find other books in the collection which include as many of the same indexed attributes of the model book as possible. The descriptions of the ten most similar books will be presented one at a time in an open book format in decreasing order of relevance. The multifaceted classification scheme is used as the basis for a weighting of all books in the collection with respect to the model book. The system calculates collection similarity on-line after each request for "find similar books." The multifaceted classification scheme is used as the basis for a weighting of all books in the collection with respect to the reference book. In the Book House, seven of the thirteen dimensions (plot, setting, place, time and impression, cognition, genre) were utilised in this calculation of similarity. The system calculates collection similarity on-line after each request for "find similar book."

Browse Book Descriptions

When browsing the user may have a need which is so ambiguous that no search specification is possible and, instead, the book shelves or data base are scanned in order to explore possible matches between the intuitive current need and the available items. A choice of a browsing strategy indicates that the user doesn't know the "specific address" of a good book, but would prefer to "wander around town" until a good/familiar/interesting item is discovered. Thus after "clicking" on this strategy, the system shifts immediately to an open book representation with a randomly chosen book description (figure 9).

The user can then step through other book descriptions. This set of books selected by the system is the user's current search profile, which he/she can revise by selecting terms from the book description, or deleting terms with the rubber at the upper level of the screen, make a NOT operation by use of a minus, or ask the system to find books similar to any book displayed on the screen by clicking at the two books in a mirror (see also figure 12).

Browsing Icons

The browsing strategy also includes an iconic version where the user can browse through small pictures describing book content. This could be appropriate when the user does not have a well formulated need but would like a quick bird's eye view of what the books in the data base are all about (figure 11). Skimming through several pages of lists of index terms, one for each dimension in the classification scheme, is feasible but tedious. Therefore, icons are an economic way of supporting searches since a single picture can communicate many different facets of meaning and include terms from more than one dimension. These terms are combined with a Boolean OR and represent a kind of semantic network. As a result the user will be able to retrieve a small subset of books with the little effort it takes to select a couple of pictures. Apart from being effective, a skimming through icons can also provide an unexpected, aesthetic and emotional experience and give rise to associations and new ideas.