dexing of queries. This problem is even more complicated in Boolean systems, where a query formulation is presented in disjunctive normal form. This chapter addressed a solution to this problem.

Before developing an algorithm that would result in an acceptable output quality, different methods of formulating POIN were discussed. One of the methods chosen is the most convenient for the user yet allows the user to express POIN more precisely. This method (which assumes the formulation of a search request in the form of a marked set) was the basis for the algorithm for constructing query formulations described in this chapter. The main benefits of this algorithm are that it not only improves the search quality (recall/precision), but it also fully releases the user or the intermediary from the complex and time-consuming process of "manually" constructing query formulations. In addition, an automatic construction of query formulations is the basis for automatic feedback, at least in those cases where the process of feedback assumes (to improve search results) a change in the query formulation.

Despite a number of important advantages, only in the last few years have some of the functioning systems began to use the automatic indexing of search requests. A number of reasons could be given to explain this delay, but two of them stand out. One is the lack of knowledge about the existence of such algorithms and another is the reluctance of developers to study these methods at a level of detail necessary for their implementation. However, questions about the automatic construction of query formulations are popular among researchers. Although the number of new algorithms is very small, the importance of this problem is constantly stressed.

In this chapter and in Chapter 6, we discussed some approaches to the automatic construction of document profiles and query formulations. The result of indexing is the input information of the BSR element in the system's structure, that is, the last of the elements in the object of control in an IR system. The next chapter discusses the construction of this BSR element.

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Bibliographic Remarks

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