

Information Retrieval

Design and Sources

Roslina Othman



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INFORMATION RETRIEVAL: DESIGN AND SOURCES

Editor

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8. NATURAL SYMMETRY BETWEEN QUERIES AND DOCUMENTS

Suleiman Shammas Ali and Roslina Othman

Abstract

This chapter projects on the notion of natural symmetry between queries and documents given in the paper by Robertson (1994). Symmetry can be assumed to have formal properties. Documents and queries are represented by languages, and their relationship is based on relevance for the purpose of matching. However, there were objections since documents are documents, while queries are representation of information needs. Documents are explicit, while information needs are implicit. Thus, this chapter concluded with the possibility that with the new development of semantic-based search system, symmetrical could be achieved.

8.1 Introduction

The notion of symmetry as proposed by Robertson in 1992 examined the possibility of pursuing a dual model for constructing the function of an IR system. This notion was framed on the documents and queries. The function of an IR system is to determine the relevance relationship between the documents and the queries.

If a symmetrical could be built, then the documents and the queries could have the same properties and possibility the same identity. Thus, the function of the relevance relationship could be fit into the proposed dual model.

IR models such as vector space assumed that the documents and the queries have similar properties: weighted set of index or query terms.