

methodology may prove useful, such as the instruction to use (or not to use) abbreviations, to underline adjectives, and so on. If the translator does not know (or does not know well) the Russian language, for example, then any methodology will be useless. However, the translator who has a good command of both languages will manage, even without using any methodology. Returning now to the developers' selection of the method for manually constructing query formulations, we should note that such a simplified approach to the creation of an IR system undoubtedly makes life easier for the creators of such systems. But does the user benefit in any way from this state of affairs? What quality of the service does the user ultimately get? Let us discuss these questions in more detail.

First, it should be emphasized that most of the efforts toward constructing query formulations in such an approach are shifted to users or intermediaries. Also, in on-line systems these efforts are almost fully assigned to the user, despite the fact that one of the goals of creating the IR system is to reduce the time necessary for the user to retrieve information. As for additional efforts, note that in this case the user is forced to express his or her POIN in the IRL, which is more difficult than to use a natural language (it is much easier and faster to formulate a search request than to construct a query formulation).

It is noteworthy that the users themselves are not unanimous as to who should, in principle, construct a query formulation. Some think this should be done by an intermediary searcher whereas others insist on their own involvement. (The user often does not even suspect that alternative automatic methods exist.) Different positions originate primarily from the use of different evaluation criteria. In questioning users in the Aslib on-line information service (523 answers were received in all), researchers discovered the following: practically all users agreed that the work on the terminal should be handled by intermediary searchers, and only four of them favored the idea of entrusting the work to users. The main reason for this outcome is that although the user only needs the information from the IR system, he or she is initially presented with a fairly complex process requiring intellectual efforts and often a lot of time. Moreover, the quality of the search is frequently quite low, despite substantial efforts required of the user in constructing a query formulation. The other position is based on the users' perception of the quality of the search when the query formulation is constructed by an intermediary searcher. Users correctly assume that they know better than anybody else what they really want (i.e., they can feel their information need [POIN]), but they falsely conclude that nobody else can be as successful as they are in searching for information to satisfy their POIN. As a result, users often express dissatisfaction with the system's performance even when the search based on the user's query formulation was inferior to the search based on the query formulation constructed by the system (Lancaster, 1979).

We connected the quality of the output to the quality of the query formulation. But in Chapter 6 we noted that the system's output is also influenced

by other factors. When using some other method of indexing documents, for example, the results of the search for the same query formulation may be different. Yet within the framework of the IRL available in the IR system and a collection of indexed documents, the results of the search (the system's output) may be used to evaluate the quality of the query formulation in a given IR system.

The problem with the quality of a query formulation obtained manually either by the user or by an intermediary searcher is well illustrated by the acuteness of the problem of constructing query formulations. Numerous experiments conducted in the 1960s to assess the quality of query formulations were focused primarily on one question: Who constructs them better (or worse), the user or an intermediary searcher? Most experiments, especially those conducted before the introduction of the on-line search, indicate that an intermediary searcher does it better. Why is it that some people do this better than others? Clearly, intermediary searchers do not conceal any secrets from the users. Moreover, when receiving requests from the users they are, as a rule, less aware of the users' real information needs (POIN). This is true not only because the requests often inaccurately reflect information about the user's POIN, but also because after receiving a request, the intermediary searcher tends to interpret it in his or her own way, that is, according to the request formulation and the searcher's knowledge of the subject matter; the searcher has his or her own notion (interpretation) of the user's POIN. This idea is illustrated in Figure 7.2, which presents just one of the possible scenarios.

Apart from the preceding situation when intermediary searchers have inaccurate knowledge of the POIN, it is also safe to assume that most of them are not as knowledgeable as users in the subject matter contained in the collection of documents in IR system. All this is true, and yet intermediary searchers have significant advantages. As a rule, they have a much better understanding of

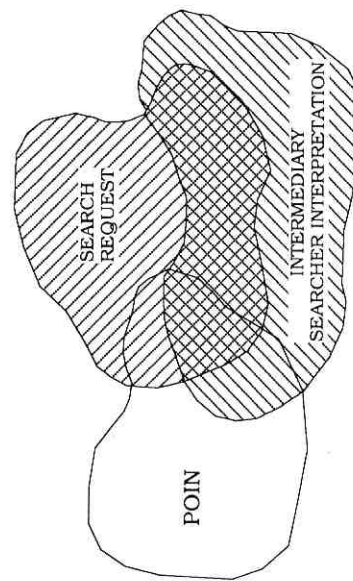


Figure 7.2

The interpretation of the user's POIN by the intermediary searcher.