

The Librarian and Reference Queries

A SYSTEMATIC APPROACH

Gerald Jahoda
Judith Schiek Braunagel



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Preface

It is our belief that the teaching of reference work needs to revolve around practice in answering reference queries. After all, reference work is not a spectator sport. However, before students are given reference queries to answer, they need to be provided with a framework for doing so. The decision-making model of the reference process here provided is intended to offer such a framework. The model is based on work sponsored by the United States Office of Education and reported in Gerald Jahoda, *The Process of Answering Reference Questions: A Test of a Descriptive Model* (Final Report, Project No. 475AH50028, Grant No. G007500619). Washington, D.C.: United States Department of Health, Education and Welfare; Office of Education; and Office of Libraries and Learning Resources, 1977.

In the present text, students are introduced to the decision-making steps in a model of the reference process and are given exercises and answers for practicing each step. When students are familiar with each of the decision-making steps that make up the process of answering reference queries, they should be ready to search for answers to reference queries using a

systematic approach. Exercises in answering reference queries are also given at the end of the book, with answers included to provide feedback. Emphasis is on the kinds of information included in types of reference tools, for example, encyclopedias, so that students can expect certain types of information in such tools when these tools are encountered in beginning as well as in advanced reference courses. A chapter on on-line searching has been included in the belief that this type of service is both related to reference work and is likely to be performed by more and more librarians during the coming years.

We suggest that the text be used in introductory reference courses. The content can be covered in one academic term with time for discussion of the role of reference work in libraries, networking and other forms of library cooperation, referral services, and discussion of specific reference titles. The text might also be used for in-service training of support personnel in libraries, or could be used for self-paced instruction of library personnel.

We are grateful to the Chemical Abstracts Service, the American Chemical Society, the Newspaper Enterprise Association, Inc., and to the Institute for Scientific Information for material reproduced herein. In addition to acknowledging the support of the United States Office of Education for the development of the model, we would like to thank our wife and husband, respectively, without whose encouragement, typing, and other assistance the text could not have been completed.

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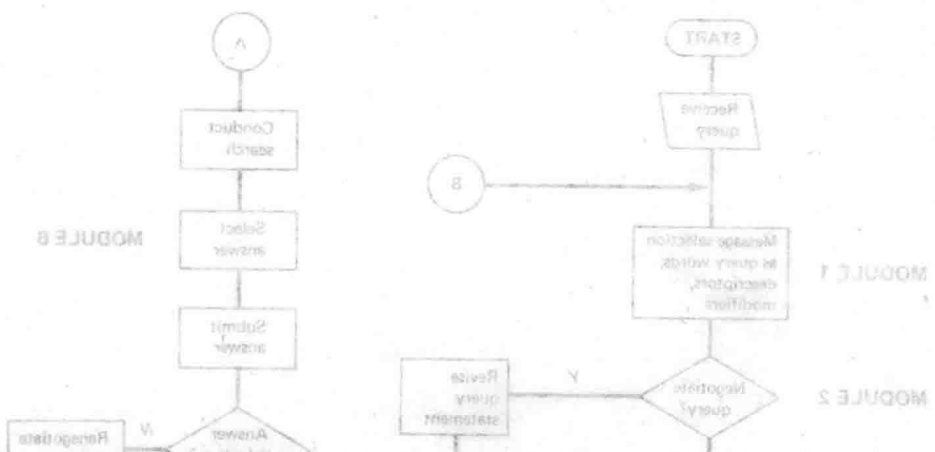
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 ... initially developed from a synthesis of several
 ... models of the reference process reported in the literature, has been further

Introduction



The queries asked at a reference desk are unpredictable and vary from simple directional requests to elaborate research questions. Complex queries can involve considerable search time and the use of many reference sources. And a simple query can be difficult for the librarian considering it for the first time. Nevertheless, reference librarians are expected to answer unfamiliar or complex reference queries with the same skill they exercise for familiar or simple queries. Performing reference work requires more than learning a limited number of basic reference titles.

No librarian can remember all the reference resources both book and nonbook—such as films and recorded materials—that could satisfy a specific query, nor keep up with the constant flow of new materials. But with the aid of a logical approach for satisfying information requests the librarian can apply certain basic principles to locating an answer, regardless of the nature of the query asked or the library in which it is answered. This approach, based on an analysis of the reference process, involves interaction between the librarian, the library patron, and the library's resources in order to satisfy the patron's information need. With an understanding of the reference process, a librarian is not restricted to a limited number of reference

2 INTRODUCTION

materials but can apply general principles when answering unique or difficult requests.

In this text, the reference process has been broken down into a series of decision-making steps, ranging from receipt of an information request to communication of an answer. Each step is discussed in a separate chapter, followed by exercises to allow practice in the concepts presented. (A model of the reference process depicted as a series of decision-making steps is shown in Figure 1-1. This model, initially developed from a synthesis of several models of the reference process reported in the literature, has been further

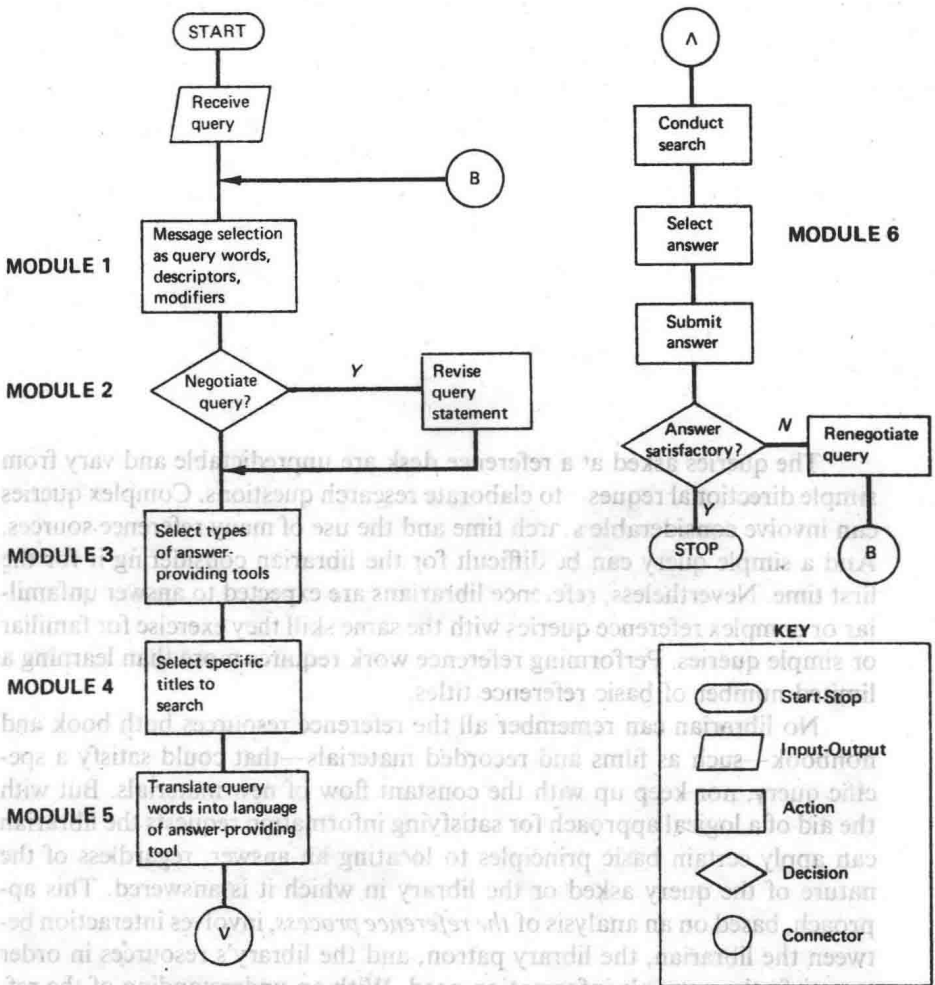


FIGURE 1-1

revised here based on testing and comments by practicing reference librarians.)

A MODEL OF THE REFERENCE PROCESS

The first decision-making step in the model, message selection, is identification of the essential information in the request of a library user. At this initial stage, the librarian analyzes the query to determine the subject of the request and to identify the type of information needed. The query may call for a fact, for example, the population of New York City in 1875, or one or more publications on a subject, for example, biographies of Martin Luther King, Jr. Once this step has been completed, the librarian must determine whether any clarification or amplification of the query is required. This process, called negotiation, requires discussion with the user about the request in order to gain a more complete understanding of the actual information need. If the librarian begins the search with an inaccurate understanding of what is really wanted, the information generated will be useless to the requestor. This wastes time for both, and may discourage the requestor from using reference services again.

Once the actual information need has been clarified through negotiation, the librarian can mentally identify categories of reference tools likely to contain the type of information needed. It is in this step that the reference librarian determines whether to search for the answer in a dictionary, an encyclopedia, or other type of reference tool. This step is followed by the selection of a specific title in which to begin searching for an answer to the query. If the librarian cannot remember a specific title in this category of reference tools, a specific German language dictionary for example, systematic techniques for identifying a specific title can be employed.

The fourth decision-making step involves location of an answer within the pages of the specific title selected. This is accomplished by selecting search headings which will provide access to information in that particular reference title. Selection of an answer, the final step, is crucial because the information identified in this step must be accurate and complete if it is to be useful to the requestor.

The process is completed when the information selected is communicated to the patron—but *only* if that information proves to be satisfactory to the patron. If not, the query is renegotiated, and the individual steps in the decision-making process are repeated.

Providing a complete and correct answer to an information request is dependent on the decisions made in each of the steps of the reference process. Errors at any of the decision-making points would result in an incorrect or

inadequate answer. If the librarian misunderstands, the message of the query, he or she will end up searching for the wrong information. For example, a librarian might assume that the query, "Who wrote *Gone with the Wind*?" is a request for the name of the author of the book, *Gone with the Wind*, when what is really wanted in this case might be the author of the screenplay for the film of the same name. Such an error in message selection, the very first decision-making step, would result in an incorrect answer to the patron's real query. Similar errors could occur in any of the succeeding decision-making steps.

THE REFERENCE PROCESS

William Katz (1974) has defined the reference process as "the process of answering questions (p. xi)."¹ It might be defined even more generally as the process of satisfying specific, recurrent information needs. This is because some reference work, such as compiling bibliographies, may be performed in response to a generalized need on the part of many library users, rather than in response to a one-time-only question from a single user.

Although each librarian develops individual techniques and approaches to answer reference questions, it is important to attempt to isolate common characteristics of this process. While reference services may differ from library to library, the process of satisfying specific information needs probably remains essentially the same. In other words, the librarian answering the question of a fourth grader in a school library and the librarian locating information for a scientist in a special library each conduct their information search in similar ways. Both begin by extracting the essential information from the user's request, and both discuss, or negotiate, the query if clarification is necessary. Both librarians would then proceed in their searches following the same basic steps: identifying tools to search, locating the page or pages within the tool in which the answer is located, selecting the correct answer, and, finally, communicating the answer to the user and soliciting feedback.

This model of the reference process, the one used in this text, is only one of many speculative models of the process.² Many theories have been devel-

¹ Katz, William A. *Introduction to Reference Work*. Vol. 2, *Reference Services and Reference Processes*. New York: McGraw-Hill, 1974.

² Other models of the reference process include the following: Bunge, Charles A. *Reference Service in the Information Network*. A Paper for the Interlibrary Communications and Information Networks Conference, 1970. P. 8; Jahoda, Gerald and Olson, Paul E. "Analyzing the Reference Process." *RQ* 12 (1972): 148-156; Rees, Allan, and Saracevic, Tefko. "Conceptual Analysis of Questions in Information Retrieval Systems." *Annual Meeting of the American*

oped in an attempt to represent the process of answering reference queries in a concise and general way, illustrating the sequence of actions and decision points in the process. This model, like many others, has both strengths and weaknesses, and should be viewed as only one attempt to illustrate steps in the process. It has been selected for use in this text because it has been tested (and revised) based on comments from professional librarians, and because it provides a useful framework for studying components of the reference process.

It is important for several reasons that we understand how librarians go about satisfying reference requests. Reference librarians can apply this knowledge in analyzing their own work and in identifying aspects of their performance which could be strengthened or improved. Teachers of reference can utilize this knowledge to teach the process on a general level, in addition to familiarizing students with specific reference titles. Administrative personnel in reference departments would find this knowledge helpful when evaluating the performance of their reference staff. An understanding of the reference process also aids in determining which, if any, aspects of reference work can be delegated to support staff, or perhaps even to computers.

ARRANGEMENT OF THE TEXT

As previously stated, the chapters in this text are based on steps in the model of the reference process presented in Figure 1-1. In Chapter 2, "Message Selection," techniques are discussed for isolating the essential message of each query, and descriptors are presented to represent elements in the query message. In Chapters 3 and 4, categories of answer-providing reference tools are discussed, and a series of matrices are provided to aid in selection of a category of tool in which to search. Chapter 5 concentrates on the selection of specific titles to search, and discusses the use of the card catalog, guides to the literature, and bibliographies for identifying appropriate titles.

Chapters 6 and 7 deal with locating a correct answer in the specific title selected. Chapter 6 concentrates on selection of search headings for locating the page or pages which contain the answer, and Chapter 7 discusses techniques for providing an answer which is both correct and complete. Although negotiation appears following the message selection step in the model of the reference process, negotiation is discussed out of sequence, after the other steps of the process have been fully discussed. Clues for recognizing queries

that require negotiation are discussed in Chapter 8, and techniques for successful negotiation are presented in Chapter 9. Chapter 10 focuses on on-line searching of bibliographic data bases and discusses the characteristics of on-line searching along with an introduction to search logic. Chapter 11, a summary chapter, is followed by a section on actual reference queries asked in libraries and resources for locating answers to them.

ADDITIONAL READING

- It is important for several reasons that go about solving reference queries. Reference librarians can apply this knowledge in a number of ways. It can help the process on a general level. It familiarizes students with specific reference files. Administrative personnel in reference departments would find this knowledge helpful when evaluating the performance of their reference staff. An understanding of the reference process also aids in determining which, if any, aspects of reference work can be delegated to support staff, or perhaps even to computers.
- Holler, Frederick. "Toward a Reference Theory." *RQ* 14 (1975): 301-309.
- Neill, S. G. "Problem Solving and the Reference Process." *RQ* 14 (1975): 310-315.
- Rugh, Archie G. "Toward a Science of Reference Work: Basic Concepts." *RQ* 14 (1975): 293-300.

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2

Message Selection

The following query is an example:

I am trying to locate the new address of one of my former college professors from Florida State University. Unfortunately, I have no idea where he is teaching now, but I think he's at some university in California. His name is Arthur Perkins, and he teaches botany.

Imagine yourself on duty behind the reference desk. A library patron approaches you and asks, "Where is the *World Almanac*?" This is a simple query, to be sure, which will not tax your professional skills. Only in the unlikely case that your library does not have this basic reference source, or should the patron not be requesting what is really needed, will this type of request require more than a routine response (necessitating negotiation on your part). In this case, however, we will assume negotiation is not necessary and take the patron's words at face value in order to make some generalizations about this request.

First, throughout this text the library user's request for information will be called a query statement, or, more simply, a query. Specialized terms are necessary because in the reference dialogue *both* the patron and the librarian ask questions. The user asks questions related to his or her information need, and the librarian also asks questions during negotiation to determine exactly what the user wants. Therefore, in discussing the reference process it is necessary to differentiate between the user's questions and those of the

librarian. It is for this reason that the user's initial question statement is called a query, while the librarian's query clarifications are termed questions.

THE QUERY MESSAGE

If we examine our sample query, "Where is the *World Almanac*?" we find that it contains two components. One component gives the subject of the information need (*World Almanac* in our example). The second component reveals the type of information needed about the subject (*Where is*—i.e., the location). Examination of hundreds of reference queries indicates that each query consists of at least those two components: the subject or "given" of the query and identification of the information needed about the subject (the "wanted"). Thus, each information request contains both a given and a wanted.

The following query is an example:

I am trying to locate the new address of one of my former college professors from Florida State University. Unfortunately, I have no idea where he is teaching now, but I think he's at some university in California. His name is Arthur Perkins, and he teaches botany.

At first glance, this query may seem too complicated to be reduced to only two basic components, but it is possible to identify a single given and a single wanted.

"Arthur Perkins" is the subject, or given, of this query. The requestor has also provided us with some supplemental information about this person in addition to his name. He is a professor of botany who formerly taught at Florida State University, and who may now teach at a university in California. This supplementary information about Arthur Perkins will undoubtedly be helpful in the answer search, but none of these additional clues is very useful without the given, Arthur Perkins. It is true that a librarian could attempt to identify a professor of botany who formerly taught at Florida State University and who might presently work in some university in California, but it would be a lengthy and complicated search. It is this professor's name, Arthur Perkins, that is the true subject of the query, and thus we single it out as the given component.

Identifying the wanted component of this query is a simpler task. The requestor is asking for Arthur Perkins' current address. Thus, this seemingly

lengthy query can be simplified into two components: the requestor wants the *address* of *Arthur Perkins*. It is possible to dissect any query, no matter how complicated, in this manner.

A query may appear more difficult to break down into a single given and wanted because the query is actually comprised of two separate queries. For example:

What is the life span of the sparrow, and what do their nests look like?

In this two-query request, the first given is "sparrow" and the wanted is "life span." The second given is also sparrow, and the wanted is a description or illustration of a sparrow's nest.

UTILIZING THE MESSAGE IN SUBSEQUENT DECISION-MAKING STEPS

The given and the wanted represent the message, or the essential information, contained in a query. Other supplementary information may be included, as illustrated in the example, but would be useless without the essential message of the query. Learning to isolate the message in each query is an aid to answering queries correctly in several ways. First, it helps to identify queries that require negotiation before you can proceed with an answer search. Second, it is an aid in selecting types of reference tools to search, and will provide points of entry for searching the titles selected.

If, in analyzing a query, you decide that either the given or the wanted is unclear or absent, it is a clue that negotiation will be necessary before beginning the search. Because an error in the message selection step will result in compounded errors throughout the succeeding steps of the process, it is important to clarify the given and wanted before proceeding. In addition, certain types of givens and wanteds provide clues that indicate the real query may not have been asked. This aspect of the query message will be discussed more fully in the chapter on negotiation.

The given and wanted can assist in identifying types of reference tools likely to contain answers to a query, as categories of reference tools can also be generally grouped in terms of givens and wanteds. (This will be discussed in greater detail later in this chapter.) Once a specific title has been selected, the given may also function as a search heading, or access point, for searching the title.