

2<sup>nd</sup>  
EDITION

■■■ Introduction to the  
**Library and  
Information  
Professions**

Roger C. Greer,  
Robert J. Grover  
and Susan G. Fowler



# Introduction to the Library and Information Professions



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Second Edition

ROGER C. GREER,  
ROBERT J. GROVER,  
and SUSAN G. FOWLER



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# Preface

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The world has changed significantly since the first edition of this book appeared in 2007. This revision reflects the impact of new technologies on the information transfer process and on the work of library and information professionals. Expectations of information users have changed as well—wanting information and service faster and customized for their needs.

As the e-book and digitized information have changed the way we think about library collections and information packages and services, the role of the library and information professional also has changed. Information professionals are interacting more closely with their clientele in all types of environments—schools, universities, public libraries, as well as private enterprise, special libraries, and information centers. Public libraries are “embedding” librarians within their communities, just as universities are sending librarians into departments. School librarians are working closely with teachers and are intimately involved in the teaching of information skills to students. Information specialists in all types of environments are applying their knowledge of information with their constituents to help them understand and utilize information that is disseminated profusely through the Internet and social media.

While technology has changed certain aspects of information creation, recording, dissemination, and use, the models in the first edition of this book are still important and applicable to the understanding of information transfer and the work of information professionals. We have updated many of our examples and applications of the models, as well as the appendices.

The most important and unique feature of this book continues to be the models that present a holistic view of information transfer, the role of the information professional, and the information infrastructure of which we are a part. These theories provide an understanding that is vitally important in our complex, rapidly changing society; furthermore, this theory base places information within the context of other academic disciplines. Technologies change and will continue to change; therefore, the need for an understanding of the “big picture” is essential for one to be productive and successful in the information professions. We provide that “big picture” in this book.

We thank the professional colleagues who shared their ideas with us as we updated this volume: Linda Freas, Family Library Services Director, AnyThink Libraries, Rangeview Library District, Thornton, Colorado; Jackie McMahon Lakin, Information Management Program Consultant, Kansas State Department of Education; Sharon Morris, Director of Library Development and Innovation, Colorado State Library; John Sheridan, Dean of Libraries, Emporia State University; Pam Sandlian Smith, Director, AnyThink

Libraries, Rangeview Library District; and Kelly Visnak, Scholarly Communication Librarian, University of Wyoming Libraries. All are visionary leaders whose perspectives and ideas we respect, and their conversations with us are reflected throughout this volume. To them we say, “Thank you!”

We also express our thanks to the professionals and staff at the State Library of Kansas, Emporia State University, and Emporia Public Library. Through their professional knowledge and information resources, we had access to the world’s information infrastructure from our homes and offices.

Our partner through both editions has been our acquisitions editor and coach, Blanche Woolls. To her we give our heartfelt thanks and a hug.

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# 1

## Introduction: Purpose and Objectives of This Book

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### Chapter Overview

This chapter is an introduction to the book, its intended audience, and its scope. In this second edition, we have reviewed sources and provided updates whenever new and pertinent information is available; however, we have continued to cite seminal works when their contributions to the profession are still appropriate.

The information professions are defined within the context of our knowledge society. Key terms are explained, including “theory,” “data,” “information,” “knowledge,” and “wisdom.” Characteristics of a profession are described, and the roles of such information professionals as information managers, records managers, librarians, archivists, and information entrepreneurs are compared. The differences between a professional and a technician are examined. The foundation is laid for succeeding chapters of the book.

### Why Read This Book?

Why should you read this book? What is its importance? These are important questions for those who have an interest in learning more about the information professions and want to expand their knowledge to be a more effective professional.

In this book we define the role of library and information professionals and present a conceptual framework—a way of thinking about professional work in the changing library and information field. We present you with an idea “toolbox” that you will be able to use as you enter the profession and as you continue through it. You are entering a society of information professionals (whenever we use the term “information professional,” we include librarians) that has the very important role of helping others to locate and use information effectively.

This book provides you with the background to prepare you for the problems that we in the information professions encounter. Consequently, graduate students in professional programs will find this book useful as an introduction, and practicing professionals will find it helpful as a guide to the current issues within a theoretical framework (a way to think about) the various issues associated with information services today.

### The Intended Audience

This book is an introduction to the information professions for individuals who need a broad perspective of professional service and to professionals who are familiar with the field of information work but want to know the “why” behind their professional practice. This book can be used for continuing education of professionals who have been “kicked upstairs” to a new leadership role and need to make decisions for an organization; they want to understand the “big picture” of information service. This work is also intended as an introductory text for students beginning a course of study in the information professions. The goal is to ground these studies in a theoretical and social perspective: how information work fits into our society and our economy. Practicing professionals and technicians who want to understand their work beyond the level of everyday practicalities will also find this book of value.

The theoretical perspective considers the information professions and their roles and functions in the dynamics of a social system, i.e., in our contemporary knowledge society. In addition, the scope and importance of the various fields or service areas in the information professions are explored.

The social perspective serves two functions: first, the sociology of information is examined from its creation to issues of preservation or discarding. Second, we examine the characteristics of the information infrastructure at the global, national, and local levels. We relate both of these elements to the role of the information professions.

### Scope of the Book

The design of this work moves from the general to the specific. The earlier [chapters \(1–5\)](#) explore the role of information in society, change of values as reflected in paradigm shifts, the theory and processes of information transfer, the characteristics of professions, and the cycle of professional service. We explore the theory base from which the information professions draw direction in the delivery of services. This discussion focuses on four fields of study, which provide a framework for research efforts necessary for the development of theory to guide professional practice: the sociology of information, information psychology, information organization management, and information engineering. These four fields are illuminated in [Chapter 4](#).

The second half of the book ([Chapters 6–10](#)) explores the role of the professional as a diagnostician and provides an overview of the national and global information infrastructures. We focus on the processes involved in the design and management of information systems, including the following topics: information production, identification, evaluation, selection, acquisition, organization, storage and retrieval, preservation, and disposal.

[Chapter 9](#) addresses the characteristics of a professional infrastructure necessary for societal recognition of professional status. These characteristics

are identified by the sociology of professions and generally fall into nine categories. Each category is considered in terms of its strengths and weaknesses with respect to the different information professions. In addition to a science or theory base, these characteristics include the existence of professional organizations, a formal education system, communication mechanism (journal literature), code of ethics, licensing, history of service, standards of performance, and general recognition by the public.

We conclude with an overview of current trends and issues in the library and information professions. Because of the broad scope of this work, many topics are treated at the definition and identification level while others are examined in greater depth. Topics lacking consensus on core issues are presented from two or more perspectives as found in the professional literature.

We begin with an introductory look at professionals and what we mean by the term “professional.” While we often focus on librarians, we emphasize that the ideas presented are applicable to the various specialties in the information professions.

## The Role of Professionals

Information professionals must understand their special role in society and *why* they do things as well as *how* they do things. First, let’s look back in time to the history of the information professions, which began with the storage of the written word on clay tablets. Cultures have realized that in order to evolve, they had to have access to their past. For nearly 5,000 years, librarians (although they weren’t always called that) were responsible for those collections by acquiring, storing, retrieving, organizing, and preserving the documents of their society. The idea that these responsibilities included the needs of specific users did not come to prominence in the library/information field until Melvil Dewey in the 1870s urged librarians to include direct service to their clients as a relevant duty:

It is not now enough that the books are cared for properly, are well arranged, are never lost. It is not enough if the librarian can produce any book asked for. It is not enough that he can, when asked, give advice as to the best books in his collection on any given subject. All these things are indispensable, but all these are not enough for our ideal. He must see that his library contains, as far as possible, the best books on the best subjects, regarding carefully the wants of his special community. Then, having the best books, he must create among his people, his pupils, a desire to read those books. . . . The time *was* when a library was very like a museum, and a librarian was a mouser in musty books, and visitors looked with curious eyes at ancient tomes and manuscripts. The time *is* when a library is a school, and the librarian is in the highest sense a teacher, and the visitor is a reader among the books as a workman among his tools. Will any man deny to the high calling of such a librarianship the title of profession? (Dewey 1876, 5–6)

A contemporary of Dewey, Samuel S. Green, shared Dewey’s concept of service in libraries and promoted “personal intercourse” between the librarian and the client. Green noted, “When scholars and persons of high social

position come to a library, they have confidence enough, in regard to the cordiality of their reception, to make known their wishes without timidity or reserve" (Green 1876, 74). However, that confidence is not evidenced in all library clientele, and Green noted "Persons who use a popular library for all purposes of investigation generally need a great deal of assistance" (74). Green also suggested that sometimes "it is practicable to refer applicants for information which you cannot supply, to libraries in larger cities in the neighborhood of your own library, or to other institutions in your own town" (77–78).

As noted above, Green (1876) recommended that librarians engage in "personal intercourse" with clientele in order to improve service to individuals. He saw the following benefits of this intercourse:

- Gain the respect and confidence of clientele to afford opportunities to direct users to the best sources of information.
- Learn what books (and other resources) the users of the library need, helping the librarian to make better selection decisions.
- "Mingle freely" with users to be available to provide help when needed, which will make the library indispensable within the community.
- Ensure the collection reflects the varying interests, abilities, and needs of the community.

Service should be a fundamental concern in libraries, Green argued. "A librarian should be as unwilling to allow an inquirer to leave the library with his question unanswered as a shopkeeper is to have a customer go out of his store without making a purchase" (Green 1876, 79).

Attention to the needs and interests of the user was first articulated by Green, and it is the focus for our philosophy in this book. It is interesting to see that this focus began with Dewey and Green, yet we must be reminded of this philosophy today, when so many agencies of all types disregard it.

### **The Value of Theory**

During the second half of the 19th century, most of the social science disciplines were developing. These new disciplines were oriented to the behaviors and characteristics of individuals, groups, organizations, and cultures. Methodologies for conducting research and extrapolating theory evolved too. Other professions and other professional services, recognizing their roles of providing services to specific clients, took advantage of social science research. Because librarians continued their preoccupation with housekeeping collections, the profession was immune to these developments in the social sciences, prompting Pierce Butler (1933) to decry the pragmatism in the library profession:

Unlike his colleagues in other fields of social activity the librarian is strangely uninterested in the theoretical aspects of his profession. He seems to possess a unique immunity to that curiosity which elsewhere drives modern man to attempt, somehow, an orientation of his particular labors with the main stream of human life. The librarian apparently stands alone in the simplicity of his pragmatism: a rationalization of each immediate technical

process by itself seems to satisfy his intellectual interest. Indeed any endeavor to generalize these rationalizations into a professional philosophy appears to him, not merely futile, but positively dangerous. (xi–xii)

Butler noted that early library schools contributed to this pragmatism by continuing to provide the vocational training that had been done in libraries. Butler wrote that library schools “were founded in an age when librarians thought too exclusively in terms of library technology. Library education was, therefore, conceived as primarily training in the niceties of cataloging and classification” (Butler 1976, 28).

Scholarship has advanced considerably with the application of social science theory to the information needs and use patterns of information consumers. However, scholarship in librarianship was unaffected by the advances in the social sciences because librarians continued to concentrate on the traditional processes of acquiring, organizing, storing, and retrieving books. Scholarship in the field of library science moved forward when propelled by new advances in technology—beginning with the typewriter.

## Theory in the Information Professions Today

Recalling Pierce Butler’s statement in the 1930s that “the librarian is strangely uninterested in the theoretical aspects of his profession,” it is noteworthy that the library and information professions today still miss the point about theory. The information professions have not contributed a great deal to the theoretical base, especially in management. Until the 1950s, management theory and pedagogy were dominated by Gulick’s model (Gulick 1937) until management began to adopt sociology theories, e.g., Karl Weick and Garreth Morgan. Management has become one of the best fields to adopt social science methodology. Industrial psychology, sociology, and anthropology are looking at their functions as they influence society. During the last three decades, numerous scholars in the information professions began incorporating social science theory into their research. Among the earliest to do so were Elfreda Chatman, Carol Kuhlthau, Michael Harris, and T. D. Wilson.

Although progress has been made with the production of research that centers on the clientele of information organizations, practice is often focused on the information package, the software, or the hardware. While bibliography is still an important function of information professionals and has expanded to other media (including such formats as journals, online publications, videos, CDs, e-books, and Web sites), scholarship has advanced considerably in the application of social science theory to the information needs and use patterns of information consumers. However, scholarship in librarianship appears to have moved forward only with advances in technology. The library profession saw an expansion of bibliography after World War II with the development of bibliography as a discipline. Promoting the creation of national bibliographies was a noteworthy accomplishment of United Nations agencies.

With the evolution of scholarship and bibliography and with the introduction of theories from the social sciences, it became apparent that the passive librarian had a more proactive role in society. During the 1970s, Roger Greer pursued this study of the librarian’s role through his study of information needs of public library clientele. The study of more than 50

communities resulted in the development of theory base for study of the information professions (Greer and Hale 1982; Greer 1987). Regardless of the role of an information professional, Greer asserts that there are four features in common across the information professions:

- The information professional works with individuals who have unique information requirements and unique styles for finding and using information. We refer to this study as “information psychology.”
- The information professional works with groups of individuals, and these groups have definable and unique information needs and patterns for use. We have given this study the designation “sociology of information.”
- The information professional manages an organization comprising staff, budget, and facilities. We call this “information organization management.”
- The information professional organizes and maintains an information storage and retrieval system to meet the needs of the organization’s clientele. For this function, we use the term “information engineering.”

These four fields of study lead to the following questions for society to address:

- How do individuals know they need information?
- How does a dynamic society create information? What do they do about it?
- How does one manage an organization whose product is information? What’s different about this kind of management?
- How does one build a database within an organization? Is an archival database different than others?

This book addresses these questions and builds on the tradition of scholarship in the social sciences because the role of information professionals is to focus on the information needs of individuals and groups. These four fields are central to all of the information professions. In this book we address the differences of technology types and the role of this profession in society and its impact on society.

Still today, some information professionals are more devoted to acquisition, storage, retrieval, and preservation than they are devoted to people and to service. This book addresses the need for the application of theory to practice:

- We urge a shift from a focus on collections and technology to a focus on people.
- We urge a shift to an understanding of theory as a basis for guiding practice.
- We provide the reader with a toolbox of theories and models that will serve as a framework for practice in the information professions.

- We provide an agenda, a “road map,” for research needed to benefit practice.

## Theory and Its Uses in Professional Service

Theory can most easily be defined as “a generalization” (Grover and Glazier 1986; Glazier and Grover 2002). We suggest that a theory is a statement that explains, describes, or predicts a possible outcome of an event or circumstance. Applied to the study of information use, theory is in the realm of the social sciences because information is created, disseminated, and used by people. Since people’s behavior is often unpredictable, social science theory cannot predict as accurately as theory in the sciences. A theory must be practical (i.e., capable of being applied to a real situation) and verified or refuted through research. Abstractions, constructs, and conjectures are not theories because they lack one or more of the properties stated above. In this book we introduce numerous theories that may be collected in a conceptual toolbox of professional theories to be employed in delivering information services.

In our daily lives we have formed generalizations, or general ideas, that we believe to be true, and we act upon them. For example, we may have accepted a theory that brushing our teeth prevents tooth decay, and that theory prompts us to brush our teeth once or more each day. That theory has been presented to us over our lifetime through our learning in school, reading of studies in newspapers and magazines, taught by our parents, and reinforced through toothpaste commercials and advertisements. Consequently, the relationship between brushing teeth and fighting tooth decay is an accepted generalization in our personal paradigm. Indeed, a theory is a generalized statement about a relationship between or among two or more factors, e.g., between brushing and tooth decay.

Theory is an essential part of professional work. The primary function of any professional is diagnosis. A professional diagnoses need; i.e., a physician diagnoses a patient’s ailment, an accountant diagnoses accounting issues of a company, and an information professional diagnoses the information need of a client or group of clients. It is necessary to apply theory in this process to have an accurate diagnosis. Diagnostic theory primarily comes from psychology, the study of human behavior. The psychological theories that apply to information professions are defined as “information psychology,” a developing field that is outlined later in this chapter and in [Chapter 6](#). Unless theory is applied to diagnosis, the information professional is functioning as a technician.

### An Example of a Professional Using Theory

Here’s an example of a professional using theory. If you want to build a deck on your house and you decide where you want it, you find a carpenter and say you want a deck. “Can you build it?” you ask. The carpenter says, “Sure! Do you want stairs? How large do you want it? What kind of wood do you want to use?” If you go to an architect, s/he will ask what you want to do on that deck. When will you use it? What time of day? How will you incorporate the deck into your lifestyle? Meanwhile, the architect has not done any design work. S/he first determines needs. Based on the client’s needs, the architect then starts planning the patio. The product is customized to the client.

Unless a product is customized, it is not the product of a professional. The carpenter is a technician more concerned about the deck itself and does not diagnose customer needs. It's a very pragmatic approach that may not address the actual needs of the customer because the carpenter develops a deck based on *his concept* of the deck and *his experience* building decks. The carpenter customizes only to the extent that the customer tells him what is wanted.

### What Theory Can Do

In our society we tend to label all kinds of abstract statements as theoretical, thereby demeaning the significance of theory. However, theory is not just abstract, it is applicable. It must be susceptible to being tested. If one takes the abstract concept of "love," it's hard to define; it cannot be validated with a measuring instrument. "Liberty" is a construct too. We can measure the lack of liberty, but we use such constructs to embellish descriptions of reality and not necessarily embellish the truth of our reality. Theories are verifiable statements that must be capable of being tested in a systematic way.

Theories are necessary for a manager because they (1) tell the individual both what is important and what can be safely ignored, and (2) group a great deal of different and disparate pieces of information into patterns or concepts (Bolman and Deal 2003). Theories help us to determine what's important and what's not important. Theories help us to see trends. Management that uses theory goes beyond "seat of the pants" decisions; a manager cannot respond effectively to trends by intuition and by "what feels good." Effective managers must know what they're doing and why they're doing it. Theory helps the manager in those thought processes.

In summary, theory enables professionals to see relationships and to make reasonable decisions based on these relationships. Just as we use our theory about tooth decay to influence our behavior daily by brushing our teeth, theories can influence our professional behavior as well. The distinction between professional service and that provided by a technician is in the product or service, as demonstrated by the architect/carpenter example. Professionals provide customized products (e.g., databases, mediagraphies, and Web sites) or services (e.g., reference assistance, answers to questions, and organization of information resources) for individual clients, while technicians apply generalized rules to fit a problem. (More discussion of the role of professionals and technicians follows later in this chapter.)

### Theory Applied to Information Service

In order to provide specialized service, professionals must draw upon a body of theory to diagnose the particular needs of individuals or groups and to provide the needed service or product. For example, Carol Kuhlthau has conducted research and generated a theory on information-seeking behavior. This theory enables information professionals to identify the stages an information seeker experiences in a quest for information (Kuhlthau 2004). Through an understanding of these stages, the librarian can better assess which stage a particular client is in during this quest. This enables the information professional to formulate an appropriate response to the query and suggest information sources or strategies to satisfy the information need.

Using the information-seeking example, the model developed by Kuhlthau (2004, 81–84) enables professionals to anticipate the six stages in the information-seeking process:

- Stage 1. Initiation:* A person first becomes aware of a need for information to complete a task or assignment. This stage is usually accompanied by feelings of apprehension or uncertainty.
- Stage 2. Selection:* The information seeker identifies a subject or topic to investigate. After a topic is identified, the feelings of uncertainty usually give way to feelings of optimism.
- Stage 3. Exploration:* The searcher begins to locate information in an effort to better understand and narrow the topic. This stage of the search is accompanied by feelings of uncertainty, confusion, and doubt.
- Stage 4. Formulation:* The information seeker uses information found to form a focus for the task or assignment. At this point in the search, uncertainty diminishes and is replaced by confidence.
- Stage 5. Collection:* The individual gathers information on the selected topic, using a library or other information system. Feelings of confidence increase and feelings of uncertainty subside.
- Stage 6. Presentation:* The search is completed, and the information is prepared for use. This stage is usually accompanied by feelings of relief. If the search has been successful, there is a feeling of satisfaction; if unsuccessful, the searcher may have feelings of disappointment.

Kuhlthau's analysis of the information-seeking process provides both an explanation of the client's behavior and feelings, and a prediction of subsequent behaviors that enable information professionals to anticipate client behavior and needs as the search continues. Generally, theory is formulated from research data and/or from observation over a long period of time. As such, theory is likely to be tested formally or informally and can be considered a desirable guideline for professional behavior. Theory enables us to explain relationships in a professional environment and can also help us predict the future.

Information professions have generated numerous theories to aid in the delivery of professional service. In addition, relevant theories from other professions and disciplines are employed when necessary. For example, theory has been generated in management, sociology, anthropology, psychology, education, and other fields that can be used to inform the practice of information professionals. This book introduces numerous theories that provide a framework for understanding the information professions and the nature of professional work.

## Defining Terms

In a layperson's conversation, and even among information professionals, the terms "information" and "knowledge" often are used interchangeably. It is important to distinguish the differences between these terms, but to do so we must also look at the terms "data" and "wisdom." Harlan Cleveland defined these terms effectively in his book *The Knowledge Executive* (1985).

### Data

Data are the rough materials from which information and knowledge are formed—i.e., undigested observations, or unvarnished facts, as Cleveland

calls them (1985, 22). For example, researchers collect data from interviews, observations, surveys, and other means in order to analyze it for research purposes. We are bombarded with data all the time. To make sense of it, data must be synthesized. Data may take the form of words, numbers, and visual images. By themselves, data make no sense. For example, these data alone have no meaning unless placed in a context, as noted below: 76, 6, 2, August.

### **Information**

Using Cleveland's (1985, 22) definition, information is organized data. Given connections or context, data can form information. In this case, we may be listening to the radio on an August morning; the radio voice wishes us a good morning and announces that it is August the second, the time is 6:00 A.M., and the current temperature in our town is 76 degrees. Now we have information because we have put the numbers together in a meaningful way.

### **Knowledge**

Knowledge, according to Cleveland, "is organized information, internalized by me, integrated with everything else I know from experience or study or intuition, and therefore useful in guiding my life and work" (1985, 22). The noise of a distant train's whistle, a passing car, conversation in the next room, the sound of a furnace or air conditioner, or the television in the background as we read all give us data or information that we may reject or do not retain or remember. When we read a newspaper or watch the television news, we remember only a small percentage of what we read, view, or listen to. That which we remember or incorporate in our memory bank becomes knowledge. In other words, information that is processed, selected, and synthesized by a human becomes knowledge.

Knowledge is also processed by groups of people, and we refer to social knowledge when we discuss information transfer and knowledge diffusion. As with personal knowledge, social knowledge requires analysis, selection, and synthesis of information in order to be accepted as knowledge. We discuss this process in much more detail in [Chapters 2 and 5](#).

### **Wisdom**

When knowledge is integrated into the thinking of human beings and incorporated into their decision-making processes, it becomes wisdom. Cleveland defines wisdom as "integrated knowledge, information made super-useful by theory, which relates bits and field of knowledge to each other, which in turn enables me to use the knowledge to do something" (1985, 23).

Using the example of the above weather report, which indicated that the temperature at six o'clock in the morning is 76 degrees, the information will tell an individual that the day is probably going to be a hot one. That information (time and temperature) alone, combined with an individual's experience of many August days (in the Northern Hemisphere) over a lifetime, suggests guidelines for dress: lightweight, light colors, loose fitting if spending time outdoors. In other words, new information is taken in, evaluated, and acted upon based on the existing store of accumulated knowledge or wisdom. Wisdom, then, is the accumulation of a lifetime's experience and testing of knowledge.