The Changing Nature of Reference & Information Services: Predictions and Realities

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INTRODUCTION

In 1876, Samuel Green outlined the four general responsibilities of reference librarians as instruction, satisfying inquiries, collection development, and public relations and library promotion. Although these four responsibilities have remained unchanged in a general sense, the methods and techniques used to satisfy these roles, as well as the boundaries of the profession, have changed dramatically and remain in a constant state of flux. In their 1985 RQ article, “The Reference Librarian of the Future: A Scenario,” Thomas T. Surprenant and Claudia Perry-Holmes attempted to identify changes and future developments in the techniques, skills, and focus of reference librarians. Our article is both an examination of the accuracy of the authors’ predictions and a discussion of the evolution of reference services over the past fifteen years.

We react in our article to several predictions made, and concerns expressed, by Surprenant and Perry-Holmes in regard to the future of the reference librarian in the wake of vast technological change. We explore the development of, as well as the profession’s adaptation to, experiments and changes since 1985 in library organizational structures, information media, information access, reference services, and the roles and expectations of reference librarians. Although not discussed by Surprenant/Perry-Holmes, leadership is examined as a component of library. In addition, although
Surprenant/Perry-Holmes could not have predicted the advent of the World Wide Web, its pervasive effect on library services is explored.

In our analysis of the Surprenant/Perry-Holmes article, three distinct periods in reference librarianship emerged: the classical period, the experimental period, and what we have named the eclectic period. Eclectic, defined as "choosing what appears to be the best from diverse sources, systems, or styles," seems to accurately describe the characteristics of the present state of library services. The classical period was defined by a marked concern with control. The roles and responsibilities of reference librarians were well-defined and expectations were formally outlined. Variances in these expectations were limited, and ideas and recommendations were cautiously passed from one level to another in the hierarchical structure of the library. Creativity and innovation were essentially controlled, and risk-taking was not valued. The experimental period was characterized by new theories and approaches aimed at redefining the library’s organizational structure, leadership, and service models in the technological age. It was a time of great experimentation and uncertainty in the library profession. As with any period of experimentation and change, some new services were successful while others were not. The eclectic period developed as a result of this time of experimentation and re-evaluation. The library of the eclectic period is still characterized by ongoing change and is a hybrid of classical reference archetypes melded with experimental theories and services, but is more stable than the library of the previous period.
FORCES OF CHANGE

In the mid- to late-1980s, numerous information professionals challenged the concepts and practices of the classical model; the Surpremant/Perry-Holmes article was written during this experimental period. Until the experimental period, reference services had remained basically unchanged for approximately 100 years.⁴ David A. Tyckoson states that the influx of technology and the accompanying increase of responsibilities and expectations for librarians in the 1980s, without appropriate salary and personnel increases, fueled the reassessment of library—and particularly reference—services.⁵

Were reference services needed? What should the structure of such services be? Who should participate in reference services? These were some questions librarians raised as numerous academic libraries were reorganized or restructured in ongoing and occasionally confusing processes that distinctly affected reference services. Jerry Campbell challenged and provoked reference librarians in articles such as “Shaking the Conceptual Foundations of Reference: A Perspective,” which questions the organization and effectiveness of reference services, as well as the roles, responsibilities, and viability of reference librarians.⁶ In a later article, Campbell states that the “profession must soon make certain deliberate and fundamental changes, or be swept away”, and that librarianship needs to be “willing to sacrifice any organizational model or specific practice in order to better carry out our mission.”⁷ Campbell also notes that the technology-centered library “ignores the old boundaries but crosses them freely, mixing responsibilities, tasks, and territories.”⁸
The rapid growth of technology and widely-recognized information explosion\(^9\) provided the driving forces that fueled reference and information service reform during the experimental phase.\(^{10}\) As librarians struggled to deal with these changes, as well as major shifts in the nature of scholarly communication, they had to satisfy increasingly demanding expectations, roles, and responsibilities.\(^{11}\) This forced change, Campbell notes, “is even more objectionable when it is imposed by external circumstances such as technological revolution.”\(^{12}\) In addition to maintaining traditional reference services, librarians had to gain more specialized subject knowledge, increase their technical skills, and become effective instructors and educators. Varying degrees of job dissatisfaction, along with fears of marginalization, decentralization, and loss of control, brought about a reassessment of the underlying values of information services and inspired librarians to experiment with the ways in which reference services were provided.

Now, fifteen years past the “critical juncture” in librarianship that Surprenant and Perry-Holmes foresaw in 1985, the profession has fitfully evolved and adapted to meet the challenges thrust upon it by technological growth.\(^{13}\) Rather than simply reverting to an “archival function,” librarians have increasingly become active participants in the information-centered contemporary world, without abandoning the traditional goals of providing both information and human service.\(^{14}\)
INFORMATION TECHNOLOGY, EXPERIMENTATION, & CHANGE

Although Surprenant and Perry-Holmes made some interesting, bold, and strikingly accurate predictions, one major development they failed to anticipate was the creation and widespread expansion of the World Wide Web. Considering that few, if any, librarians foresaw the development of anything resembling the Web, such an oversight is understandable. Nonetheless, their inability to anticipate an accessible, affordable, and universal information delivery system had far-reaching effects on their ability to accurately predict the future of reference services and the changing nature of the profession.

The Web has influenced almost every area of reference work over the past decade, and as a result it affects almost every area discussed by the authors in their article. The Web and other forms of electronic information have had important consequences, only some of which the authors were able to anticipate.

Surprenant and Perry-Holmes did not fully grasp the impact of information technology on the changing nature of reference interactions. The Web, affordable technologies such as CD-ROM, and the move toward windows-based platforms have changed the availability and accessibility of information for the general user. Libraries have enthusiastically embraced these technologies by providing public service terminals and by making their catalogs and other resources available over the Internet. The point-and-click technology of windows-based systems and the Internet’s use of this technology have allowed end-users to directly access information both from within and from outside the
physical space of the library. As a result, reference interactions have expanded from traditional face-to-face encounters at a reference desk to include options such as electronic mail, in-depth consultations, information literacy education, and web-based instruction. Additionally, the need for librarian-mediated searches has been drastically reduced, as information becomes more accessible and more affordable for the average user.

Some experimental reference services have become standard practice while others have fallen by the wayside. Still more experimental methods have been combined with, or integrated into, classical reference archetypes to form a constantly evolving eclectic model of providing information services in a continually changing information environment. Experimental reference methods and services such as web-based instruction, digital reference services such as twenty-four hour electronic reference and real-time reference, consortial licensing of databases, electronic full-text journal access, digital library initiatives, and tiered reference services, have grown out of technology-driven organizational changes in a variety of library settings.

Specific experiments included the “flattening” of traditional hierarchical structures in libraries, such as those at the University of Arizona and Indiana University, to facilitate team building and empower individual employees. In a 1993 article about the Indiana University Library, James Neal and Patricia Steele state, “. . . in order to remain a vital part of the university, the research library must create a working environment where both the employee and user recognize and accept new power to exercise creativity and implement change.”15 They also
emphasize the importance of librarians' involvement in the university, the library’s involvement in instruction, and the performance of needs assessments.\textsuperscript{16} Surprenant and Perry-Holmes predicted the growth of tiered reference services in which paraprofessionals routinely screen reference questions, thereby freeing professionals to concentrate on research questions.\textsuperscript{17} Libraries at the University of Arizona and Brandeis University attempted tiered reference service experiments. In 1990, the Brandeis University Library implemented a “research consultation model,” consisting of a triage structure in which graduate students staffed the information desk and determined which clients should be referred to librarians.\textsuperscript{18} Douglas Herman, Brandeis University Library Reference Coordinator, explained the model’s purpose as improving “. . . services to the classes of patrons who most need professional assistance.”\textsuperscript{19} The research consultation model emphasized the provision of in-depth service and information literacy skills to clients, rather than the classical period’s “quickness of service and sheer availability.”\textsuperscript{20} The model did not survive the experimental period, due primarily to paraprofessionals' lack of information needs assessment skills and clients' feelings of alienation at being physically removed from librarians. However, the Brandeis reference model serves as an example of experimental services integrated into classical archetypes to form an eclectic information service model. Currently, professionals and classified staff often work in pairs, split time at key service points, and work on teams to provide information services. These subtle changes in reference structures and organizations reveal some of the lasting influences of the experimental period on libraries today.
THE CHANGING NATURE OF REFERENCE INTERACTIONS

Surprenant and Perry-Holmes were remarkably prescient in their vision of the future library as less a physical place than a function, and they understood that the reference librarian of the future would have to play a central role in technological growth, information literacy, and the electronic dissemination of information. Information once restricted to a library building within prescribed hours is now often available from remote locations twenty-four hours a day. Library functions and services have been reevaluated as the format and delivery options of library materials have changed, as have the expectations and needs of users. With the advent of new technologies, the rise of consortia with shared resources, and the availability of multiple document delivery options, libraries have shifted from a classical collection development model of material ownership to an eclectic model of providing timely access to materials.

While Surprenant and Perry-Holmes understood that reference interactions would change as a result of information technology, they did not envision information delivery mechanisms that would allow libraries to place information onto the desktops of a large user community. For instance, they foresaw a reference climate in which “. . . the vast majority of reference librarians will be in service-point offices, outside of the library, where they can be close to the action in their user community.”21 The authors were fairly accurate in predicting an environment where librarians physically reach out to their user communities, but they were mistaken in predicting how this shift would occur. While in many instances we do see consultants physically reach out to their user
population, we see more examples of electronic information delivery to library clientele. Desktop information delivery, along with email and fax, has served to connect the client and the consultant and has removed traditional boundaries.

**INSTRUCTION, EDUCATION, & LEARNING**

One area in which Surprenant and Perry-Holmes made some profoundly accurate predictions was in their vision of “education librarians” playing a prominent role in the library of the future. The authors stated that “. . . education may gain equal status with the provision of information as a prime reference function. Education librarians will be well versed in technology and how to apply it to solving information problems. They will assume responsibility for assisting the general public in understanding technologies and procedures to access information.”

Through formal and informal instruction, reference librarians have indeed adopted an increasing role in guiding users through the ever-expanding morass of electronic information. As the authors predicted, the electronic information explosion has multiplied the variety of information formats and interfaces clients encounter, and has provided additional challenges to librarians as educators and facilitators of end-user access.

Surprenant's and Perry-Holmes' vision of the growing importance of librarians as educators has been reflected by unprecedented changes over the past fifteen years in library instruction. While its roots can be traced back a century or more, instruction emerged as an important activity in the late 1960’s and early 1970’s. As technology has allowed clients to access information outside of the library, and the nature of undergraduate education has moved from
an instructional paradigm to a learning paradigm, librarians have logically re-examined the nature of library education. Since the 1980’s, librarians have expanded instructional activities to include the current emphases on information competencies and lifelong learning. A number of libraries have experimented with methods such as team teaching, online web-based tutorials, course-based instruction, and interactive group learning. While experimentation continues today, it is evident that library learning has moved from a classical lecture-based instruction model, focused on locating information within a particular library building, to an eclectic model in which instruction is integrated with other educational techniques that stress lifelong learning and core information competencies.

**FEES, CONSORTIA, & INFORMATION ACCESS**

While Surprenant and Perry-Holmes’ predictions concerning the importance of instruction have been supported by the growth of electronic information, as well as shifts in methodologies and emphasis among reference librarians, their vision of a fee-for-service reference model has not come to pass. The authors asserted that costs for services, particularly electronic resources, would continue to escalate and that library budgets would not be able to keep pace. Out of necessity, costs would be passed on to library users, and some services would have to be curtailed or discontinued. They also speculated that “... if the library profession does not resolve the dilemma of the ‘fee versus free’ controversy in a way that will increase library revenues for new services, then some profit organization will be formed to fill the gap and siphon off many
traditional users.” In other words, not only would libraries lose revenue from fee-based services, but they would also lose the support of their client base. All of this, according to the authors, creates two classes of users—those who can afford to pay for access to information and those who cannot and are therefore “information poor.”

When discussing the economic burdens electronic resources increasingly place on libraries, Surprenant and Perry-Holmes state, “One value that is inhibiting the ability to maintain flexibility during these times of change is the insistence on the provision of free information and services. Like it or not, fees for services will be necessary if we are to enhance or continue to maintain our institutional status in the society. Budgets cannot support the extensive access to databases and other telecommunications and electronic services that will be commonplace, indeed necessary, in the future.” These were dire predictions, but in the nearly fifteen years since this article was written, developments in technology and the means of disseminating information have changed in ways the authors could not have imagined.

In 1985, the technological and budgetary realities of libraries were not able to support access to electronic information without fee-for-access programs. Innovative access mechanisms based on creative economic models, however, have allowed libraries to create new infrastructures to meet the information needs of a varied clientele without resorting to a predominantly fee-based model. Even in poor and rural areas, libraries are able to offer access to the World Wide Web with the assistance of programs such as the E-rate and technology grants.
from the Gates Foundation and similar organizations. Simply put, the Web and other forms of networked information have spurred the development of new economic models for libraries that the authors did not envision.\textsuperscript{28} Still, the challenges of providing access to information in print and electronic formats, along with meeting the needs of the information poor, so wisely pointed out by Surprentant and Perry-Holmes in 1985, continue to test the resources and creative problem solving abilities of libraries and librarians today.

\textbf{INFORMATION CONSULTING}

Information consulting is a service of the eclectic model that reflects both the classical and experimental library periods. The title “Information Consultant” reflects a businesslike approach to information services, and the consultant's focus on the importance of in-depth service and information literacy skills is an outgrowth of tiered reference experiments. With information consulting’s emphasis on extensive interaction with clients and active support of their information needs, the consultant becomes indispensable to clients and their organizations. As Neal and Steele discuss, consultants are empowered to initiate projects, make independent decisions, and take responsibility for their individual professional development, while concurrently participating as members of a working team.\textsuperscript{29}

The roles of the information consultant transcend the traditional boundaries of the classical library-bound professional who provided reactive reference services when approached. In direct contrast, consultants assume a proactive role, recognize and initiate consulting opportunities, and understand the
importance of remaining in the “information loop.” Although users have become more self-sufficient with the advent of electronic information, the consultant experiments with innovative ways to build relationships and provide services to clients and the larger university community. The consultant continually shifts priorities while managing and assessing information needs in the evolving library environment.

Information consulting typically includes the traditional responsibilities of reference desk service, teaching general library classes, performing collection development activities, and providing faculty with information concerning new trends and materials. Consultants are, however, an increasingly vital part of the academic community, becoming fully integrated into the instructional and research fabric of the campus. Consultants participate in institutional events and committees, attend departmental faculty meetings, provide individual and group faculty demonstrations, give presentations at student orientations, teach specialized library classes, consult individually with faculty and students, and offer office hours in campus departments. Contrary to Surprenant’s and Perry-Holmes’ predictions, contemporary librarians are not paid directly by their clients; rather information consultants work within the general system to engage their clientele in a full array of services.

LEADERSHIP & VISION IN AN ERA OF EXPERIMENTATION

Leadership and supervision is an area of reference librarianship that was not discussed by Surprenant and Perry-Holmes. They accurately asserted that the profession would change in many ways, but did not mention the important
role that leadership plays in facilitating change. Moving from one model or organizational culture, with its ingrained and finely tuned behaviors and practices, to a different model or culture necessitates a degree of effective leadership. In particular, leadership that is associated with a sense of vision, as well as a willingness to confront and to take risks, is required for successful cultural transformations.

Several key descriptors characterize reference cultures, including: well-defined behaviors and practices, values (quality, for example), philosophies that guide or influence attitudes toward clients, and formal policies and procedures. A culture is a “. . . pattern of basic assumptions— invented, discovered, or developed by a given group as it learns to cope with its problems of external adaptation and internal integration—that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems.”30 This pattern of basic assumptions essentially defines or underscores the dominant behaviors and practices of the “typical” reference librarian in each of the models described in this article. Leadership also comes under the umbrella of these evolving patterns. As librarianship has moved from the classical model to the experimental model and then to the eclectic model, the practices associated with leadership have also evolved. Effective leadership moves and transforms cultures. In these transformations, organizational assumptions are continually monitored, influenced, and shaped.
Leadership in the classical model was generally characterized by several variables. One was control. Information professionals who were responsible for reference services in classical cultures were particularly concerned with control over people, policies, and procedures. This trait was considered to be desirable and fundamental to effective management. Managers tended to focus on organizational operations, not on people, and time and effort were devoted to maintaining the elements of the organizational structure.

Another variable was complexity. Managers in the classical model valued complexity, and as it was introduced into reference services, managers were needed to cope with the resulting structures. Units and functions tended to be “added on” to existing activities and services, and organizational structures were not examined holistically. Important decisions were made by people in positions of leadership, not by reference librarians, although reference librarians participated in decision making to a limited degree.

As discussed earlier, various driving forces of change coalesced in the mid-to-late 1980s as information professionals challenged the concepts and practices of classical reference services. The period of change and re-evaluation also affected leadership. Control and complexity, for example, were challenged. Administrative levels were examined and reduced or minimized. Professionals tried to reduce the number as well as the impact of the traditional hierarchical levels, and administrative responsibilities and associated authorities were decentralized or redistributed. Departments became teams in some libraries and department heads became team leaders. Librarians studied and tried to apply
the behaviors of team-based organizations to libraries, and finally, the "learning organization" was introduced to academic libraries.

Senge's five core disciplines, including personal mastery, mental models, shared vision, team learning, and systems thinking, underscore initiatives associated with learning organizations. These disciplines describe organizational cultures in which individual development is a priority. Outmoded and erroneous ways of thinking are identified and corrected, and the vision and purpose of the organization are understood and supported by all of the participants. Articles such as Shelley Phipps' "Transforming Libraries into Learning Organizations: The Challenge for Leadership" exemplify the ways that the roles and responsibilities of leadership were changing. The message was clear. People in positions of management needed to become skilled learners, mentors, and facilitators.

The ongoing challenges and associated reactions of the experimental phase soon evolved into the current or eclectic phase. In the eclectic period, open and distributed systems are generally preferred over control-focused options. Managers or team leaders who emphasize control are assessed as less effective, and simplicity is valued and preferred over complexity. Work is not created unless the activities contribute to the strategic goals of the organization. As possible, work is eliminated. Trust is perceived as particularly important and managers who are not trusted, or do not trust, are not effective. Effective leadership is based on the ability to learn, to mentor, and to facilitate. In other words, effective leadership is focused on people, not on organizational
structures. Hierarchies still exist in academic libraries as strategic levels are still needed, but the hierarchical levels are more flexible and, in a sense, permeable.

In this newest phase of librarianship, people and organizational structures are more flexible and responsive. Roles are also more flexible as, increasingly, people are assuming responsibilities in different areas. Expectations are mutually determined, and information is openly shared. Important decisions are made by the people who do and are closest to the work. Creativity and innovation are valued. Leadership is progressing from "I know" to "Let's learn."

CONCLUDING COMMENTS

There will never be a classical reference period again. The pace of change that has driven the reference reform movement and helped create the current eclectic period will no doubt continue and force librarians to be flexible, adaptable, and lifelong learners. Looking back at the classical and experimental periods allows us to understand how far we have come and, more importantly, to prepare for the future. By understanding the continually evolving roles and expectations, organizational structures, and workplace cultures that impelled libraries and librarians to successfully move from the classical to the experimental to the eclectic periods, we can thus understand the skills and qualities necessary for future success.
References & Notes


9. Two sample articles from the period that discuss the information explosion are:


10. For a summary of major reference reform developments see:


11. For an overview of changes in scholarly communication see:

14. ibid.
16. ibid., 83-84.
18. For more information on the Brandeis reference model see:
20. ibid., 20.
22. ibid., 236.
26. ibid.
27. ibid.
28. A number of articles in the literature discuss the emergence of digital libraries and/or consortia arrangements, some examples in the recent literature include:


