Librarians as Generalists:
Redefining Our Role in a New Paradigm

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"Enlighten the people generally, and tyranny and oppressions of body and mind will vanish like evil spirits at the dawn of day."

– Thomas Jefferson

Abstract

Our information-saturated society has drastically changed the role of librarians and their collections. In addition to "publishing" and "producing" as primary terms in the librarian's lexicon, "partnering" has also become a key component of the job description. Many collaborative projects have emerged due to the dwindling resources of state-funded educational institutions and the consequent need to consolidate resources, services, and personnel. This paper outlines the development of Imagen, a multimedia, interdisciplinary database project at the University of Arizona, and the subsequent lessons learned which have revealed a new paradigm for collections and their administrators. This new paradigm, defined by such paradoxical issues as increased access with dwindling resources, and interoperability while maintaining unique collection identity, influences how disciplines and media collections interact with each other. The paper's conclusion advocates the continued need for generalists in an age of increasing specialization and the leadership role librarians should play in this new paradigm.

Introduction

As is the case for many other information professionals, my title, Curator at the College of Architecture, belies the spectrum of responsibilities and breadth of previous experiences which most of us bring to our jobs. In addition to managing three media collections within a school of architecture, I also teach courses, and have written publications on various aspects of architecture as well as information science. I am a designer, I am a librarian, I am an archivist, I am a curator, I am a teacher. I am a generalist.

Job descriptions for librarians have changed drastically in the last ten years. Librarian positions now routinely feature a job description which includes such skills as collection development, needs assessment, connection development, policy management, budget management, reference services, staff training, supervision and assessment, bibliographic instruction, risk-taking, integrative services responsibilities, communication skills, understanding of current technological innovations, the legal aspects of copyright and its implications for the collection, a subject area specialization which will guide the research and publishing agenda, and usually a foreign language.

Accompanying this "generalist" job description is an environment of decreasing financial resources, in which previously independent institutions are, voluntarily or by necessity, developing collaborative relationships. I discovered in the process of embarking on my own cooperative venture that precious few articles existed which offered guidelines for the creation, maintenance or even the justification of cooperative ventures, joint ventures, consortia, collaborations, and my favorite term, "institutional partnering." These are new terms in our late twentieth-century lexicon which are infiltrating the library world.

This lexicon is very much a part of the framework defining the National Information Infrastructure, Vice-President Al Gore’s information highway. In its list of objectives is the development of “a variety of sustained public and private partnerships and funding mechanisms to support education … and promote interoperability.” Indeed, institutions are developing collaborations and cooperative ventures at an increasing rate. Universities and other institutions are working to develop intra-institutional collaborations between libraries and computer centers to provide access to collections online. Many others are developing inter-institutional cooperative ventures to share the wealth of cultural resources between campuses and other institutions. However, many of us work on campuses and in institutional environments where collegiality is preached and territoriality is practiced.

As the world of information is expanding, the financial resources which manage it are getting smaller. With educational institutions using corporate management
techniques, the very survival of specialized collections will be based on our ability to develop cooperative resource-sharing as part of the direct mission of the institution. But little has been done to analyze the results of the efforts of our brave new world. Should our independent collection identities be subjugated to the goals of interoperability? Does the myth of a shared knowledge base match the reality of cooperative ventures? What are the obstacles and costs of collaboration? What is the role of librarians in this new environment? Are librarians being directed by the change or do we have an opportunity to direct the change?

The purpose of this article is to address these questions within the context of a collaborative project being developed at the University of Arizona, as well as to acknowledge the importance of librarians as leaders in such collaborative projects and to make the case for more generalist education in an environment of increasing specialization.

Imagen

The three media types I manage, slides, videotapes, and archival architectural records, are housed within the College of Architecture, rather than in an institutional library. This overarching responsibility was not accidental, but represents the dwindling resources of state-funded educational institutions and the consequent need to consolidate resources, services, and personnel. This financially constrained environment is occurring, paradoxically, at the same time as technological expectations are increasing for greater access by broader audiences as a critical objective of the University.

In 1993, I began the design and preliminary implementation of a multi-phase project called Imagen (pronounced ee MAA hen), Spanish for the word "image" yet whose equivalent English pronunciation, "imagine", nevertheless defines the project's vision of conceptual exploration. The goal of the Imagen Project is to use the computer network as a teaching tool to provide access to the multimedia resources integral to the study requirements of architecture and other visually-oriented disciplines.

In January 1996, I began the implementation of Imagen as a pilot project within the College of Architecture with a $21,000 grant from the University of Arizona. The project had four objectives: 1) Consolidate the three media collections within the College of Architecture; 2) Preserve the original medium in its best possible environment through the use of digital technology; 3) Provide access to content across media types through natural language queries; and 4) Disseminate the data and images online to classrooms and independent learning environments, such as the Web. The implementation of Imagen was divided into two phases.

Phase One:

Begun in January 1996, phase one concentrated on developing a model for one discipline-specific collection content, architecture, to be shared across media types. As a means of implementing this Phase One goal, a frame-work of objectives was articulated: Consolidation, Preservation, Access, and Dissemination.

Consolidation: Within the College of Architecture, multi-media resources form the basis of teaching methodology. The Slide Collection is an essential complement to the course lectures given in the College of Architecture. The Videotape Collection is increasingly in demand for its capability of providing succinct documentation of interviews, constructions, and design processes. The Arizona Architectural Archives chronicles the historical development of Arizona architecture through original architectural drawings, photographs, and manuscripts dating from the nineteenth century. The cumulative user group profile for these collections spans the entire spectrum from general undergraduate and graduate education to teaching faculty, scholars, and the general public, but with varying degrees of accessibility. From a curator's perspective, however, the existence of three separate architectural collections defined solely by medium created an artificial barrier to their efficient management and access. With the emergence of collection-management software, which not only accommodates textual records but also accompanying digital images, the fundamental principles of collection management could be re-evaluated.

Preservation: Student access to the College's multimedia resources had been restricted due to the deterioration of original materials through constant use. The development of digital technology has created a medium through which access is maximized while preserving the original in its best possible environment. Imagen utilizes existing Kodak Photo CD commercial technology for the conversion of the existing slides into digital format. Using the Photo CDs as digital masters, digital images are transferred to the Imagen database server and the master CDs are kept in archival storage cabinets. Digital conversion of video clips is done through the use of a digital film board. Large-format digitization of media such as architectural drawings is now becoming a mainstream service of architectural reproduction vendors.

Access: Imagen uses natural-language queries to view multi-media representations of architectural examples. The precision with which one can articulate in textual terms the physical appearance and content of an original architectural work, piece of art, or even a non-physical concept, affects the way in which its representation can be retrieved. "Classification" systems, more often associated with book and some slide collections, have been abandoned and replaced with "description" methods more common to archival collections. Using EmbARK collections-management software (by Digital Arts & Sciences), the architectural information was organized around a hierarchical structure of Representation, Work, and Creator. At the same time, a data structure and vocabulary applicable to other disciplines were developed.

The common thread and the key to understanding Imagen's organization of data is that the architectural collections at the College are Representations in the form of slides, videos, drawings, manuscripts, etc., which represent Works (buildings, in my case) made by Creators (architects). As each new record representing a particular medium is accessioned, it is linked to media-neutral
authority records in both the Work and Creator files. This satisfies a primary goal of the project to define the Work and Creator records only once, as authority records.

Also, the accommodation for pull-down choice lists for authority control, created from established and Web-accessible thesauri such as the Art and Architecture Thesaurus, the Union List of Artists’ Names, and the Thesaurus of Geographic Names, allows non-specialists with various backgrounds to perform data entry with minimal training. Considering the wide spectrum of data entry expertise, including non-library personnel and undergraduate student workers, this was another primary goal.

Dissemination: In the past, student use of architectural media collections was restricted due to preservation-oriented access policies, concurrent use, and disparate collection locations. With Imagen, faculty create customized subsets of the larger Imagen database, called portfolios; these can be used for review, and to create assignments and image-rich tutorials, using Imagen as the encyclopedic foundation for information and digital images. The portfolios are exported from the mother Imagen database and are accessible to students on the Imagen Website through EmbARK’s complementary software, ImageAXS Pro. A copyright and fair-use policy, not yet approved by University counsel, dictates the criteria by which Imagen maintains its interpretation of fair use, including size and resolution of images, a Web gateway including a copyright agreement statement, course and semester-based password protection, as well as copyright-holder acknowledgement for each image.

Phase Two:

In March 1997, the Imagen Project began Phase Two, whose goal is the development of an interdisciplinary consortium of University fine arts and humanities collections, called the Humanities Partnership. It includes collections within the University of Arizona, such as those of the Center for Creative Photography, the Arizona State Museum, University Museum of Art, the College of Fine Arts, the Center for Middle Eastern Studies, and a plethora of localized departmental and faculty collections.

The same framework of objectives described in Phase One above is also being applied to the implementation of this larger multi-disciplinary phase of the Imagen Project. In this phase, however, Consolidation applies to the diverse collections and disciplines represented in the Humanities Partnership. Preservation and Access apply to the definition of the unique and common attributes of the distinct collections. Dissemination refers to the increased development of online independent study, distance learning, and interactive tutorials which has significantly modified pedagogical methodologies.

Project Conclusions

In an effort to summarize my experiences in developing this collaborative project and to extrapolate those experiences as they relate to the larger issue of the changing role of librarians, I would like to divide my thoughts into the following categories.

Teamwork

According to a recent Chronicle of Higher Education article, creating a “preferred library for the future” will require collaboration among librarians, faculty members, computer center staff, students, administrators, and lawyers, groups that have not traditionally worked together (or at least not well). Universities in particular are plagued by caste distinctions and reward systems that inhibit teamwork. Faculty treat non-faculty with disdain; many librarians act as medieval gatekeepers to information; and computing professionals consider technical knowledge the only measure of worth. Though the cultural divide between the humanities and the sciences is well known, the equally deep divide which lies between scholars, librarians, and computer professionals is just beginning to be recognized.

Information technology, however, is challenging the traditional, independent roles of libraries and computer centers on most campuses. The library and the computing center, with different organizational histories, different staff expertise, and different funding structures are now finding themselves charged with providing information support that neither can give well without the other. Moreover, faculty attitudes will also have a major impact on future information environments in higher education. As many already recognize, it is the student population which is driving the definition of the technological edge, while the teaching faculty has yet to come to a consensus as to what is an acceptable rate of change, or even if there is a need for change.

Teamwork has also gotten a bad reputation as a result of its institutionalization in programs such as total quality management (TQM). Teamwork must be seen as a natural extension of the implementation of shared goals requiring flexibility and compromise, as well as a tolerance for risk-taking. But more importantly, teamwork is also a critical step in the validation of knowledge. Our collective cultural scientific knowledge base was developed through a process of validation which is recognized in the collaborative criticism of colleagues, the peer-review process, and the replication of individual experiments by others. Teamwork is simply a mechanism to build consensus, by which the validation of an individual’s ideas and methods takes place. If done well, the maturation of collaborative goals will be accelerated, not inhibited, by effective teamwork.

Define Unique and Common Attributes

In a paper on shared cataloging delivered at the 1996 Visual Resources Association conference in Boston, I presented, as my thesis, the limited scope within which shared cataloging is practical. Universal standards and interoperability between collections are profoundly significant goals, but should not be obtained at the expense of the specific needs which define a collection and institution’s unique identity. We must strive for a balance between universality and specificity, but that can only be done if all involved understand the goals and limitations of both.

In courageous attempts to strike this precarious balance, numerous data models have been developed by
various entities. In its effort, the National Information Infrastructure working group has actually lowered its expectations for creating a comprehensive infrastructure capable of cataloging, searching and retrieving data from the trillions of bytes of digital material, including texts, photographs, maps, sound, and video from various disciplines, collectively known as metadata. One concept on which there does appear to be agreement is the notion of a two-tiered structure of information. The primary tier would consist of a core group of data elements with access to accommodate a large group of defined users. Generalized fields could then be expanded upon locally at the secondary tier to accommodate the unique needs of the individual institution, collection, media, discipline, and clientele.

Moreover, many of the existing metadata systems are created for information junkies and not for the primary users of our collections. The definition and prioritization of accurate user profiles affect both the input of information and resources as well as the output in various formats. These prioritized must be evaluated and compared by the media- and content-specific personnel in the development of common consortium priorities. These priorities can then be directly translated into the development of various interfaces with administrators, librarians, technical support staff, teaching faculty, students, and other users. Defining these user profiles and subsequent priorities is one of the most difficult tasks of the collaborative process.

Beyond the definition of collection and user profiles, the core consortium representatives are individuals with idiosyncratic personalities, egos, strengths, and weaknesses. In his book, Sacred Hoops: Spiritual Lessons of a Hardwood Warrior Phil Jackson, coach of the Chicago Bulls, discusses the use of Zen Buddhism in the coaching of possibly the best basketball team of our time. The key to his blending of seemingly oxymoron application of Buddhism to basketball is the identification and acknowledgement of individual strengths and weaknesses, the development of a team ethic through the definition of common goals regularly reinforced through group communication, and the channelling of individual egos within a flexible team expression. Jackson also acknowledges that the inherent paradox in the nature of collaboration is individual responsibility. Team work is hard work but is necessary to maintain open gateways in a collaborative landscape.

Leadership

Librarians are more integrated in the creation and dissemination of human knowledge than ever before in our profession. In this, the third wave, the information age, our legacy as information specialists must be one of leadership. Management guru Stephen R. Covey defines leadership as “the art of mobilizing and energizing the intellectual and creative resources of all people at all levels of the organization.” If the library profession is to survive in this age of increased expectations and diminished resources, we must not only participate in cooperative ventures within and outside our institutional organization, but develop a professional ethic of leadership through the collaborative process.

Librarians have traditionally been the interface between knowledge and its dissemination, but the infrastructure by which knowledge transfer occurs is rapidly changing. We as individual librarians and as a profession must affect change in a way which gives librarians a voice in the criteria by which the change itself will be defined. We must also become a model for the collaborative nature we expect of the next generation; we must practice collaboration, not just preach it.

Call for Generalists

What then has happened to the role of librarians in the development of this new collaborative environment? Have we become the new breed of Renaissance men and women? Are we not generalists? Not according to our valued professional organization, ARLIS/NA, which, in an attempt to find a descriptive umbrella title for its members, refers to us not as librarians, but as information specialists, a deliberate use of the antonym of generalist.

Although most of our job descriptions, like the one referred to earlier, outline the definition of a generalist, we tend to work in specialized environments, such as those defined by the specialized committees of ARLIS/NA and other information-oriented organizations. This specialization of knowledge areas is also a product of the academic reward system, where one is rewarded with tenure or promotion for gaining national recognition for specific knowledge expertise.

But now, as our facilities of knowledge are becoming smaller, expectations of broader access through technology are increasing, and as the resources to create and maintain our knowledge are dwindling, a new community of partnerships, cooperative ventures and collaborations is inevitable. This new paradigm requires a new definition of professional with broadly based skills in the integration of knowledge in its various forms from creation to dissemination. This professional must be a generalist; a weaver who foresees the entire tapestry within the potential of each individual thread, bright or dull, wide or narrow, rough or smooth. I believe the library profession is poised to develop as leaders in this new generalist paradigm.

A paradigm shift, however, cannot occur in isolation. As we library professionals become more involved in collaborative efforts to integrate rather than fragment specialized knowledge, we must also advocate institutional reward systems which recognize our generalist knowledge. We must be rewarded for integrating methodology, diplomacy and the broad content knowledge necessary to orchestrate collaborative projects. We must be given recognition as risk-takers, so that even failure and its lessons are seen as part of the natural process in the creation and validation of knowledge in our collaborative efforts.

Integration was also the theme of a recently published Carnegie Foundation report entitled Building Community: A New Future for Architecture Education and Practice. The author, the late eminent educator Ernest Boyer, called for architects, members of the former epitome of individualistic professionals, to integrate collaborative projects into the core of their training. Boyer stated that “the future belongs to the integrator” and emphasized the need.
for a profession so linked to the enrichment of our communities to learn more about the inter-disciplinary community in which it creates environments. I could not help but be struck by the parallel identity of librarians in this new paradigm. As we become more and more responsible for the creation and enrichment of conceptual environments which integrate and disseminate the various media types and content disciplines, we must draw on our education and professional experience as generalists.

The generalist, and the education of future generalists, are not only critical to the library profession, but to our society as well. The contributions of generalists throughout our cultural history represent the legacy of enlightenment whose aspirations are as valid now as they have ever been.

Notes
1. Thomas Jefferson, in a letter to P.S. DuPont de Nemours, April 24, 1816.
6. The National Information Infrastructure (NII) conference was sponsored by the U.S. Department of Defense, National Science Foundation, and NASA and involved six leading universities: Carnegie Mellon, Stanford, University of California, Berkeley, University of California, Santa Barbara, University of Illinois at Urbana Champaign and University of Michigan.