The Archivist's First Responsibility: A Research Agenda to Improve the Identification and Retention of Records of Enduring Value

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Abstract: What archivists select for preservation largely determines the nature of their work and the role of their profession in society. Yet, the archival profession has much to do in developing appraisal theory and practice that cope effectively with modern documentation. This essay starts with the recently published report on the profession's goals and priorities, and proposes a research agenda that could strengthen archival appraisal and the profession's ability to document society. The authors suggest research projects to examine the nature of the documentary record, to determine the interrelatedness of archival records, to assess how to deal with the growing quantity of automated records, to relate the development of automated descriptive systems to appraisal, and to assess the quality of the documentary record. The authors also describe the potential value of documentation strategies in dealing with some of these appraisal concerns.

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THE PRIMARY AIM OF this article is to suggest a research agenda that will improve the archival profession's ability to document society. A secondary aim is to demonstrate the validity of the Goals and Priorities (GAP) report as a planning tool and the need to continue the process of professionwide planning. The recommendations in Goal I, "The Identification and Retention of Records of Enduring Value," in the GAP report provided a background for this article.1 To successfully document society, which is the profession's first responsibility, archivists need a mechanism like the Committee on Goals and Priorities (CGAP) that keeps essential issues in the forefront, allows successes to be marked, and helps identify needs.²

Goal I includes four objectives for ensuring the identification of records of enduring value; we will concentrate on two. The first is to "understand the characteristics and uses of records," an objective that suggests analyzing such concerns as the "creation, administration, and use of records by their creators"; the "value of records to secondary users"; the "larger documentary record to determine the value of archival materials in that record"; and the "impact" of information technology. The second is to "develop and apply appraisal and documentation strategies." This

objective suggests formulating "appraisal strategies" and "ways to disseminate appraisal guidance," and encourages the "development of institutional acquisition policies" and "coordinated and cooperative documentation strategies." The remaining objectives are more concerned with issues requiring influence or advocacy, such as educating records creators about their responsibility to maintain historical records, or analyzing the use of information to aid in the determination of what should be retained.³ Although these are important concerns, we are concentrating instead on the profession's need to comprehend the nature of recorded information and develop and test techniques to identify records of enduring value.

Definintions

Appraisal. All archivists have notions about what appraisal is, ranging from the traditional ideas of evidential and informational value to broader concepts or models such as the Boles-Young "black box" or the Samuels-Hackman documentation strategy. In this paper we are using the broadest possible definition of appraisal—any selection activity that enables archivists to identify recorded information that has enduring value, primarily for the documentation of modern society. We cer-

¹Planning for the Archival Profession: A Report of the SAA Task Force on Goals and Priorities (Chicago: Society of American Archivists, 1986), 8–13.

²For preliminary assessments of the value of this report, see F. Gerald Ham, "Planning for the Archival Profession," *American Archivist* 48 (Winter 1985): 26–30; Richard J. Cox, "Strategies for Archival Action in the 1980s and Beyond: Implementing the SAA Goals and Priorities Task Force Report," *Provenance* 3 (Fall 1985): 22–37; and Gregory S. Hunter, "Filling the Gap: Planning on the Local and Individual Levels," *American Archivist* 50 (Winter 1987): 110–15.

³We acknowledge that use is an extremely important area of archival administration that has tremendous implications for appraisal. The new writing on this subject is especially beginning to reveal the importance of understanding use; see, for example, Paul Conway, "Facts and Frameworks: An Approach to Studying the Users of Archives," *American Archivist* 49 (Fall 1986): 393–407, and Bruce W. Dearstyne, "What Is the *Use* of Archives? A Challenge for the Profession," *American Archivist* 50 (Winter 1987): 76–87.

⁴For the traditional, standard definition of appraisal, see Maynard J. Brichford, *Archives & Manuscripts: Appraisal and Accessioning*, Basic Manual Series (Chicago: Society of American Archivists, 1977). For more recent ideas about archival appraisal, see Frank Boles and Julia Marks Young, "Exploring the Black Box: The Appraisal of University Administrative Records," *American Archivist* 48 (Spring 1985): 121–40; Larry J. Hackman and Joan Warnow-Blewett, "The Documentation Strategy Process: A Model and A Case Study," *American Archivist* 50 (Winter 1987): 12–47; Jutta Reed-Scott, "Collection Management Strategies for Archivists," *American Archivist* 47 (Winter 1984): 23–29; and Helen W. Samuels, "Who Controls the Past," *American Archivist* 49 (Spring 1986): 109–24.

tainly do not intend to imply that what has long served the profession well has been inadequate; if anything, we are convinced that archivists have inadequate information about these traditional appraisal methods and past appraisal practice. Though there are a few textbooks and manuals, few specific institutional practices are codified. We are also not implying that only archivists can document society; documentation requires coordinated efforts with librarians, oral historians, folklorists, material culture specialists, museum curators, and others.⁶ We are also convinced, however, that archivists must focus their sights on the full documentation of society, not merely the piecemeal evaluation of isolated records for historical or other long-term value. This need challenges archivists to go beyond the traditional appraisal systems that are tied to single institutions and to the collecting of historical records.

We hope that this article will suggest why additional analysis and new techniques are needed to supplement, not supplant, traditional practice. The challenge for archivists is to build upon their knowledge and to make their theory and techniques more responsive to the demands created by modern documentation.

Research. In modern society, research is generally equated with large institutions, external funding, and the ivory tower vision of the solitary academic with research time. Overwhelmed by the spectre of sci-

ence, technology, and academe, one envisions large teams, equipment, and piles of data and publications. If archivists think about research at all, they focus on the national archives—the National Archives and Records Administration (NARA), the Library of Congress, the National Archives of Canada, Britain's Public Record Office, and the larger state archives. Archivists turn to these institutions for research on preservation treatments, appraisal techniques, and legal matters, a fact that is clearly reflected in the archival literature. But if we reexamine the research process, we can discover a larger and more pervasive role for research in the archival world.

Research is generally described as a systematic search for new concepts, new knowledge—truth. Focus for a moment, though, on the process rather than the end product. The key to valuable research in any field is the framing of the initial question delineating what the researcher wants to know and why. A strategy must then be developed to gather information and test assumptions before conclusions can be drawn. Finally, the findings are examined for their applicability in other situations, and are then disseminated.⁸

Research, then, is defining what is unknown and finding answers by asking questions. This simplistic explanation is offered to demonstrate that the everyday work of archivists involves the research process. How should this collection of social wel-

⁵This lack of codification is clearly reflected in the range and diversity of published studies on archival appraisal captured in Julia Marks Young, comp., "Annotated Bibliography on Appraisal," *American Archivist* 48 (Spring 1985): 190–216.

⁶One of the primary reasons for the rise of material culture studies is concern that the written record does not always adequately document society. For a good introduction to the purposes and nature of such studies, see Thomas J. Schlereth, *Material Culture Studies in America* (Nashville: American Association for State and Local History, 1982), *Material Culture: A Research Guide* (Lawrence: University Press of Kansas, 1985), and *Artifacts and the American Past* (Nashville: American Association for State and Local History, 1980).

⁷The primary codifiers of archival practice and the few theoreticians that the profession has produced have come from the National Archives and other large archival programs. This is mainly because the larger programs have had the necessary resources to support such work, and the profession has had few full-time archival educators doing research or encouraging others to do so. For an evaluation of archival writing and research, see Richard J. Cox, "American Archival Literature: Expanding Horizons and Continuing Needs, 1901–1987," *American Archivist* 50 (Summer 1988): 306–23.

⁸A most enjoyable and approachable description of the scientific process is presented in Horace Freeland Judson, *The Search for Solutions* (New York: Holt Rinehart and Winston, 1980).

fare case files be appraised and described? Are there legal problems in making the material available? Should the daily weather observations made by the county meteorologist be retained? How should the electronic messages created by the institution's central administration be appraised, described, and preserved? The answers to these questions will assist the archivist in coping with his or her immediate problem.

But there are other ways to frame questions. What are the long-term values and problems associated with preserving social welfare case files? How much of this kind of material has been preserved and what more is needed? What is the value of local weather data? Who else creates and preserves these data? How does one capture, preserve, and gain useful access to integrated electronic data bases? Posing questions in a more universally applicable fashion allows archivists to respond to their own problems while seeking solutions that will assist others with similar problems. When the archivist steps back and generalizes upon the findings and disseminates the results, the research gains more than local significance. This process acknowledges that archivists have similar problems and must seek answers through cooperative research efforts.

Where can such research projects take place and who will do them? Research ought not be limited by the size of institutions or their resources. "Lone arrangers" as well as members of large staffs are capable of undertaking such projects. It is the quality of the individuals and the commitment of the institution that make successful research possible.

A few examples will demonstrate the diversity of settings and projects that comprise recent archival research. The state archives obviously play a major role. Currently, seven state archives are working together to examine how to adapt the US MARC AMC format to their own internal management needs and to explore means and benefits of sharing appraisal information with each other and other government agencies through the Research Libraries Information Network (RLIN). The Kentucky Department of Libraries and Archives is conducting a major study of the creation, control, and preservation of automated records in state government.9 A current project in New York includes a component to encourage archivists, librarians, historians, other specialists, and concerned citizens to plan for the adequate documentation of the state's six westernmost counties. 10

State, business, college, university, and religious archives are participating in a research project to test an appraisal model proposed by Frank Boles and Julia Young. Colleges and universities have been active in other research areas. The Bentley Library at the University of Michigan may be the most visible, as the site of the Mellon research fellowship program, which has had

⁹Conversations with Charles Robb and Glen McAninch in Kentucky about work in progress funded by NHPRC (#85-69). Information about the seven-state RLIN project is based on attendance at a presentation at the 1987 SAA annual meeting and the authors' own familiarity with the project.

¹⁰This project is part of the New York Historical Records Program Development Project, funded by NHPRC (#85-129 and #86-123) and administered under the auspices of the state Historical Records Advisory Board. This effort was initially intended to lead to a draft documentation plan for the region and the creation of an ongoing mechanism to monitor and refine that plan as necessary. Applying the documentation strategy model has proved to be difficult for a variety of reasons, including only a modicum of resources to support this part of the project, the newness of the documentation strategy concept (especially to local repository staff and historians), and the composition of an advisory board that can effectively evaluate a broad range of human activity. The two main products of this project are now expected to be a brief guide that can assist local repositories in New York to carry out such work and an article in the professional literature that describes this documentation strategy test.

¹¹The project, entitled "An Appraisal System for Modern Documentation," is based at the Bentley Historical Library at the University of Michigan and is funded by NHPRC (#87-79).

a significant impact on the archival literature. In addition, there are the development of the MicroMARC at Michigan State University and the appraisal projects at MIT. In the last two cases the parent institutions may be large, but the archives' staff and resources are not. There are also the appraisal study of social science records carried out by Gary Saretsky at Educational Testing Service and the study of planning and education for "lone arrangers" in religious institutions, carried out by Tom Wilsted and Peter Wosh. In International Int

Most of these projects have been funded by outside sources, principally the National Historical Publications and Records Commission (NHPRC), but this does not mean that similar projects cannot be carried out solely with funds from the primary institution. Staff members at archival repositories, students and faculty of comprehensive archival education programs, and scholars in allied fields can all make meaningful contributions to this research. In fact, there is always a role for individuals apart from institutions in archival research. Any individual may formulate a question, do background research, and write the results for presentation at professional conferences and, eventually, for publication. A commitment to research is part of an archivist's role as a professional. Theory and research have long been identified as essential elements of a profession.14

A Research Agenda for Appraisal

Anyone examining the suggested activities in the GAP report under "identification and retention of records of enduring

value" will discover an exciting, if somewhat daunting, potential research agenda for this aspect of the archival mission, including such tasks as reviewing knowledge of other disciplines about the characteristics, management, and use of records by their creators; comparing the informational content of published and unpublished sources to determine if the proliferation of published materials has affected the usefulness of original archival materials; and studying the effects of past and present technological changes on records creation and retention. The list—and its implications—goes on much longer than even suggested here.

Many archivists worry, however, that the present level of research activity is not meeting the challenges of documenting our society. Despite the extensive current research in this area, we question the overall effectiveness of the work at this point. Most of the present research is relatively isolated and limited when viewed against the profession's needs. The appraisal research has been designed to meet individual or institutional interests rather than in response to a professionwide consensus on priorities or needs. The result has been as one would expect: some good work, but considerable gaps and lack of coordination.

There is no way to carve out a comprehensive agenda in this article. In many ways, it would just repeat the GAP list. Neither would it be useful to propose one grand solution, as there is no simple solitary answer. The goal for archivists is clear—to improve their ability to identify and preserve a record of society. But many complex questions must be answered before this goal can be achieved. For years physicists

¹²Bentley fellows with articles on appraisal in the *American Archivist* are Frank Boles and Julia Young, JoAnne Yates, Paul Chestnut, and Leonard Rapport (Spring 1985), and Larry Hackman and Joan Warnow-Blewett (Winter 1987).

¹³Gary D. Saretzky, An Evaluation of "Appraising the Records of Modern Science and Technology: A Guide" as an Aid to Archivists of Social Science (Princeton: Educational Testing Service, 1986), final report to NHPRC for grant #85-114. The Religious Archives Technical Assistance Project is based at the American Bible Society with Elizabeth Yakel as project archivist; funding is provided by NHPRC (#87-93).

¹⁴See Richard J. Cox, "Professionalism and Archivists in the United States," *American Archivist* 49 (Summer 1986): 232–44.

have been seeking a neat synthetic theory of the cosmos. Hundreds of separate research projects are undertaken in the hope that each will be a building block towards the final goal. Archivists need to do the same.

We have chosen five areas that represent professionwide priorities as examples of the type of research that is desirable, the mechanisms required, and the actors needed. Other archivists undoubtedly will think of additional areas and concerns.

Projects

Nature of the Documentary Record.

The first proposed project involves an examination of the nature and quality of the information archivists collect. Standard appraisal practice emphasizes the evidential and informational content of records, but archivists lack techniques to assess the unique value and quality of the information. Archival techniques also fail to encourage the appraiser to assess this value in light of all other available information. Published, visual, and artifactual sources must be evaluated as the archivist selects.

Recent studies have shown the usefulness of this type of analysis. The Pennsylvania Railroad Historical Records project determined that the published coverage for railroads is satisfactory only between 1868 and 1875. Therefore, the appraisal team recommended that a high percentage of all records prior to 1868 should be retained. ¹⁵ A recent study of state and local government publications suggested that archivists should have a hand in managing this material, as their collections must be appraised in light of the availability of

information in these published sources.¹⁶ The MIT science and technology appraisal study explored the relationships between the published, artifactual, visual, and manuscript documentary evidence. The study described when published sources may provide sufficient information and when and why one must seek supplementary manuscript and archival sources.¹⁷

Archivists are beginning to see the relationships, but considerable work is required in this area. When archivists conduct research they logically integrate their use of the published, manuscript, visual, and other sources. But when archivists appraise, they often fail to make the same connections. Lacking a knowledge of the availability of published sources and the type and quality of information they provide, archivists have yet to develop appraisal procedures that include the evaluation of other sources of information. Shared bibliographic networks of manuscript, published, visual, and artifactual sources will encourage and facilitate this procedure. Several additional case studies could enhance archivists' understanding and begin to suggest techniques to carry out such appraisals. We propose two such studies focusing on congressional and architectural records.

Many sources document the United States Congress, including the *Congressional Record*, newspapers, and oral histories, as well as the records of congressional committees and the papers of individual representatives and senators. Although much energy has been expended in recent years, especially on the appraisal and processing of personal papers of representatives, there is still no coordinated appraisal study that

¹⁵Christopher Baer, "Documenting Strategy and Structures: A Chandlerian Conceptual Model for Appraising the Penn Central Archive," unpublished.

¹⁶Richard J. Cox, "Government Publications as Archives: A Case for Cooperation Between Archivists and Librarians," in *Archives and Library Administration: Divergent Traditions and Common Concerns*, ed. Lawrence J. McCrank (New York: Haworth Press, 1986), 111–28.

¹⁷Joan K. Haas, Helen Willa Samuels, and Barbara Trippel Simmons, *Appraising the Records of Modern Science and Technology: A Guide* (Cambridge: Massachusetts Institute of Technology, 1985), distributed by the Society of American Archivists.

seeks to understand the universe of information generated by the Congress. Significant resources are being invested to preserve records that are of questionable value.18 What information is best provided by what type of documentation? What is the unique value of the Congressional Record, committee files, and personal papers? Archivists at the Legislative Branch of the National Archives and many other institutions have already made thoughtful contributions to this topic. These individuals now need to come together under the auspices of one institution—possibly a university, or a government archives-to conduct a cooperative appraisal study that will provide more specific guidance on what should be selected and preserved.

In recent years archivists, conservators, librarians, and practitioners have given considerable thought to the preservation of architectural records. With few exceptions, ¹⁹ they have examined each record type in isolation from the other related sources. What written, visual, and artifactual records comprise the total documentation of a building? For routine structures, what is the minimum that needs to be known, and what records should be retained for that purpose? What additional information should be retained for the pioneering and significant structures? What evidence is required to understand the role of the architects, engineers, urban planners, financial backers, and clients? What appraisal criteria are needed to fulfill the needs of the historic preservation community? Again, one of the

universities, state historical societies, or preservation agencies could draw the relevant experts together to examine the related appraisal issues.

Each of these studies would provide appraisal advice and an integrated strategy to assure the documentation of specific sectors of society by preserving sources more wisely. Even more important, as case studies they would also provide findings and techniques that can be replicated in other sectors.

The Interrelatedness of Archival Records. While the previous topic focused broadly on the full range of documentary records, the problem of the interrelatedness of records focuses specifically on archival materials. Traditional appraisal and records management techniques have concentrated on understanding and controlling the archival records of individual institutions. But as patterns of funding and regulations create connections between institutions, so the records of institutions are interconnected. Archivists need to examine this phenomenon and determine through careful testing and evaluation if appraisal and records management decisions can be coordinated.20

Two projects might provide good tests. The first involves the National Archives working with a few state archives to examine the records generated by several federal agencies that provide funding to the states, such as Health and Human Services and the Transportation Department. The records for specific projects and activities

¹⁸The most useful description of congressional papers is Patricia Aronsson's essay, "Appraisal of Twentieth-Century Congressional Collections," in *Archival Choices: Managing the Historical Record in an Age of Abundance*, ed. Nancy E. Peace (Lexington, Mass.: Lexington Books, 1984), 81–104. In 1985 NHPRC provided funding to the Dirkson Center to formulate recommendations about congressional records. Unfortunately, rather than pursue the useful appraisal strategies suggested by Aronsson, the congressional papers project tried to formulate standards for collections that should be preserved and repositories that could house them (final report, Congressional Papers Project, sponsored by the Dirkson Congressional Center and NHPRC [#87-1]; Frank H. Mackaman, project director).

¹⁹Toward Standards for Architectural Archives: Proceedings of the Conference, February 12–13, 1981 (Washington, D.C.: American Institute of Architects Foundation, 1986).

²⁰JCAST investigated the implications of this phenomenon for modern science and technology (Clark A. Elliott, ed., *Understanding Progress as Process: Documentation of the History of Post-War Science and Technology in the United States* [Chicago: Society of American Archivists, 1983]). The Center for History of Physics at the American Institute of Physics is proposing to continue this work by examining multiinstitutional and multinational research.

should be examined both in the federal and state offices. While policy and abbreviated progress records are probably maintained at the federal level, the full progress and implementation records are probably only maintained at the state level. ²¹ Discussions with archivists, records managers, and government officials could then assess how coordinated retention decisions could be carried out. The National Association of Government Archives and Records Administrators (NAGARA), working with the Council of State Governments, would be another key contributor to such a project.

A similar study of the documentary problems created by grants and contracts could be conducted. Although most frequently found in science and technology, grants and contracts are used in many other sectors of society. Research universities, business archives, and scientific or engineering discipline history centers could work with federal and private granting agencies to assess documentary problems and to propose recommendations about the location and coordinated retention of records. Current government grant and contract provisions are extremely vague about records unless they are a "deliverable product." Archivists could play a constructive role in discussions on the retention of grant and contract records with government agencies, lawyers, and contractors.²²

A good case study would be the Goddard Space Flight Center, the main research and development facility of the National Aeronautics and Space Administration (NASA). Ninety percent of NASA's research and development budget is expended on grants and contracts to industry and academic institutions. Although Goddard conducts some research and development in house, the bulk

of the basic research—the development of the components and the construction of the instruments and satellites—is done outside. The records of the development, construction, and operation of the Hubble Space Telescope are widely dispersed. NASA headquarters in Washington provides overall policy and direction for the program. NASA's Marshall Space Flight Center in Huntsville, Alabama, provides day-to-day management of construction and operations. Goddard is responsible for the development of the scientific instruments and ground system to monitor and receive the data from the telescope. The Lockheed Company is constructing, assembling, and testing the instruments. The European Space Agency, a consortium of eleven western European nations, is developing some of the instruments and will participate in the operation of the telescope. The Johnson Space Center will launch the space telescope on a future shuttle flight, while the Kennedy Space Center will monitor launch operations. In this case it seems one cannot do appraisal without a score card to keep track of the players.

Complex contractual arrangements are not unusual, and they require new attitudes and techniques to help archivists cope with the records produced by these multiinstitutional and multinational activities. Ideally, government grants and contracts should be issued with a record schedule clearly delineating the responsibility of grantor and grantee for the creation and retention of records.

Automated Records. Automated records may present archivists their greatest challenge in identifying, selecting, and preserving records of enduring value. Since the introduction of the computer, archivists

²¹NARA has begun to study these issues as part of their Intergovernmental Records Project (Frank Evans, project director; Marie Allen, associate project director). This documentary problem is very similar to that of grant and contract records discussed below.

²²Grant and contract records are discussed in Haas, Samuels, and Simmons, *Appraising the Records of Modern Science and Technology*, and are being addressed in the Johns Hopkins Medical Institutions Records Project (Nancy McCall, project codirector) funded by NHPRC (#85-139 and #86-124).

have been concerned about its impact on their profession's mission; in recent years, predictions of dire consequences have been sounded. A recent report by the National Archives of Canada on machine-readable data stated that "if one were to take the traditional archival approach of waiting for whatever recorded information came out of the system, then the archivist in the electronic age will undoubtedly die of information starvation."23 Over the past decade archivists have tried to redefine their role in the modern information age,24 but many seem to have been merely paying lip service to society's major shift to an "information" era. At present one can count on one hand the number of major programs established to deal with automated records, and these are only located at some of the largest archival institutions—the National Archives of Canada, the U.S. National Archives, and the New York, Utah, and Kentucky state archives. Contrast this with the facts: computers have been used for three decades, personal computers have become an ubiquitous feature of society in just the past decade, and a major portion of all information presently being created is going into automated systems of some variety. Nevertheless, there is overwhelming evidence that archivists are not effectively appraising such information nor using the helpful findings of previous research.²⁵

Current research is, however, both innovative and promising. Archivists have made substantial progress in increasing their knowledge of automated records. The National Archives of Canada's office information project is examining how automated office systems are shaping information creation and use. The national archives in Canada and the United States and the Library of Congress are all investigating the impact of optical storage systems on information creation and use. The National Archives, National Bureau of Standards, and American Society of Information Scientists are cooperating to develop standards for information exchange through the compatibility of software systems. Some experts consider the incompatibility of software to be the biggest problem faced in the appraisal of automated information, making it difficult to compare related bodies of information to each other.

What should be the research agenda for automated information systems? Thanks to the Society of American Archivists' Automated Records Task Force, archivists have thought about and acted more in this area than in others; but the work is so critically important that the agenda bears repeating.

First, the archival community needs to examine how it can implement programs at all levels and in all varieties of archival repositories to establish and maintain effective operations for the appraisal of automated information and subsequent preservation of that information in machine-readable formats. Most repositories lack the technical expertise and equipment needed to identify, preserve, and reuse machine-readable records. They have deferred to other archival programs to conduct research in this area and have, therefore, neglected their own records. A study is needed

²³Five-Year Plan for the Management and Archiving of Machine-Readable Data in the Public Archives of Canada (n.d.), 7.

²⁴For various views on this important issue, see Richard Kesner, "Automated Information Management: Is There a Role for the Archivist in the Office of the Future?" *Archivaria* 19 (Winter 1984–85): 162–72; Trudy Huskamp Peterson, "Counting and Accounting: A Speculation on Change in Recordkeeping Practices," *American Archivist* 48 (Spring 1982): 131–34; and John A. Vernon, "Technology's Effect on the Role of the Archivist," *Provenance* 3 (Spring 1985): 1–12.

²⁵These views were refined by conversation with Margaret Hedstrom, an expert on machine-readable records. Hedstrom estimates that over four hundred individuals have been introduced to the management of machine-readable records through the SAA workshops, but there is no evidence that this has yet produced any new institutional programs for the care of these records.

that provides specific suggestions how completed research can be adopted and used by other archival programs. Archivists will not meet the broader mission of documenting modern society if such programs are *only* established at a handful of major archival programs.

Second, archivists need to learn that they must take a more active role in the creation of information and records systems. The archival profession only began seriously grappling with the problems of machine-readable records in the mid-1970s, fully twenty years after the advent of the computer. Archivists might even need to stop worrying about such records produced in the 1950s and 1960s and concentrate instead on the records being currently created. Jerry Ham's "archival edge" comes back to haunt and chide the profession.²⁶

Third, archivists need to know more about how automated systems fit into the overall nature of information creation and use and how automation affects the nature and value of information. Appraisers must resist the temptation to examine only the paper records or the paper products of automated systems without considering the automated systems themselves. Otherwise, archivists risk losing a large portion of the overall body of information that should be saved.

Fourth, and finally, archivists must determine how to become involved in the decision-making process of creating automated information systems and to demonstrate to system designers, through cogent arguments based on hard research results, why long-term retention is important. Sufficient technological sophistication will be required to suggest how this can be done. Archivists have no choice. If they do not do this, they risk losing information of enduring value that has been destroyed or is otherwise irretrievable.²⁷ Archivists must be sensitive and responsible to the changing context of their mission, realizing that theirs is the only profession with the unique role of identifying and preserving information of enduring value.

Automated Descriptive Systems. In contrast to archivists' attitudes toward automated records, automated archival descriptive systems have seemingly "come of age" in the 1980s, even promising to transform dramatically the archival profession and its work. For decades, archivists prided themselves on the idiosyncracies of their institutions, especially in arrangement and description practices. Archival records are unique, they argued, so how can we have uniform descriptive standards?28 The increasing acceptance of the US MARC AMC format has laid much of this kind of thinking to rest, and delivered what many archivists were looking for in the 1960s and 1970s—a means to construct a national data base and a straightforward descriptive system that could be readily adopted by all varieties of repositories.

To facilitate communication and sharing of information, archivists naturally have focused on automated description for man-

²⁶Ham worried, for example, that the archival profession was "too loosely tied to the vogue of the academic marketplace. . . .If we cannot transcend these obstacles, then the archivist will remain at best nothing more than a weathervane moved by the changing winds of historiography." F. Gerald Ham, "The Archival Edge," *American Archivist* 38 (January 1975): 8.

²⁷For example, many optical disk users, such as realtors, do not need any information much longer than six months. The manufacturers of such systems also are generally concerned with their short-term benefits and uses (five years or less), not their potential archival adaptations.

²⁸Most early archival literature on arrangement and description emphasized certain basic principles, but generally acknowledged that the uniqueness of records and the repositories caring for them overrode absolute systemization. The work of the National Information Systems Task Force (NISTF) uncovered the depth of these inconsistencies. See Richard H. Lytle, "An Analysis of the Work of the National Information Systems Task Force," *American Archivist* 47 (Fall 1984): 357–65.

agement and dissemination.²⁹ But these same descriptive systems need to be examined more closely to determine their value for archival appraisal. A central body of information on holdings provides an opportunity to examine the strengths and weaknesses of holdings. Also, coordinated appraisal decisions about interrelated sets of records can be supported through this data. To use a descriptive system in this way, archivists must agree on the information that is required and use a common vocabulary to describe holdings. Good description, however, is wasted on records that have been improperly or carelessly selected due to poor appraisal practices.

Archivists have a long way to go in thinking about the relationship of appraisal and automated descriptive systems. The current seven-state RLIN project is the only major study looking at automated descriptive systems in this way. This project is considering functional terms for description of series and agency histories (such as certifying, licensing, business, and education) that could also be used for sharing appraisal information and assisting in the development of additional appraisal projects. Such techniques could ease future selection and improve archivists' ability to determine more systematically the effectiveness of documentation.30

Considerable work remains to be done with automated descriptive systems and appraisal, however. Avra Michelson, for example, has shown the inadequacies of subject indexing by users of the US MARC AMC format in the RLIN system.³¹ These inadequacies weaken the usefulness of RLIN as a tool for appraisal because they dimin-

ish the ability to relate existing repository holdings to subjects that archivists wish to understand and document. Research on automated descriptive systems such as RLIN and appraisal must address the following questions: can automated descriptive systems also support broader appraisal work in topical, functional, geographic, and other areas? If so, how must archivists alter the format, or what standard vocabularies are required to facilitate such use? Is the use of Library of Congress subject headings sufficient for such shared appraisal work or are these terms too cumbersome due to their complexity? Is a smaller set of terms that covers all human activity but that is more manageable for broad documentation analysis needed? Can regional, statewide, and national data bases be constructed that are useful and manageable for sharing appraisal information? Would making such appraisal information available through automated descriptive systems be valuable to researchers? Or should such information not be readily available to researchers? These are only a few of the issues that archivists need to grapple with in the near future and into the 1990s.

Assessing the Quality of the Documentary Record. Among the archival skills that need to be strengthened is the ability to assess the quality—the value—of the collections assembled. Archives may have a lot of "stuff," as Frank Boles would say, but do these holdings provide the knowledge that researchers seek? In the last five years, forty-two states have completed assessment studies of archival programs, studies which focused on legal, administra-

²⁹Prior to the advent of automated bibliographic systems, archivists were prone to discuss "significant" use in terms of numbers of researchers. Perhaps the fact that the automated systems make number-crunching a greater possibility, but somewhat meaningless without consideration of the quality and importance of the research, archivists have begun to focus more on the notion of significance. This has been especially reinforced through the increasing volume and complexity of records with diminishing resources available for their administration.

³⁰This project is directed by the Research Libraries Group, with NHPRC funding (#85-147 and #87-5). The states involved are Alabama, New York, Minnesota, Wisconsin, Pennsylvania, Utah, and California.

³¹Avra S. Michelson, "Description and Reference in the Age of Automation," *American Archivist* 50 (Spring 1987): 192–208.

tive, physical, and fiscal issues.³² The assessment reports documented the quantity of the states' holdings, but did not assess the quality of those holdings. How well do the collections document the states? Maybe this should be the next round of assessment reports. Currently, however, archivists lack the techniques to make such an assessment. How does one judge if a collection—any collection—adequately documents a given topic? A new round of state assessment grants could generate the techniques that the profession requires to make such judgments, techniques that could be used by archivists in many settings.

Such a project would have to begin with one state as a test site, charged to develop and test the methods that others would use. Such a study should be led by the state archives, in conjunction with the state library and possibly also the state museum, to assure that the documentation is evaluated in an integrated fashion. The ideal site for such a pilot project would be a state with strong archival, library, and museum programs, and one that has useful, comprehensive information about existing documentation. A smaller state would make this a more manageable project. An advisory board of creators, curators, and users would be most helpful to advise and direct the project. A useful technique would be to select a few representative issues (a key event, a locale, an industry, a group of citizens) and determine the sources needed to study such issues. The emphasis of the pilot project would be methodological. Although there may never be definitive answers to what constitutes adequate documentation, archivists and other curators must begin to develop methods to assess the value of holdings to current and future researchers.

The Documentation Strategy Model as Nexus

The research agenda for archival appraisal suggested above—projects investigating the nature of documentation, automated information and descriptive systems, the interrelatedness of records, and the value of archives—constitutes a formidable challenge. Each of these specific projects requires special and extensive research. Each of these, however, also can be at least partially tackled through the implementation, testing, and refinement of the proposed documentation strategy model, thoroughly discussed in the recent essays by Samuels and by Hackman and Warnow-Blewett.³³

Documentation strategy is currently defined as "a plan formulated to assure the documentation of an ongoing issue, activity or geographical area. . . . The strategy is ordinarily designed, promoted, and in part implemented by an ongoing mechanism involving records creators, administrators (including archivists), and users. The documentation strategy is carried out through the mutual efforts of many institutions and individuals influencing both the creation of the records and the archival retention of a portion of them. The strategy is refined in response to changing conditions and viewpoints."³⁴

For a number of reasons, we believe that the documentation strategy is an important tool for carrying out the research agenda presented above. First, the mechanism uses a group of records creators, administrators, custodians, users, and others, providing the expertise to look at all varieties of documentation. For example, an advisory body working on the documentation of architecture could easily accommodate architects, engineers, architectural historians, historic

³²Copies of the individual state assessment reports are available from NHPRC. The summary report of the first phase of the reports is Lisa B. Weber, ed., *Documenting America: Assessing the Condition of Historical Records in the States* (Atlanta: National Association of State Archives and Records Administrators, 1984).

 ³³Samuels, "Who Controls the Past"; Hackman and Warnow-Blewett, "The Documentation Strategy Process."
 34Samuels, "Who Controls the Past," 115.

preservationists, archivists, librarians, and other specialists; their charge could be to ensure this subject's documentation by examining archival records, records being created, the built environment, the visual record, and published reports and studies.

Second, the documentation strategy provides a way to influence the creators of automated information systems by bringing these individuals into the documentation process. For example, participating architectural firms that use new automated design systems could explore the impact of these systems on documentation. Through such work they might be persuaded that such systems should be designed to enable archivists and others to identify and preserve the information of enduring value they include.

Third, the documentation strategy mechanism encourages a broader way of thinking about the archival mission that should suggest changes and improvements in automated descriptive systems, strengthening their potential use for appraisal as well as access. The strategy forces archivists to ask questions about the kinds of information needed to carry out archival work.

Fourth, the strategy is specifically designed to enable examination of the documentation of specific topics or functions across a variety of records creators, assisting archivists to deal with the most "modern" aspect of records—their interrelated nature. For example, archivists can examine the documentation of architecture by studying what private architectural firms do, the requirements of government regulatory agencies and the impact of those regulations, and the influence of client needs and desires.

Fifth, and finally, the documentation strategy opens up a way to identify and

report on significant uses of archival records. The diverse group of individuals guiding documentation analysis can also suggest innovative and important uses and therefore the value of the documentation.

Nevertheless, we must admit that the documentation strategy model is largely untested. The important activities of the discipline history centers such as the American Institute of Physics are precursors, but other work is just beginning. There have been several efforts to develop hypothetical case studies,35 and the New York State Archives is testing the validity of the model for regional documentation analysis.³⁶ Evaluations of the documentation strategy model in a diversity of topical and geographical areas and institutions are needed in order to refine it or to abandon it in favor of another mechanism that provides the broad perspective required in modern archival appraisal. As originally planned, the documentation strategy model provided a structure. Will it work? Only tests and evaluations will provide answers. In the final analysis, there may be several variations and approaches that enable these broader documentation issues to be considered. At the moment, the primary value of the documentation strategy model seems to be the broad discussion it has generated about the way the archival heritage is assembled.

Mechanisms

Throughout the discussion above, we have suggested how individuals, institutions, and organizations might participate in these research efforts. The research agenda delineates the knowledge required to respond to current demands. To address these issues, archivists, as professionals, must place a high value on research and encourage staff

³⁵David J. Klaassen, "Achieving Balanced Documentation: Social Services from a Consumer Perspective," *Midwestern Archivist* 11, no. 2 (1986): 111–24; Helen W. Samuels and Philip Alexander, "The Roots of 128: A Hypothetical Documentation Strategy," *American Archivist* 50 (Fall 1987): 518–31.

³⁶Richard J. Cox, "Choosing Documentation Strategies; Further Thoughts on the Use of a New Archival Appraisal Concept in a Geographic Context," unpublished.

members and parent institutions to engage in these activities. Archivists must be willing to commit resources—people, money, time, and space—and cultivate efforts that reach beyond their institutions through cooperative projects and the dissemination of research results. Archivists can be influential as individuals pursuing research on their own time and as staff members at their institutions.

Archival educators can be particularly influential by encouraging research as an ongoing priority in archival work. Lewis Thomas, President of the Memorial Sloan-Kettering Cancer Center in New York, has criticized the way science is taught. "We teach science as complete and set," he said, "but that is not the way it is. Science provides a sense of our own ignorance—a wilderness of mystery. We need minds attacking this ignorance from many directions to solve these questions. But, we need to teach science differently. Leave the fundamentals aside for a while and first stress the mysteries—the unknown. Do not teach that science is useful, but first what we don't know about the fundamentals of science."37 Thomas was trying to entice people into the study of science. We may do the same for archives by recognizing that it is fruitful to talk about what we do not know and thereby encourage research and growth in these areas.

The professional societies play a critical role as potential sites for projects and as disseminators of findings and coordinators of activities. The committees and sections of the regionals and the Society of American Archivists (SAA) are prime sources of the expertise required for many projects. SAA's institutional sections could undertake targeted appraisal studies of specific record types. The college and university section could examine curriculum materials

or student records, while the religious section could investigate parish records.

Professional meetings and publications are still the best means to disseminate research results. The poster sessions have been a useful addition, offering a mechanism to report on projects in process. Program committees and journal editors must be diligent to identify and encourage reports on research projects. Likewise, it is the obligation of those who engage in research to disseminate their work by offering presentations and publishing their findings.

Professional organizations can also emphasize the importance of specific topics by devoting meetings or publications to specific topics. The theme of the fall 1987 meeting of the Midwest Archives Conference was documentation. The New England Archivists also stressed this important theme by compiling the recently published essays on documenting New England.³⁸

The organizations are also in an ideal position to facilitate work with other professions. Through joint committees, meetings, and projects archivists can establish the ties needed to learn from allied professions and to share expertise. Librarians and museum curators share archivists' concerns about the difficulty of documenting the twentieth century. Librarians are grappling with preservation and collection management strategies. The American Association for State and Local History (AASLH) has recently offered a seminar for their members on documenting the twentieth century. Archivists would do well to share and build upon this expertise.

Finally, archivists must consider the sources of funding. While individual institutions can contribute through allocations of funds and released time, the granting agencies—public and private—will, we hope, continue to make a significant con-

³⁷Lewis Thomas, speech delivered at the American Association for the Advancement of Science, Washington, D.C., 5 January 1982.

³⁸American Archivist 50 (Fall 1987).

tribution. Funds from NHPRC, the National Endowment for the Humanities (NEH), and the Andrew W. Mellon Foundation, the major supporters of archival research activity, have given the archival community a wealth of knowledge. The weakness in the system, though, is that these organizations can only consider and fund projects once they have proposals in hand. Unlike the scientific agencies, NEH and NHPRC do not utilize RFPs-requests for proposals-as a means to stimulate research in specific areas and develop specific products. While NEH and NHPRC foster grant applications in targeted areas by publishing program emphases lists, it is difficult for them to encourage specific projects. The agencies still rely on the energy and creativity of the applicants to identify the issues and formulate the projects.

With few exceptions funding has been for institutional rather than individual research efforts.³⁹ In 1982 the Mellon Foundation awarded the Bentley Library at the University of Michigan funds to begin a summer fellowship program for individual archivists. 40 We venture to say that the staff of neither the Bentley nor the Mellon Foundation foresaw the rapid impact and success of this program. Increasing numbers of archivists are taking leave from their institutions to conduct research in Ann Arbor for one or two months. The profession has seen, and will continue to see, the fruits of this labor in the significant contributions to the American Archivist and other publications. Archivists need more such opportunities. We hope that both NEH and NHPRC will initiate funding programs for individual research projects. We also hope that archival institutions will support their staffs through funds, when possible, and released time.

Archivists have suggested that they would profit from an organization like the Council on Library Resources, which stimulates, coordinates, and funds research activities for the library profession. This may be so, but presently archivists do not currently have the resources or political clout that such an enterprise requires. Until they do, the profession must use existing organizations and institutions to fulfill this role. NHPRC and SAA can clearly play critical roles.

All archivists hear colleagues describe appraisal as an inexact art or as a function that requires a certain instinctive feel, characterizations which capture the immensely difficult responsibility that is archival appraisal. But archivists should not shortchange themselves by focusing on the mysterious feel or art that appraisal may require; doing so only guarantees that they remain satisfied with groping about in the dark when identifying information that has enduring value. The focus should be on a specific research agenda that enables archivists to move to better and more precise means of accomplishing their first responsibility. The GAP report was an initial step in developing that agenda; we hope that this article will move us along a little further.

³⁹We believe that the National Science Foundation was the first to provide funds to an individual archivist for a research project.

⁴⁰Additional funding was later provided by the Earhart Foundation of Ann Arbor and the Research Division of the National Endowment for the Humanities, a federal agency.