![Special Section]

Archival Description Standards: Establishing a Process for Their Development and Implementation

Report of the Working Group on Standards for Archival Description

Lawrence Dowler, project director

Victoria Irons Walch, project coordinator and principal author

Members of the Working Group

David Bearman	H. Thomas Hickerson	Kathleen D Roe
Lynn L. Bellardo	Marion Matters	Leon J. Stout
Jean E. Dryden	Fredric Miller	Richard V. Szary
Steven L. Hensen	Harriet Ostroff	Sharon Gibbs Thibodeau

NHPRC Representatives

Nancy Sahli   Lisa B. Weber

Standards for Archival Description

Introduction

LAWRENCE DOWLER
Chair, Working Group on Archival Description

THE WORKING GROUP ON Standards for Archival Description was not a creative product of someone's imagination. Rather, it grew out of a frustration to which a number of issues and events contributed.

The rapid adoption by so many archivists of the USMARC Format for Archival and Manuscripts Control (USMARC AMC) had, in only a few short years, radically changed the tone, if not the substance, of discussion about archival description. The unthinkable happened. Archivists, struggling to absorb the unfamiliar notions and language of MARC, began talking to librarians and other information professionals for whom standards of one kind or another were part of their vocabulary. It became increasingly clear that archivists, who are jointly responsible for maintaining USMARC AMC with the Library of Congress, were at a distinct disadvantage in these discussions because the profession had developed neither standards that reflect the distinctive ideas entailed in archival description nor a procedure for discussing and adopting any standards that archivists might consider worthy of adoption.

At the same time, those responsible for conducting workshops on USMARC AMC throughout the country began reporting growing frustration among archivists over the absence of standards for implementing the format. Indeed, there was little agreement about terms and definitions, and there was no clear understanding of just how, or

even if, a USMARC AMC record contributed to a national utility might relate to a repository's internal finding aids and its other descriptive practices. Moreover, there was growing awareness that while USMARC AMC provided guidance for exchanging information in a national database—a very small piece of archival descriptive practice—there was little agreement within the profession about what standards for archival description, if any, might be beneficial. In truth, most of us were not very sure we really knew what was meant by the term *archival description.*

Finally, increasing pressure for standards raised concerns among some members of the profession that the rush to embrace rules and guidelines for archival description might produce some unintended consequences, not the least of which might be the loss of flexibility in describing archives. Most archivists understand, if only intuitively, that archives are inherently dynamic; archival description, what ever else it may be, requires a degree of flexibility in providing intellectual and physical control over archives. Clearly, we thought then and believe now, what archivists needed was not a comprehensive set of rules, but a process and procedure for evaluating and adopting those guidelines or standards that would improve control over, and access to, archives. Devising the tools and procedures for evaluating, adopting, and maintaining description standards for the profession,

therefore, became the primary mission of the Working Group on Standards for Archival Description.

The Working Group

At the 1987 annual meeting of the Society of American Archivists (SAA), the Description Section devoted a substantial portion of its meeting to a discussion of the active development and increasingly widespread use of various kinds of standards for archival description. In marked contrast to similar discussions in the late 1970s, there was clear consensus among those present that description would benefit from the application of standard practices. At the same time, many worried that the accelerating pace of standards development and implementation and the lack of coordination among projects was leading to confusion and redundant effort. The section concluded by passing a resolution calling on the SAA Council to appoint a task force and/or seek funding to study the problem and recommend a course of action for the profession.

While the Council agreed that the concerns raised by the section were important, it quickly became apparent that SAA as an organization would be unable to respond promptly. This was attributable in part to the lack of an internal structure within the society to handle standards-related issues, a deficiency that the Description Section had noted during its meeting. In addition, the society already was preparing to submit other grant proposals to the same funding agencies that might have been likely to fund an SAA-sponsored project on description standards.

Judging the issues to be too urgent and the timing too critical to wait for SAA's organizational wheels to turn, several archivists began drafting a proposal to fund an independent working group. The staff of the National Historical Publications and Records Commission's (NHPRC) Records Program concurrently encouraged the proposal's development and submission. Har-

vard University agreed to provide the necessary institutional sponsorship. In June 1988 the commission approved funding for this project.

The Working Group on Standards for Archival Description officially began work on 1 September 1988. Sixteen archivists have comprised the Working Group:
- Lawrence Dowler, project director, Harvard University;
- David Bearman, Archives and Museum Informatics;
- Lynn Lady Bellardo, National Archives and Records Administration;
- Jean E. Dryden, United Church Archives;
- Steven L. Hensen, Research Libraries Group, Inc.;
- H. Thomas Hickerson, Cornell University;
- Marion Matters, Society of American Archivists;
- Fredric Miller, National Endowment for the Humanities;
- Harriet Ostroff, National Union Catalog of Manuscript Collections;
- Kathleen D. Roe, New York State Archives and Records Administration;
- Leon J. Stout, Pennsylvania State University;
- Richard V. Szary, Yale University;
- Sharon Gibbs Thibodeau, National Archives and Records Administration;
- Nancy Sahli and Lisa B. Weber, representing the National Historical Publications and Records Commission; and
- Victoria Irons Walch, project coordinator.

The Working Group held its first meeting at the University of Maryland Adult Education Center on 3-4 December 1988. The discussions at that meeting were based in large part on background papers prepared specifically for that purpose by Lisa Weber, David Bearman, and Richard Szary, printed on pages 504-526. Out of those discussions came a definition for archival description, the formulation of a matrix within

which description standards could be analyzed, and criteria for evaluating standards development proposals, all of which are discussed in some detail in the text of the report that follows.

During that first meeting, the Working Group also identified certain areas in need of further study or analysis that prompted the preparation of additional background papers prior to its second meeting. The second meeting was held 3-4 June 1989, again at the University of Maryland. Using the analyses and conclusions presented in the second group of papers (to be published in the Winter 1990 issue), the Working Group formulated a series of recommendations to present to the archival community. A subcommittee met briefly in late August 1989 to further refine the recommendations, especially those related to the proposed research agenda. The seventeen recommendations resulting from these two meetings are presented on pages 462-477.

While this Working Group has operated as an independent entity, outside of the official aegis of any professional association, it is important to recognize that nearly all of its members have been active in the Society of American Archivists for many years, especially in areas involving description and standards. Five members of the Working Group served on the National Information Systems Task Force in 1980-82 when it oversaw development of the USMARC Format for Archival and Manuscripts Control. Two members have held the SAA staff position of automation project officer, coordinating training programs in the USMARC Format and library descriptive standards. Two others have served as the SAA liaison to MARBI. Three members are authors of recently or soon-to-be published SAA manuals, including the new archival fundamentals manual on arrangement and description, the revised cataloging rules for archives and manuscripts, and the basic glossary of archival terminology. Several have been active in key SAA subgroups,

including four past chairs of the Description Section, the current chair of the Reference, Access, and Outreach Section, the current chair and several current and past members of the Committee on Archival Information Exchange, and the chair and two members of the SAA Task Force on Standards.

Because of this deep and long-standing involvement in the work of SAA by the individuals comprising the Working Group, we are especially pleased that our final report and the background papers that supported our deliberations are being published in the *American Archivist*. We hope that the discussion and recommendations that follow will elucidate the already significant progress made toward developing and implementing standards for archival description and will help map the profession's future course as we continue to refine and expand our vision.

An Overview of the Report

The purpose of the report that follows is to enlist archivists in the process of considering what standards for description are required in order to improve access to archives. We have attempted to do this in three ways.

First, the report provides some tools for understanding and evaluating standards. It presents a matrix or model intended as a framework for understanding the relationship of any one standard to the myriad of other standards. No doubt disputes will arise over the designation or location of a particular standard within the matrix, but readers ought to bear in mind that the matrix is not a picture of reality. Its intention is to provide a structure or tool that may help archivists to get on with the real business of evaluating and adopting or rejecting particular standards. The Working Group has also devised a list of criteria, although not definitive, that are intended to help archivists evaluate and decide whether or not a particular standard should be adopted.

Second, the Working Group has drafted

seventeen specific recommendations. Instead of proposing the adoption of specific standards, with one or two exceptions, they focus on the development of procedures and mechanisms that will enable the profession to evaluate standards in an orderly way. Again, our goal was to help the profession establish a *process* by which a particular standard might be considered and then adopted or rejected.

Third, in the section of the recommendations titled "Research and Development Needs," the Working Group has tried to identify some of the issues and questions that it believes need attention in order to develop effective standards for archival description. In truth, some of these questions will have to be, or at least ought to be, answered before the profession can adopt or even consider certain standards.

If some of these proposals seem to venture beyond familiar archival terrain, it is because, in the course of its deliberations, the Working Group came to a deeper appreciation of the world of information within which archivists must establish control and to which a user of archives might wish to have access. Put in another way, once one begins to consider standards for description, and even more, the standards needed to communicate information about archives beyond one's own institutional walls, other people's and other professions' standards necessarily come into play. Electronic standards (national and international), library standards, emerging standards for different forms of material, or even the same kind of material described from a different professional or user perspective, all vie with one another for consideration. Inevitably, this process leads one to a larger system or universe of information.

In this larger universe, the question, finally, is not whether there will be standards; the question is, what role can or will archivists play in defining standards in ways that provide effective control over and access to archival materials? Archivists will simply have to decide whether they are willing to pay the price, both financially and professionally, to dine at the national and international standards table. In the last analysis, the archival profession will be judged by the standards it keeps.

Standards for Archival Description

Glossary of Acronyms

AACR 2   Michael Gorman and Paul W. Winkler, eds., *Anglo-American Cataloguing Rules*, 2nd edition, 1988 revision (Chicago: American Library Association, 1988)

AASLH   American Association for State and Local History

AAT   *Art and Architecture Thesaurus* (a project of the Getty Art History Information Program, to be published by Oxford University Press, 1990)

AIIM   Association for Information and Image Management

ALA   American Library Association

ALCTS   Association for Library Collections & Technical Services, American Library Association (formerly known as the Resources and Technical Services Division)

ALIC   Archives Library Information Center, National Archives and Records Administration

AMIM   Wendy White-Hensen, *Archival Moving Image Materials: A Cataloging Manual* (Washington: Library of Congress, 1984)

ANSI   American National Standards Institute

APPM   Steven Hensen, *Archives, Personal Papers, and Manuscripts: A Cataloging Manual for Archival Repositories, Historical Societies, and*

Manuscript Libraries, 2nd ed. (Chicago: Society of American Archivists, 1989)

ARMA   Association of Records Managers and Administrators

ASC X3   ANSI Accredited Standards Committee X3: Information Processing Systems

CAIE   Committee on Archival Information Exchange, Society of American Archivists

CART   Committee on Automated Records and Techniques, Society of American Archivists

CC:DA   Committee on Cataloging: Description and Access, Association for Library Collections & Technical Services, American Library Association

CCITT   International Telephone and Telegraph Consultative Committee

CIN   Conservation Information Network

CNLIA   Council of National Library and Information Associations

COS   Corporation for Open Systems

FIPS   Federal Information Processing Standard

ICA   International Council on Archives

IEEE   Institute of Electrical and Electronics Engineers

IFLA   International Federation of Library Associations and Institutions

ISO International Organization for Standardization

ISSB Information Systems Standards Board, American National Standards Institute

ITSB Image Technical Standards Board, American National Standards Institute

ITU International Telecommunications Union

LITA Library and Information Technology Association, American Library Association

LC Library of Congress

LCNAF Library of Congress Name Authority File

LCSH Library of Congress Subject Headings

MARBI Committee on Representation in Machine-Readable Form of Bibliographic Information (a joint committee of three ALA divisions: LITA, ALCTS, and RASD)

MARC Machine-Readable Cataloging (the version of the MARC standard used most widely in the United States is known now as USMARC)

MCN Museum Computer Network

MFBD MARC Format for Bibliographic Data (superseded by the UFBD)

NAGARA National Association of Government Archives and Records Administrators

NARA National Archives and Records Administration

NARS National Archives and Records Service (became NARA in 1985)

NBS National Bureau of Standards (became NIST in 1988)

NEH National Endowment for the Humanities

NHPC National Historical Publications Commission (became NHPRC in 1975)

NHPRC National Historical Publications and Records Commission

NISO National Information Standards Organization (Z39)

NIST National Institute on Standards and Technology (formerly known as the National Bureau of Standards)

NISTF National Information Systems Task Force (1977–83), Society of American Archivists

NTIS National Technical Information Service

NUCMC National Union Catalog of Manuscript Collections

OCLC Online Computer Library Center, Inc.

RASD Reference and Adult Services Division, American Library Association

RBMS Rare Books and Manuscripts Section, Association of College and Research Libraries, American Library Association

RLG Research Libraries Group, Inc.

RLIN Research Libraries Information Network (operated by RLG)

RTSD Resources and Technical Services Division, American Library Association (became ALCTS in 1989)

SAA Society of American Archivists

SCC Standards Council of Canada

UFBD   USMARC Format for Bibliographic Data

USMARC   The version of the MARC standard now used most widely in the United States

USMARC AMC   USMARC Format for Archival and Manuscripts Control

USMARC VM   USMARC Format for Visual Materials

X3   See: ASC X3.

Z39   See: NISO (Z39).

Standards for Archival Description

Report of the Working Group on Standards for Archival Description

Defining Archival Description

ASK MOST ARCHIVISTS TO define "description" and they will probably begin by saying that it is one of the primary archival functions that falls somewhere in the middle of an archivist's active work with a body of records. It comes after the initial steps of appraisal and arrangement but before preservation and reference. Mostly, they will say, description has to do with the preparation of "finding aids" to provide "access" to the repository's holdings.

This relatively narrow, product-oriented focus was reinforced in SAA's "A Basic Glossary for Archivists, Manuscript Curators, and Records Managers," which has stood since its publication in 1974 as the standard vocabulary used by the archival profession: "Description [is] the process of establishing intellectual control over holdings through the preparation of finding aids."[1]

Push a little harder, however, and most archivists today will acknowledge a broader view of the description process. The key to the glossary's definition above is not in the

words *finding aids* but in the term *control*. David Gracy, in his basic manual on archival description, rightly asserts that the underlying purpose of an effective archival descriptive program is to establish physical, administrative, and intellectual control.[2] This requires effective means of capturing information every time an archivist interacts with a body of records, from the first survey in the creator's office or warehouse, through accessioning, processing, and conserving the materials, to documenting how the records are stored and used once they are made available for research.

The earlier focus on the products of description is understandable. A decade or two ago, when everyone still relied largely on manual office procedures and paper-based filing systems, the information collected during each of these steps was recorded on discrete forms, each designed to fulfill a single function and each filed separately from the others: records schedules, accession dossiers, processing control forms, collection inventories and catalog cards, conservation record sheets, location registers, and reference request slips. The documents in each file provided a different view

---

[1]Frank B. Evans, et al., "A Basic Glossary for Archivists, Manuscript Curators, and Records Managers," *American Archivist* 37 (July 1974): 415-433. A new glossary is now being prepared for publication as part of the Society of American Archivists' "Archival Fundamentals" series. Its editors, Lewis Bellardo and Lynn Lady Bellardo, are planning to include a definition of description very similar to the one developed by the Working Group and printed below.

[2]David B. Gracy II, "Finding Aids Are Like Streakers," *Georgia Archive* 4 (Winter 1976): 39; David B. Gracy II, *Archives and Manuscripts: Arrangement and Description* (Chicago: SAA, 1977): 19.

of the data (although it was often the same data simply rearranged) and a different access point that depended on how the file was arranged.

Advances in office technology and the introduction of computer-based information systems now make it possible to think of integrating all of the information gathered during these separate activities into a single system. Theoretically (and perhaps already implemented somewhere?) an archivist should have to enter the name of a collection only once, when keying in the scheduling information perhaps, and then merely use the system's capabilities to link it automatically with information gathered during later stages of processing or reference.

The ease with which information can be revised or linked to other data encourages the view that archival description is an ongoing process that is never completed. Each time a researcher interacts with a collection, something new is learned about the materials; ideally even information gleaned during reference activities should be captured and integrated with more formal descriptive compilations.

Not only has automation affected the methods by which archivists manage information about archives, it has profoundly affected the records themselves. Many electronic records systems now contain elements that make them "self-referential." This means that the systems contain data elements (often in standardized formats) that effectively "describe" one or more characteristics of the information and/or records in the system. They might cover the file's physical characteristics (what kind of hardware it runs on, how many separate records exist in the file and how much room each occupies); when, why, and by whom the file was created or updated; or instructions for transfer or erasure of discrete pieces of information after a specified period of time. Presumably archivists could take advantage of these "self-referenced" files, extracting

Chronology of Key Developments in the Evolution of Standards for Archival Description

1888
Historian Justin Winsor (who was elected first president of the American Library Association in 1876 and later served as librarian at Harvard) develops first documented cataloging rules for manuscripts in the U.S. at the Massachusetts Historical Society.

1900-17
First inventories of state and local archives sponsored by Public Archives Commission are published in the American Historical Association (AHA) annual reports.

1904
Rules for cataloging manuscripts, developed by a staff member in the LC Manuscripts Division, are included in Cutter's *Rules for a Dictionary Catalog*.

1906
First repository guide to manuscripts published by the Wisconsin Historical Society.

1912
AHA Annual Report recommends compilation of a "Manual of Archival Economy."

1914
First repository guide to public records published by the Mississippi Department of Archives and History.

1936
T.R. Schellenberg prepares instructions for inventorying state and local archives for use in the WPA's Historical Records Survey.

late 1930s
National Archives experiments with card catalogs for describing archival material, abandons them when new program of preliminary inventories begins (1941).

1938
The Illinois State Library, through the work of archivist Margaret Cross Norton, submits its cataloging rules for archives to the SAA Committee on Cataloging and Classification as "a tentatively approved code;" the rules produce archival descriptions so similar to library cards "that the average user is scarcely conscious of the difference."

1939
AHA establishes Special Committee on Manuscripts to plan for bibliographic control of historical source materials.

1940
National Archives committee on finding aids recommends a description system based on preliminary checklists, preliminary inventories, and final inventories; approved in 1941; instructions for preparing inventories not issued, however, until 1951.

1946
AHA Annual Report contains outline of specifications for a National Union Catalog of Historical Manuscripts.

1949
Joint Committee on Historical Manuscripts (of the Society of American Archivists and the American Association for State and Local History) begins to explore creation of a national union catalog for historical manuscripts; presents plan in 1951.

1951
LC offers to house and administer proposed national union catalog.

the archivally significant information where it already exists in the system rather than reconstructing it. Indeed, the ability to access and preserve electronic records over the long term will depend on archivists being able to use this information effectively.

Taking the broadest view of the life cycle of records, we can now see that the description of archival materials begins at the very creation of those records, proceeds through their accessioning and processing by an archival repository, and extends indefinitely through their useable life. The Working Group has prepared a definition of archival description that reflects this expanded understanding of the functions related to description and the interrelationships of those functions with other archival activities:

> Archival description is the process of capturing, collating, analyzing, and organizing any information that serves to identify, manage, locate, and interpret the holdings of archival institutions and explain the contexts and records systems from which those holdings were selected.

This definition does several things that earlier definitions did not do. First, it emphasizes that archival description is an *ongoing* process. Second, it omits references to specific products such as "finding aids" in favor of focusing on the *processes* that lie behind the generation of those products. Third, it extends the scope of archival de-

---

[3]The importance of context in archival description is one of the most significant differences from more library-oriented practices. The possible methods for documenting context in bibliographical databases and the potential for using context-related queries for providing access to archival materials have been explored in David Bearman and Richard H. Lytle, "The Power of the Principle of Provenance," *Archivaria* 21 (Winter 1985-86): 14-27; Max Evans, "Authority Control: An Alternative to the Record Group Concept," *American Archivist* 49 (Summer 1986): 249-261; and Richard Szary, "A Provenance-Based Description and Retrieval System for Archival Materials" [unpublished draft, December 1988].

scription so that it includes not only information about the records themselves as physical and intellectual entities, but about the *contexts* in which they were created and used and the larger *systems* of records and information of which they were a part.[3]

The Evolution of Archival Description: How Standards have Come to be so Important

The strong consensus that now exists on the need for and desirability of standards for archival description has emerged only recently and, when viewed against opinions widely held only a decade or two ago, is just short of revolutionary.

The foundation is laid. The chronology accompanying this text highlights the key developments related to description in the 102 years since the first documented set of cataloging rules was prepared.[4] The events and advances cited were drawn from the sources listed at the end of the chronology which together provide a much more detailed analysis of how and why archival description practices have evolved than is possible in this report. The discussion included here attempts only to focus on the convergence of opportunities and technical advances that, by the late 1980s, had driven the archival profession to demand description standards.

The National Archives laid the foundation for many modern descriptive practices during the 1940s and 1950s with its development of the record group concept. With its leadership, the profession came to regard the archival inventory and its coun-

---

[4]Schellenberg cites the manuscript cataloging rules prepared for the Massachusetts Historical Society in 1888 by Justin Winsor. Winsor was a historian who was active in the American Historical Association's efforts to preserve historical manuscripts, a librarian at Harvard where he organized the university archives, and the first president of the American Library Association when it was formed in 1876. T. R. Schellenberg, *The Management of Archives* (New York: Columbia University Press, 1965), 3-4, 7, 49.

1951
National Archives issues T.R. Schellenberg's *Preparation of Preliminary Inventories.*

1951
National Historical Publications Commission begins accumulating material for a guide to the location of archives and manuscripts in the U.S. published as the Hamer *Guide* in 1961.

early 1950s
Katherine Brand develops procedures for preparing manuscript registers within LC Manuscript Division borrowing from the National Archives procedures for archival inventories.

1954
LC Descriptive Cataloging Division issues a preprint of rules for cataloging manuscripts, in part to support compilation of a national union catalog.

1957
LC Manuscript Division starts microfilming presidential papers and uses punch cards to create indexes by date, author, and recipient; in 1964 punch cards are replaced by direct data entry in computer.

1958
LC receives a $200,000 grant from the Council on Library Resources to fund the *National Union Catalog of Manuscript Collections (NUCMC)*. NUCMC prints its first card in June 1959.

1961
A Guide to Archives and Manuscripts in the United States (Hamer Guide), compiled by Philip M. Hamer of the NHPC, is published. It contains entries describing the holdings of 1,300 repositories and more than 8,000 collections; more than half of the collections listed are housed in libraries.

1962
NUCMC publishes its first volume with 3,688 entries.

mid-1960s
Hoover Institution uses KWIC ("keyword in context") program to produce index to records of American Relief Administration.

mid-1960s
Public Archives of Canada uses punch cards to produce subject and name indexes to prime ministers' papers.

1964-70
LC Manuscript Division is first to use computer for physical and administrative control of archives with the development of the Master Record file.

1967
Council on Library Resources gives grant to nine institutions for development of SPINDEX II, including the National Archives, LC, Cornell University, the Smithsonian Institution, the Minnesota Historical Society, and the State Historical Society of Wisconsin.

1967
The first edition of Anglo-American Cataloging Rules is published; Chapter 10, devoted to cataloging manuscripts, is a direct outgrowth of the 1954 LC preprint of rules.

Early 1970s
National Archives uses SPINDEX to produce item indexes to Papers of the Continental Congress.

1973
LC publishes MARC Format for Manuscripts, which receives very limited use over next decade; OCLC is the only major system to implement the format.

terpart, the manuscript register, as the principal product in a repository's descriptive program. T. R. Schellenberg, one of the architects of the National Archives' descriptive program, made an assertive call for the development of archival standards, especially in the area of description, in his landmark book, *The Management of Archives*, published in 1965. Although Schellenberg's arguments were somewhat controversial when they were published twenty-five years ago, they seem especially prescient in the light of the current activity.

Tacit agreement on basic practices evolves. Vociferous arguments persisted well into the 1970s about whether archivists either could or should try to come to formal agreement about what constituted the basic elements of an inventory or any other type of finding aid. But the truth is that a tacit understanding did develop. The broad commonalty of practice that had evolved in large part from the model first expressed in the National Archives inventory was documented in the final report of the SAA Committee on Finding Aids completed in September 1975.[5] The committee found that the terminology used in inventories varied greatly from repository to repository and that the end products of description were quite different in physical appearance and intended use. But, most remarkably, the underlying processes used to compile the inventories and the functions of their component parts were more alike than not.

The committee's report is still in print and has been widely used as a set of examples and a training tool for the preparation of inventories. In their Preface and Foreword, respectively, the committee's chairpersons, Frank Burke (during the study leading to the report) and David B. Gracy II (at the time it was published) expressed their hopes that the report might become

[5]SAA Committee on Finding Aids, *Inventories and Registers: A Handbook of Techniques and Examples* (Chicago: SAA, 1976).

the basis for developing description standards (Burke) or even be adopted itself as a standard (Gracy). But the professional climate in the 1970s still broadly celebrated the uniqueness of each repository and its records. Many still argued that there could never be a consensus on standards because the variations among holdings and users of each institution mandated basic differences in approach.

National information system requirements demand attention. By the end of the decade, however, a fundamental shift in attitude began that initiated the archival profession's strong drive toward the development and acceptance of description standards. By the late 1970s the profession began to realize that a national archival information system of some kind was not simply a possibility but a probability. The *National Union Catalog of Manuscript Collections (NUCMC)*, which began gathering entries in 1959, was now joined by the energetic National Historical Publications and Records Commission's (NHPRC) national guide and database project. The SAA Council appointed a National Information Systems Task Force (NISTF) in 1977 that determined that, while no single entity was likely to become *the* information system for archives, nonetheless archivists should become actively involved in the development of these and other systems to ensure that their needs were met.[6]

NISTF initiated a period of truly groundbreaking work in June 1980 when it received a grant from the National Endowment for the Humanities. During the next two years the task force produced several

---

[6]Richard H. Lytle, "An Analysis of the Work of the National Information Systems Task Force," *American Archivist* 47 (Fall 1984): 358.

[7]Elaine D. Engst, "Standard Elements for the Description of Archives and Manuscript Collections" [unpublished, September 1980].

[8]The dictionary was published as "Data Elements Used in Archives, Manuscripts, and Records Repository Information Systems: A Dictionary of Standard Terminology," in Nancy Sahli, *MARC for Archives and Manuscripts: The AMC Format* (Chicago: SAA, 1985).

1973
At a SPINDEX Users Conference, the National Archives announces that it will not attempt to use SPINDEX II for its own holdings because such detailed and in-depth control "was not feasible." When conference participants from other institutions express concern about the implications of the decision on NARS's ability or willingness to provide necessary support services, NARS promises to get SPINDEX II working, to make it available at a reasonable cost, and to publish systems documentation.

1974
NHPC begins a project to update the 1961 Hamer *Guide.*

1975
With the publication of its tenth volume, *NUCMC* now covers 29,356 collections and 850 repositories; financial strain has created significant backlog in supplying catalog cards to submitting repositories which results in criticism.

1976
SAA's Committee on Finding Aids publishes *Inventories and Registers: A Handbook of Techniques and Examples,* compiled following a survey of more than 400 archives and manuscript repositories; while Frank G. Burke, chair of the Committee during the project, asserts that it does not "represent more than a compilation of examples," the foreword states that, after drawing comment from the profession, "Council will consider issuing the handbook as a Society standard."

1976
The National Historical Publications and Records Commission (NHPRC) begins using SPINDEX for the guide update project begun in 1974 and announces its intention to build a national inventory of historical records through its database.

1976
The first overall assessment of archival uses of automation is published in Hickerson's *Spindex II at Cornell University and a Review of Archival Automation in the United States.*

1977
SAA creates the National Information Systems Task Force (NISTF) in part to resolve perceived competition between *NUCMC* and the new NHPRC database project. NISTF reports that it does not foresee any one national system dominating the future of archival information, but instead sees several systems working in concert.

1977
SAA publishes David Gracy's basic manual on arrangement and description, which refers to the "long-standing struggle to achieve standardization of archival methodology," but contends that different needs and resources among repositories underlie the current "kaleidoscopic variety of systems."

1977
LC Manuscript Division reviews draft of *Anglo-American Cataloguing Rules*, 2nd ed. (*AACR 2*), Chapter 4 on manuscripts, and raises substantial objections; suggests the preparation of an alternate set of rules.

1978
Publication of *AACR 2* is met with general disappointment among archivists and manuscript curators.

documents that have become cornerstones for the subsequent development of archival description standards. Elaine Engst's report on descriptive data elements, submitted to the task force in September 1980, proved empirically what the Committee on Finding Aids had discovered earlier but with less specificity.[7] While each repository used different names for each element within its finding aids and other descriptive products, the contents and functions of those elements were essentially identical regardless of type of repository or type of records/ manuscripts being described. After additional research into the kinds of information archival repositories gathered in order to provide effective control over and access to their holdings, NISTF prepared its "Data Elements Dictionary" which was designed to be a comprehensive and permissive data element standard.[8]

NISTF also undertook the preparation of a machine-readable format for the exchange of data about archives and manuscript collections which ultimately became the US-MARC Format for Archival and Manuscripts Control (USMARC AMC). As the NISTF chairperson, Richard Lytle, observed at the conclusion of the project, the task force had dealt with technical issues and political concerns in almost equal measure.[9] From the outset the construction of a workable MARC format for archives and manuscripts was an extremely complex technical process. Not only did it have to identify and accommodate the wide range of detailed information necessary to adequately describe archives and manuscripts, it had to do so within a structure that was compatible with other USMARC formats and with the Z39 standard on which all of them were based.[10] Simultaneously, the

---

[9]Lytle, "Analysis of the Work of NISTF," 358.
[10]The record structures for all of the USMARC bibliographic formats represent implementations of the *American National Standard for Bibliographic Interchange*, ANSI Z39.2-1979. ANSI Z39.2 is related directly to the International Organization for Standardization standard, ISO 2709: *Documentation—Format for Bibliographic Information on Magnetic Tape.*

developers had to actively involve the archival and library communities in the process and then work to ensure that the format was adopted by the key organizations in both groups which held the power to implement the format. The successful handling of this nexus of technical and political factors continues to affect how, when, and why archival description standards, indeed standards of any kind, are developed.

Archival information is automated and integrated. The years 1981 to 1984 were a watershed period during which archival description practices began to change in ways that are still unfolding.[11] Within a relatively short time, several events took place that were all related to standards. First, the USMARC Format for Archival and Manuscripts Control received formal approval from the American Library Association's Committee on Representation in Machine-Readable Form of Bibliographic Information (MARBI), which is the principal MARC advisory and oversight body in the library community. The format, along with the NISTF "Data Elements Dictionary," also received formal endorsement from the SAA Council which committed the society to maintaining these two description standards through its newly created Committee on Archival Information Exchange.[12]

Second, the Library of Congress published three manuals presenting interpretations of rules for describing archives and manuscripts, graphic materials, and motion pictures in response to difficulties encountered in using the principal library catalog-

---

[11]For several perspectives on the changes that have occurred since the late 1970s, see the Winter 1988 issue of *Library Trends*, edited by Anne J. Gilliland, on "Automating Intellectual Access to Archives," especially the articles by Steven L. Hensen, "Squaring the Circle: The Reformation of Archival Description in AACR 2," 539-552, and H. Thomas Hickerson, "Archival Information Exchange and the Role of Bibliographic Networks," 553-571.

[12]"Minutes: Council Meeting, 17 October 1982," in *American Archivist* 46 (Spring 1983): 226.

1978
NHPRC publishes the *Directory of Archives and Manuscript Repositories in the United States*, the first publication emanating from its database project, with entries for 3,250 repositories.

1979-80
Joint Committee on Specialized Cataloging, convened under auspices of Council of National Library and Information Associations, identifies several *AACR 2* chapters that need expansion or interpretation for specialist libraries and archives; obtains NEH grant for three manuals on manuscripts, visual materials, and motion pictures; first drafts will be prepared by LC staff members.

1980
NISTF receives National Endowment for the Humanities grant that supports subsequent development of the MARC Format for Archival and Manuscripts Control (USMARC AMC) and the "Data Elements Dictionary."

1981
H. Thomas Hickerson's basic manual on automated access, published by SAA, acknowledges that archival automation is still in an experimental stage and predicts rapid growth in the use of automation by archivists in the next five years.

1982
LC publishes the first of the *AACR 2* cataloging interpretive manuals, *Graphic Materials: Rules for Describing Original Items and Historical Collections*, by Elisabeth Betz [Parker].

1982
SAA Council commits the society to maintaining and updating two description standards: the NISTF "Data Elements Dictionary" and the US-MARC Format for Archival and Man-

1983
USMARC AMC Format approved by MARBI.

1983
LC publishes Steven Hensen's *Archives, Personal Papers, and Manuscripts: A Cataloging Manual for Archival Repositories, Historical Societies, and Manuscript Libraries* (*APPM*).

1984
LC publishes Wendy White-Hensen's *Archival Moving Image Materials: A Cataloging Manual.*

1984
The Research Libraries Group makes available enhancements to its bibliographic network, RLIN, which support the functions and design of the MARC AMC Format; Hensen's *APPM* is adopted as rules for preparing catalog entries for archives and manuscripts in RLIN.

1984
OCLC implements the USMARC AMC format to replace the old MARC Format for Manuscripts.

1984
USMARC AMC Format published by LC as part of MFBD Update #10.

1985
The Bureau of Canadian Archivists publishes *Toward Descriptive Standards: Report and Recommendations of the Canadian Working Group on Archival Descriptive Standards.*

1987
SAA Description Section asks Council to take action to appoint a task force and/or obtain grant funds to study standards for archival description.

ing standard, *Anglo-American Cataloguing Rules*, 2nd edition (*AACR 2*), published in 1979.[13]

Third, the Research Libraries Group, Inc., began modifications to its nationally available bibliographic network, the Research Libraries Information Network (RLIN), so that it could include archives and manuscripts in its database along with standard catalog records for library materials. A key element of this third event was that it harnessed the power of the first two, specifying that the USMARC AMC Format would be used for these materials when "group" or "archival" control is desired and that those wishing to catalog archives and manuscripts would use the rules in the recently published interpretive manual.

In the intervening five or six years, some ninety repositories have entered a total of more than a quarter of a million AMC records in the RLIN database. The National Union Catalog of Manuscripts Collections (*NUCMC*) is now a major contributor of catalog records. Since 1959 *NUCMC* has been one of the few available centralized information sources about manuscript collections in the United States.[14] It has not been perfect, but its limitations were largely

[13]Elisabeth W. Betz, *Graphic Materials: Rules for Describing Original Items and Historical Collections* (Washington, DC: Library of Congress, 1982); Steven L. Hensen, *Archives, Personal Papers, and Manuscripts: A Cataloging Manual for Archival Repositories, Historical Societies, and Manuscript Libraries* (Washington, DC: Library of Congress, 1983); Wendy White-Hensen, *Archival Moving Image Materials: A Cataloging Manual* (Washington, DC: Library of Congress, 1984).

[14]*NUCMC*'s influence on the development of archival description has been significant. The manuscript cataloging rules devised by the Library of Congress in anticipation of *NUCMC*, first issued as a preprint in 1954, gained broad acceptance among manuscript curators nationwide as they formalized their local practices. In addition, the 1954 rules ultimately provided the basis for the rules contained in the first edition of the *Anglo-American Cataloging Rules* (1967), Chapter 10, which was devoted to cataloging manuscripts. Even those who did not follow these rules directly often modeled their institutional finding aids after the format used in the printed *NUCMC* volumes.

mechanical ones related to the cumbersome nature of its separate volumes and indexes and the inherent slowness involved in preparing large numbers of catalog entries and publishing them. The automated processes, linkages, and flexibility offered by a system like RLIN should ameliorate many of these factors.

RLIN is only one of several bibliographic utilities that have begun incorporating records for archives and manuscripts into their databases. OCLC now has some 103,000 records describing archives and manuscripts.[15] The Western Library Network (WLN), UTLAS, and many local systems have also been enlarging their AMC files. But many archivists give credit to RLIN's early commitment and its interest in tailoring an implementation that could accommodate a wide range of archival needs with making the advances both intellectually possible and financially practical.

The Society of American Archivists has played a central role in encouraging the broadest possible implementation of the AMC format. Its Committee on Archival Information Exchange (CAIE) is the standing committee established as the direct successor to NISTF when it dissolved in 1983. CAIE bears the responsibility for SAA's joint maintenance of the USMARC AMC Format with the Library of Congress among its other tasks. SAA has also offered a series of workshops on the AMC format and on library descriptive standards as part of its Automated Information Program, a project funded by the National Endowment for the Humanities (NEH). In addition, SAA has just published the substantially revised and expanded second edition of Steven Hensen's *Archives, Personal Papers, and*

1988
Responding to lack of action within SAA, several archivists prepare grant proposal and obtain funds from NHPRC to support a Working Group on Standards for Archival Description.

1988
NUCMC begins adding headings to the official LC Name Authority File. It also begins entering catalog records in RLIN.

1989
SAA publishes second edition of Hensen's *APPM*, which is endorsed as a standard for archival description by the SAA Council.

Expected 1990
First *NUCMC* volume produced from catalog entries made in RLIN database is published.

Expected 1990
SAA publishes *Arranging and Describing Archives and Manuscripts* by Fredric Miller as part of its new archival fundamentals series; the volume contains an entire chapter on standards.

---

[15]OCLC implemented the USMARC AMC Format in the fall of 1984. Prior to that, it had been one of the few users of the old MARC Format for Manuscripts which the Library of Congress published in 1973. Some 40,000 of these records were originally entered in the old format.

Sources for chronology:

Berner, Richard C. *Archival Theory and Practice in the United States: A Historical Analysis*. Seattle: University of Washington Press, 1983.

Burke, Frank G. "Manuscripts and Archives." *Library Trends* [theme issue on "Bibliography: Current State and Future Trends"] 15:3 (January 1967): 435-439.

Duckett, Kenneth W. *Modern Manuscripts: A Practical Manual for Their Management, Care and Use*. Nashville: AASLH, 1975: 149-157.

Gracy, David B. *Archives and Manuscripts: Arrangement and Description*. Chicago: SAA, 1977.

Hensen, Steven L. "Squaring the Circle: The Reformation of Archival Description in AACR 2." *Library Trends* 36:3 (Winter 1988): 540-550.

Hickerson, H. Thomas. "Archival Information Exchange and the Role of Bibliographic Networks." *Library Trends* 36:3 (Winter 1988): 556-558.

_____. *Archives and Manuscripts: An Introduction to Automated Access*. Chicago: SAA, 1981.

_____. "Expanded Access to Archival Sources." *Reference Librarian* 13 (Fall 1985/Winter 1985-86): 195-208.

Lytle, Richard H. "An Analysis of the Work of the National Information Systems Task Force." *American Archivist* 47:4 (Fall 1984): 357-365.

Norton, Margaret Cross. *Norton on Archives*. Edited by Thorton W. Mitchell. Carbondale, IL: Southern Illinois University Press, 1975.

Schellenberg, T.R. *The Management of Archives*. Ithaca, NY: Cornell University Press, 1965.

_____. *Modern Archives*. Chicago: University of Chicago Press, 1956.

SAA Committee on Finding Aids. *Inventories and Registers: A Handbook of Techniques and Examples*. Chicago: SAA, 1976.

Manuscripts, also with support from NEH.

These SAA activities are just part of a broad spectrum of activity devoted in the last few years to refining the cataloging practices necessary to enter records in the integrated bibliographic systems. Archivists working primarily with visual materials have been exploring the extent of, and reasons for, divergent cataloging practices, hoping that their efforts will lead to future consensus.[16] The development of widely applicable controlled vocabularies, such as the Getty Art History Information Program's *Art and Architecture Thesaurus*, gives archivists new tools for indexing.

Beyond cataloging, into the future. Despite this recent concentration on cataloging-related issues, it is important to remember that archival description is much more than cataloging. In fact it is much more than the production of those traditional and familiar products like inventories and guides. Archivists (and their close allies, records managers) have accepted the challenge of providing control of and access to records and the information they contain throughout their life cycle, from creation through disposition. In the process they capture, manipulate, and provide information about the records in many forms to serve many functions.

Records created in electronic form offer new challenges but also some powerful tools through the adherence to certain standards that are being developed and promulgated by data processing equipment manufacturers and software developers. Essentially these standards prescribe structures and coding for indicating such important characteristics as the size and content of a file, the originator and recipient of a document, and the place and time of creation or alteration. Archivists will recognize these as basic elements in many archival descriptive

---

[16]Linda J. Evans and Maureen O'Brien Will, *MARC for Archival Visual Materials: A Compendium of Practice* (Chicago: Chicago Historical Society, 1988).

systems. The implication is that electronic records, through the use of standards applied at the time of creation, can in effect describe themselves.

Description, as defined above by the Working Group and as reflected in its background papers and recommendations, involves all of the steps throughout the life cycle. Many of the recommendations made by this Working Group focus on expanding the limits of traditional finding aids. There is special emphasis on exploiting the potential of automated information systems, both through the enhancements they can provide to the description of archival materials in a single repository or a network of repositories and through the power inherent in records when they themselves are created and maintained in electronic form.

The Benefits and Limitations of Standards

In order to have the standards needed to facilitate and improve archival practice, archivists must: (1) understand how the process of standards development and implementation operates; (2) assess correctly the potential impact of standards; (3) choose sensible strategies for accomplishing their goals; and (4) become actively involved in the development and implementation process. These requirements apply to every area in which standards might be applicable, not just the practice of description.

The sections that follow contain discussions of the effects and potential benefits of developing and implementing standards, both in general terms and as specifically applied to archival description. The goal is to provide a common base of understanding upon which further standards-related work can build.

Certain fundamental concepts appear in most of the basic literature about standards whether it is written for electrical engineers or librarians or archivists. These concepts

are presented, phrased in various ways, in all of the articles and books comprising what could be considered a basic reading list on library and information science standards.[17] They are also repeated at various times and with varying emphases in the thirteen papers written by members of this Working Group as background for our discussions.

1. **Standards are not ends in themselves, but means to an end**. While it might seem logical and orderly to want to encourage everyone to do things the same way, standards cannot and should not be pursued for purely aesthetic reasons.

2. **The successful development and implementation of standards require cooperation and collaboration among all affected parties**. An individual or organization cannot unilaterally devise a set of practices or policies and expect their adoption by all. While a single institution often plays an important role in facilitating the development of standards or encouraging their use (see point #4 below), all affected parties should be drawn in as participants to ensure that their needs are met and to promote their compliance.

3. **Conversely, cooperative efforts usually require consensus on standard practices or procedures**. The desire to participate in specific cooperative activities has provided the direct incentive behind development of many existing standards. For archival description, the

---

[17]The bibliography on pp. 498-502 includes a number of sources about standards development and implementation in the library profession. Two of the best introductions are provided in Walt Crawford, *Technical Standards: An Introduction for Librarians* (White Plains, NY: Knowledge Industry Publications, Inc., 1986), and Henriette D. Avram, Sally H. McCallum, and Mary S. Price, "Organizations Contributing to Development of Library Standards," *Library Trends* 31 (Fall 1982): 197-223. The best source for current information about the larger world of information-related standards is *Information Standards Quarterly*, the newsletter of the National Information Standards Organization (NISO), edited by Walt Crawford.

single greatest motivating factor has been the desire to communicate or exchange information about holdings among repositories, especially via integrated bibliographic systems.

4. **Effective implementation of standards requires a body such as a central authority to require their use or an organization to give its direct or implied consent to their use.** Simply stated, someone has to be in charge, to make sure the standard works and that it is applied correctly. The central body may be an international or national organization whose sole responsibility is the development and implementation of standards, a professional association or national institution to which all practitioners turn for guidance and leadership on individual and institutional practices, or even a private corporation (e.g., the Research Libraries Group) through which many separate institutions cooperate.

5. **Economic benefits are the primary incentives behind the development and successful implementation of most standards.** Such benefits may come as a result of streamlined procedures, or distribution of expenses among several participants in a cooperative project, or the establishment of uniform procurement criteria. The successful implementation of standards requires more than altruism. The projected cost/benefit ratio will have a greater impact on a decision to pursue a standard or not than any other factor.

6. **Standards development is often time-consuming, costly, tedious, and frustrating.** No one said it was easy. But if the incentive to cooperate is strong enough, if the cost/benefit ratio justifies the necessary investment of time and money, and if a central body is willing to provide the necessary organizational underpinning, then the effort and expense may be worth it.

The Matrix of Standards for Archival Description: A Framework for Discussion

The Working Group spent considerable time trying to categorize the types of standards that make up the "shared practices" for description among archivists. Beginning with a framework proposed by David Bearman in his background paper for the first meeting, the Working Group created a three-dimensional matrix (Figure 1) whose cells are defined by: (1) the strength of the standard, (2) the primary developer of the standard, and (3) the level of description to which the standard applies. The first two dimensions actually could be used to sort all standards used in any sector of archival practice; the third relates specifically to archival description.

Strength of the Standard. Standards are generally acknowledged to take three forms, from very restrictive and specific to relatively permissive and general in application.[18]

• *Technical standards* are the most rigid and exacting in this hierarchy of standards and, if followed correctly, will yield identical products. According to Walt Crawford, a technical standard "is an explicit definition that can be communicated, which is not subject to unilateral change without notice and which, if properly followed, will yield consistent results."[19] While archivists make use, perhaps unconsciously, of many technical standards in the course of their daily work (such as ANSI X3.4, which specifies the ASCII characters so widely used by computer systems), no technical standards have been specifically developed by archivists for description applications.

[18]Avram, et al., "Development of Library Standards," 197-198.
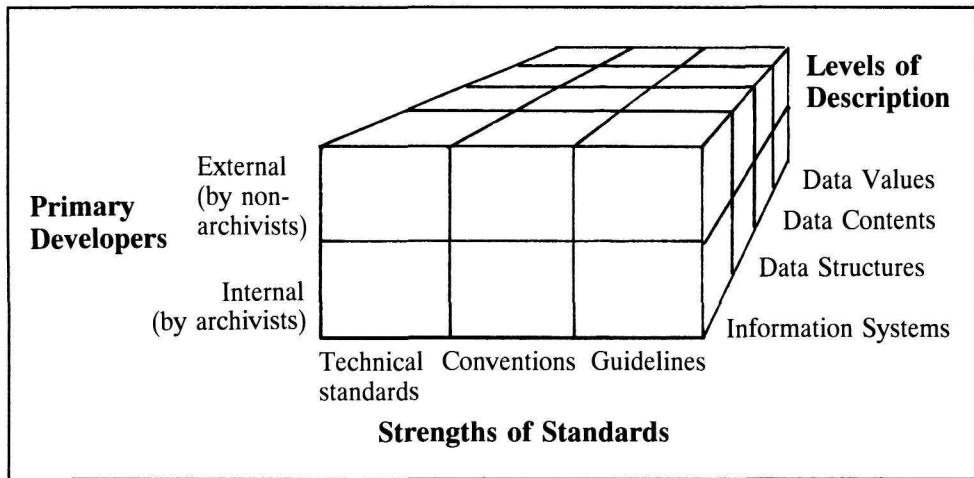[19]Crawford, *Technical Standards*, 6-7.

FIGURE 1.   Three-Dimensional Matrix of Standards Applicable to Archival Description

- *Conventions* (also called "rules" or "professional standards") are more flexible and accommodate more variation in local practice. They will result in similar but not necessarily identical products when applied correctly. The Society of American Archivists has formally endorsed two archival description conventions, the USMARC Format for Archival and Manuscripts Control (an internal data structure convention) and Hensen's *Archives, Personal Papers, and Manuscripts* (1989) (an internal data content convention). Other examples of widely used description conventions are the cataloging rules published in Betz, *Graphic Materials* (1982), and White-Hensen, *Archival Moving Image Materials* (1984).

- *Guidelines* provide a broad set of practice and/or service criteria against which to measure products or programs. In 1976 SAA's Committee on Finding Aids published a set of description guidelines in *Inventories and Registers: A Handbook of Techniques and Examples*. Other examples include SAA's "Principles of Institutional Evaluation," first published in 1982 and now incorporated in its *Ar-*

chives Assessment and Planning Workbook (1989), which define all of the basic elements of a sound archival program including arrangement and description activities. SAA has also produced guidelines for college and university archives (1979) and graduate archival education programs (1988) which contain description-related criteria.

Primary Developer of the Standard. The second dimension of the Working Group's matrix reflects the fact that many of the standards that are central to our work have been developed and implemented by individuals or institutions outside our field.

- *External standards* (i.e., those developed outside the archival profession) are used or encountered by archivists for many reasons. In some cases, they are universally accepted and broadly used standards like the ASCII code referred to above. In other cases, they were developed by groups of closely allied professionals with interests and goals similar to our own, such as the specifications for microfiche headings produced by the Association for Information and Image Management. In still other circumstances, archivists are confronted

with an external standard because it has come imbedded in a record accessioned by their repository, such as the several standard geographical place-name code sets used widely in statistical files.

- *Internal standards* are those developed specifically or primarily by and for archivists. The line is not always clear between external and internal. For instance, several standards relating to graphic materials, including the Betz cataloging manual, could easily be placed under either the external or internal category depending on an individual practitioner's perspective. The motivation behind trying to draw the external/internal distinction lies largely with establishing how much influence archivists can have in future modifications or development of new standards in these areas. Archivists must be realistic about their potential role in the development or revision of standards. External standards can prove very difficult to influence, even with the most persistent of efforts.

Level of Description. The third dimension of the matrix is based on analyses of levels of archival description done by David Bearman and others.[20] The dimension identifies four levels in operation; while each level can operate independently of the others, ideally standardization should progress from information system downwards to data value.

- *Information system standards* operate at the broadest level, attempting to specify all the component parts of a descriptive system in a single repository or a network of repositories. An information system standard will define the roles of and interrelationships among each com-

ponent within the overall system. Benefit: systems performing similar functions in different locations will be more coherent and uniform in their approaches, and will be able to communicate and interchange data more readily.

- *Data structure standards* define what elements of information are contained in the components of an information system, including input formats (e.g., accession sheets, deeds of gift); output formats (e.g., registers, catalogs, inventories, shelf lists); and record types (e.g., holdings, donors, creators). Uniform data structure standards adopted across repositories must recognize legitimate needs of distinctive organizations for different methods and mechanisms of control. Benefits: the need for development of unique software will be reduced; exchange of data will be facilitated.

- *Data content standards* provide the rules to apply when entering information within each element defined in the data structure standards. They cover, but are not limited to, such issues as punctuation and capitalization, formats for expressing dates and quantities, and required vs. optional inclusion of specific items of information. Benefit: increased integrity in that specific usages carry greater meaning and are more easily correlated with descriptions intended to carry similar meaning.

- *Data value standards* provide lists or tables of terms, names, alphanumeric codes, or other specific entities that are acceptable for entry in a particular data element. These standards include code lists and thesauri. Benefit: increased integrity, as above.

Using the Matrix to Evaluate the Need for Standards. The Working Group identified more than one hundred standards that are applicable to archival description and assigned each of them to one of the cells of the three-dimensional matrix described

---

[20]David Bearman, "Strategy for the Development and Implementation of Archival Description Standards," unpublished paper given at the International Council on Archives Invitational Meeting of Experts on Descriptive Standards, 4-7 October 1988.

above. The classified list of standards appears on pp. 478-492, first in summary tabular form, and then in a checklist that provides more detailed information about each standard.

The Working Group used the matrix as a framework for its discussions of the need for standards within specific areas of archival description. During its first meeting the group examined in turn each cell or sets of related cells within the matrix. For each, the discussion focused on the nature and use (actual and potential) of the existing standards within those blocks, the significance of the lack of standards when the cell was empty or sparsely populated, and what actions were necessary (revision of existing standards, development of new ones, or possibly no action at all). In many cases, the Working Group determined that additional information or study was needed and asked one of its members to prepare a background paper on the relevant issues before its second meeting.[21]

Criteria for Evaluating the Potential Benefits of Standards

During the cell-by-cell discussion of the matrix described above, the Working Group found that certain questions were occurring most frequently in its evaluation of when and why standards development might be important to pursue. As a result, it developed the following criteria to use in weighing which areas of archival description would benefit most from the creation or adoption of standards. In fact, these same criteria should also be applicable to standards being considered for any sector of archival practice.

1. **Cost-effectiveness.** Do the benefits of developing, maintaining, and implementing a standard justify the expenditure of resources?

2. **Immediacy.** Does the decision to adopt or not adopt a particular standard have an immediate capacity to influence events?

3. **Usability.** Will the ability to access or use records be affected by the decision to adopt or not adopt a standard?

4. **Importance.** Does the relative importance of the information contained in records warrant the maintenance or adoption of standards?

5. **Practicality.** Could the standards be applied if adopted?

6. **Breadth of applicability.** How many different classes of institutions or classes of records does this affect? How often does this apply?

7. **Popularity.** Does it appeal to the potential users of the standard or will it meet with resistance?

8. **Conflict with existing standards.** Does it conflict with an existing standard to the extent that it is impossible to implement one without violating the other?

9. **Retrospective impact.** What will the impact be on the results of existing or prior work?

10. **Compliance.** Is it likely that parties affected by the standard will comply?

When examining the need for standards development in a specific area, the Working Group found that a negative rating on the first criterion, cost-effectiveness, was enough to kill the entire concept. It might also be useful to view the first five as essentially strategic considerations, having to do with whether the development process should happen at all, while the last five are more tactical, concerned with *how* development should proceed once it is deemed practical and necessary to do so.

Developing and Implementing Standards: The Participants and the Process

An incredibly diverse and complex array of institutions and organizations is respon-

---

[21]Abstracts for the background papers presented at the second meeting appear on pp. 528-532. The papers will be printed in the Winter 1990 (53:1) issue of the *American Archivist*.

sible for the standards that archivists use for description. Included are professional associations, government agencies, and private corporations that operate at the regional, national, and international levels. Their authority may be mandated by law, or vested by formal consensus among the affected parties, or merely asserted by virtue of the organization's economic or intellectual primacy in its area of influence. Some standards are developed cooperatively by two peer organizations working to resolve a shared problem. Others are developed by an organization having a relatively small sphere of influence (e.g., a section within a larger association or a single profession) and are then forwarded to an organization with a broader mandate for adoption as a standard affecting a broader population (e.g., the entire association or nation). Many national standards become international ones and vice versa.

The matrix developed by this Working Group and presented in some detail above distinguishes between "internal" standards, i.e., those developed and maintained principally by and for archivists, and "external" standards, those developed and maintained by nonarchivists, but used in archival practice. One of the important reasons for making this distinction is that the potential for archival participation in and influence over the development of "internal" and "external" standards differs significantly.

As a profession, we have an obligation to establish procedures for developing and implementing our own internal standards. Standards development within the archival community has until now been largely the domain of the professional associations. They have taken a relatively ad hoc approach, responding to a specific need or issue and then using whatever mechanism for ratification was in place to formally endorse or adopt the proposed convention or guideline, if a formal vote was ever taken at all. It is essential that archivists begin to formalize their own procedures for developing and implementing "internal" standards and also begin to understand and work with those organizations outside the profession whose "external" standards affect archival practices.

Archival participation in the development and implementation of external standards is a complex proposition. For the large number of external standards, those developed by others that affect our work, archivists need to establish strong working relationships with the other professional associations and with the national and international organizations that oversee standards development. Until now, our ties to even closely allied professional associations that contribute important standards to our field, like the American Library Association and the Association for Information and Image Management, have been dependent largely on the voluntary efforts of a few individuals.

The paragraphs that follow seek to provide an introduction to the wide range of organizations whose work affects archival description and to summarize some of their most significant recent activities.

Organizations and institutions comprised primarily of archivists. The **Society of American Archivists** (SAA) has formally endorsed three standards for archival description: the USMARC Format for Archival and Manuscripts Control (USMARC AMC) and the NISTF "Data Element Dictionary" in 1982 and *Archives, Personal Papers, and Manuscripts: A Cataloging Manual for Archival Repositories, Historical Societies, and Manuscript Libraries* in 1989.[22] SAA holds joint responsibility with the Library of Congress for maintenance of

---

[22]The SAA Council's vote to endorse *APPM* was made in October 1989 and came in response to Recommendation 9 of this Working Group. The Working Group presented the recommendation to Council in advance of the completion of its full report and is appreciative of the Council's timely action.

USMARC AMC and carries out its responsibilities through its Committee on Archival Information Exchange (CAIE). The society has conducted a series of workshops on the AMC format and library descriptive standards. SAA works on standards-related issues with library organizations through a number of joint committees, appointed liaisons, and representatives, including the Joint ALA/ SAA Committee on Archives and Library Relationships, the Council on National Library and Information Associations (CNLIA), the Association of Research Libraries, MARBI, the Committee on Cataloging: Description and Access (CC:DA), and the Network Advisory Committee. It is also addressing records and information management standards through participation in several other organizations, including the Association for Information and Image Management (AIIM) Standards Board, the Archives and Records Information Coalition (ARIC), and the recently created joint committee with the Association of Records Managers and Administrators (ARMA).

In 1988 the Society of American Archivists created its Task Force on Archival Standards, a response to a widely perceived need that SAA needed to formalize its standards procedures. Both the task force and this Working Group seem to be in agreement that the SAA should establish a central board of some kind that could oversee the development, review, and implementation of standards within the society as well as coordinate liaison activities to other, external organizations that develop standards used by archivists.

The **National Association of Government Archives and Records Administrators** (NAGARA) produced its *Program Reporting Guidelines for Government Records Programs* in 1987 in an attempt to standardize the collection and reporting of statistics about archival programs. It has also prepared and promoted two sets of overall guidelines, one for state records programs and the other for local records programs.

The **National Archives and Records Administration** (NARA) has undertaken the development of three major archival information systems over the past few years and has also commissioned studies of electronic data exchange standards and expert systems for retrieval of descriptive information. It has explored the application of the USMARC AMC format through its Life Cycle Tracking Project and in its three developing information systems.[23] The **Archives Library Information Center** (ALIC), a clearinghouse operating within the National Archives Library, can provide copies of many of the standards listed in the checklist on pp. 478–492 and most of the sources listed in the bibliography, either through photocopies or interlibrary loans.

Internationally, the **Bureau of Canadian Archivists** produced a report in 1985, *Toward Descriptive Standards: Report and Recommendations of the Canadian Working Group on Archival Descriptive Standards*. The Bureau's Planning Committee on Descriptive Standards has continued the work through several working groups. The report of the Working Group on Description at the Fonds Level was released in draft in March 1988; since then it has been widely circulated and the publication of a revised version is expected in 1990. Late in 1989 the Planning Committee issued *An Introduction to Authority Control for Archivists* by Louise Gagnon-Arguin.

---

[23]NARA published the *Life-Cycle Systems Data Elements Manual* (Data Elements 800) in 1988 (followed by a 1989 update) that includes a number of authorities and code lists for use agency-wide in its automated systems. Among these is the thesaurus that originated in the information system developed for use by the presidential libraries (PRESNET), for which see William H. McNitt, "Development of the PRESNET Subject Descriptor Thesaurus," *American Archivist* 52 (Summer 1989): 358-364.

The British **Society of Archivists** has also been actively pursuing description standards, one result of which was the *Manual of Archival Description* by Michael Cook and Kristina C. Grant published in 1985.

The **International Council on Archives** (ICA) convened "An Expert Consultation on the Planning of a Long-Term International Action for the Development of Descriptive Standards for Archives" in December 1989. The United States, Canada, and the United Kingdom were among the nations who sent representatives.[24] Earlier, in 1988 and 1989, the ICA sponsored two invitational meetings in Ottawa to discuss various aspects of description standards; a third, which will focus on moving image and recorded sound collections, is planned for the spring of 1990.

Organizations and institutions of closely allied professionals. The library community has produced many of the standards now used by archivists in describing their collections, especially when those descriptions are entered in library networks and other bibliographic databases.

The **American Library Association** (ALA) is the major national professional association for librarians in the United States and therefore naturally plays a major role in standards used in libraries, including those that affect archival practice. ALA has a multilayered organizational structure with standards activity happening at each level. A Standards Committee reviews and approves all standards adopted for the entire organization, but guidelines and conventions can also be adopted by various subgroups without ever being submitted for ALA-wide approval.

The **Rare Books and Manuscripts Section** (RBMS) within ALA's **Association of College and Research Libraries** (ACRL) has prepared a number of thesauri for use

in rare book and special collections cataloging. Other standards included in the Working Group's checklist that were produced by ALA subgroups include guidelines for selecting automated systems, from the **Library Information Technology Association** (LITA), and guidelines for subject access to audiovisual materials and microcomputer software, prepared by the **Association for Library Collections and Technical Services** (ALCTS).

Perhaps equally significant to archivists is ALA's role as a coordinator and monitor of standards developed and maintained outside the organization itself. The Committee on Representation in Machine-Readable Form of Bibliographic Information, commonly known as **MARBI**, is a joint committee comprised of LITA, ALCTS, and the Reference and Adult Services Division (RASD). The committee also has voting representatives and nonvoting liaisons from other organizations, including one from SAA. MARBI's principal responsibility is to advise the Library of Congress Network Development and MARC Standards Office about MARC format revisions and other MARC-related issues. Another subgroup of ALCTS is the Committee on Cataloging: Description and Access, commonly known as **CC:DA**, which exercises ALA's responsibilities in reviewing and commenting on proposed revisions to the *Anglo-American Cataloguing Rules* (*AACR*). CC:DA also has invited liaisons from other organizations including SAA. *AACR*, now in its second edition and revised in 1988, itself is a product of an ongoing cooperative project. ALA is one of four national library associations that belongs to the **Joint Steering Committee for the Revision of AACR** along with ALA's counterparts in Australia, the United Kingdom, and Canada.

The **Library of Congress** (LC) is, of course, the dominant institution in regard to library-based standards including those used for archival description. LC's **Net-**

---

[24]The individuals who attended included Sharon Gibbs Thibodeau (United States), Hugo Stibbe (Canada), and Christopher Kitching (United Kingdom).

work Development and MARC Standards Office maintains and publishes all of the USMARC formats, including the USMARC Format for Bibliographic Data (UFBD), the USMARC Format for Authority Data, and the USMARC Format for Holdings. The UFBD incorporates one of the principal archival standards, the US-MARC Format for Archival and Manuscripts Control (USMARC AMC), along with several others used by archivists such as the formats for visual materials (VM), maps (MP), and computer files (CF). The **Network Advisory Committee** was created by LC to bring representatives from many outside organizations (including SAA) together to advise it on MARC-related issues.

LC is also responsible for two major standards for terminology used in cataloging, the LC Subject Headings (LCSH) and the LC Name Authority File (LCNAF). LC's **Prints and Photographs Division** staff has also produced several valuable tools for cataloging archival visual materials.[25]

LC staff undertook the preparation of three of the *AACR 2* interpretive manuals used most widely by archivists: Hensen's *Archives, Personal Papers, and Manuscripts* (1983), Betz's *Graphic Materials* (1982), and White-Hensen's *Archival Moving Image Materials* (1984). It has also been home to the *National Union Catalog of Manuscript Collections* (*NUCMC*), whose cataloging rules, first issued in 1954, have influenced archival practice nationwide.

Another point of view in the description of manuscripts, that of the dealer, is represented in the **Manuscripts Society**'s re-cently drafted "Criteria for Describing Manuscripts and Documents."

The **Association for Recorded Sound Collections** has a strong archival contingent. Its Bibliographic Access Committee is currently working on a revision to the *Rules for Archival Cataloging of Sound Recordings* which was originally published in 1982.

Several organizations that focus on records and information management also have significant standards-related activity of interest to archivists. The **Association for Information and Image Management** (AIIM) has an active and long-standing standards development program which has concentrated in the field of micrographics but has begun to broaden into electronic imaging and computer information interfaces. AIIM is an ANSI-accredited standards developer and has many ties to other national and international standards organizations. Although most of AIIM's archivally relevant standards fall in the area of conservation, those related to standardized labeling and targets for microforms as well as its micrographics glossary definitely relate to archival description. AIIM also sponsors a National Standards Council, with invited representatives from a wide range of associations including SAA, to promote communication about common standards-related concerns. Another organization with strong ties to the archival community, the **Association of Records Managers and Administrators** (ARMA), has just in the last few years also become accredited as an ANSI standards developer. ARMA's records management glossary and its alphabetic filing rules are also in the checklist.

The museum community's rapidly growing interest in standards, especially in the development of format and terminology for describing collections, is evident in the activities of several organizations. The **American Association for State and Local History** (AASLH) has sponsored the Common Agenda Project, with funds from

[25]Elisabeth Betz, *Graphic Materials: Rules for Describing Original Items and Historical Collections* (Washington, DC: LC, 1982); Helena Zinkham and Elisabeth Betz Parker, comps. and eds., *Descriptive Terms for Graphic Materials: Genre and Physical Characteristic Headings* (Washington, DC: LC, 1986); and Elisabeth Betz Parker, comp., *Library of Congress Thesaurus for Graphic Materials* (Washington, DC: LC, 1987).

the National Endowment for the Humanities, whose work has included a Database Task Force. The model developed by the task force is currently being tested in several Philadelphia-area institutions. The **Museum Computer Network** (MCN) has created the Working Group on Computerized Interchange of Museum Information (CIMI) to define protocols for the interchange of data between museum computing systems. The CIMI protocols will be consistent with ISO 2709, the international standard for such exchanges, that has been endorsed by the International Council on Museums. CIMI's members are drawn from all areas of the field, including historical, natural history, zoological, and art museums.

The **Getty Art History Information Program** is involved in a number of interinstitutional projects which are developing standards. One that has received considerable interest from members of the archival community is the *Art and Architecture Thesaurus (AAT)*. Since 1984, the *AAT* staff has actively sought advice from archivists to ensure that terminology necessary for archival cataloging was incorporated in its various hierarchies.

National and international standards organizations. The **National Information Standards Organization** (Z39) (NISO, successor to the American National Standards Committee Z39) is the principal standards organization in the fields of libraries, publishing, and information science. As of 1 December, 1989, NISO had sixty-seven voting members, including NARA, LC, ALA, AIIM, RLG, and OCLC among those with special ties to the archival community. NISO standards are developed through committees whose members work as volunteers and are drawn primarily from its voting members. The Working Group has identified at least twenty-one NISO standards as useful in archival description. One of the most significant is Z39.2, Bibliographic Information Interchange, the latest

version of which was approved in 1985. It is the standard upon which the USMARC formats, including the AMC format, are built. Also of broad potential application is Z39.50, Information Retrieval Service Definition and Protocol Specification, which establishes standardized procedures and formats for computers operating in two different systems to communicate with each other, i.e., the foundation of any network used to share information about library (or archival) holdings.

The principal standards agency in the U.S. federal government is the **National Institute of Standards and Technology** (NIST, formerly the National Bureau of Standards). NIST oversees the development of Federal Information Processing Standards (FIPS) which establish the specifications for all data processing equipment and software purchased by the federal government. Because the government is such a major purchaser, most companies will design all of their products to meet FIPS standards, so that even nongovernment purchasers are affected by FIPS requirements, if indirectly. NIST regularly conducts studies for other government agencies and has done so several times in the past for the National Archives, largely in the area of conservation and storage-related standards. In 1988-89, however, NARA commissioned a NIST study of data exchange standards and their implications for the archival management of records stored in electronic form.

The major national standards organization in the United States is actually a nongovernmental body, the **American National Standards Institute** (ANSI). ANSI does not develop standards itself, but instead serves as an accrediting agency, coordinating body, and publisher for the standards developed by the more than 200 committees and organizations that it has accredited. In addition to the ANSI-accredited organizations described above (AIIM, ARMA, NISO), several others are responsible for standards that affect archival prac-

tice. In the area of description, these include the **Accredited Standards Committee X3** (ASC X3) which focuses on information processing (including programming languages and characteristics of magnetic media) and the **Institute of Electrical and Electronics Engineers** (IEEE) which is concerned with communications and connections between electronic components. ANSI's **Information Systems Standards Board** (ISSB) attempts to coordinate the work of these and some twenty-seven other related organizations.

ANSI is the United States representative to the **International Organization for Standardization** (ISO). ISO conducts its work through Technical Committees (TCs) and it is common for an ANSI-accredited organization to be the official U.S. representative on the TC most directly related to its field of interest. For instance, NISO is a member of TC 46, Documentation, which is responsible for international standards development relating to libraries, documentation, information centers, archives,

information science, indexing and abstracting services, and publishing.

The other major international standards organization in the field of information is the **International Telephone and Telegraph Consultative Committee** (CCITT). CCITT is a division of the International Telecommunications Union (ITU), which in turn is part of the United Nations. CCITT's members are principally the post, telegraph, and telephone authorities of members' countries. Private corporations can also belong as nonvoting members. Because CCITT is a UN treaty organization, its U.S. representative is the State Department. CCITT's work is conducted through its Study Groups and Working Parties which produce "recommendations" that are the equivalent of ISO "standards." Often ISO and CCITT will cooperate and develop identical standards in areas of mutual interest. For archivists, CCITT's work in the area of data exchange standards and the potential of these standards for ensuring long-term access to and use of electronic records is vital.

Standards for Archival Description

Recommendations of the Working Group on Standards for Archival Description

Archival Participation in the Standards-Setting Process

The Working Group's first five recommendations focus on the role archivists should play in the development and implementation of standards, both in the United States and internationally. The most appropriate organizer and conduit for this participation is the principal professional archival association in the United States, the Society of American Archivists.

Recommendation 1: The Society of American Archivists should establish a standards board to oversee the process of developing, implementing, and revising standards within the association and to provide an active liaison with other standards-developing organizations whose work affects archival practice.

The rapidly broadening interest in the development and adoption of standards is a strong and healthy sign that the archival profession has reached a point of maturity. As Richard Szary observed in his discussion paper for this Working Group, archivists in the United States now share "consensus on the validity of procedures and approaches; a determination that the profession is embarked on a shared enterprise that requires unambiguous communication; and the willingness to adjust local concerns to benefit that larger shared undertaking."

The final report and thirteen supporting discussion papers produced by this Working Group describe in some detail the many efforts that are under way toward the development and implementation of standards for archival description. But description is not the only area of archival

practice receiving such attention. Standards-related activities are in progress or planned in virtually every phase of professional archival work. Among the major recent initiatives are the establishment of the Academy of Certified Archivists, the adoption of formal guidelines for graduate archival education programs, and the strong efforts toward developing effective and meaningful institutional evaluation criteria.

The Society of American Archivists, as the primary national professional association for archivists in the United States, has been and will continue to be a principal focal point for the development and promulgation of archival standards. As such, it is important that SAA establish an internal structure and appropriate procedures for handling standards development and monitoring standards implementation.

The SAA Council has already appointed

a Task Force on Archival Standards that began in 1988 the review of existing and proposed standards in the Society and the development of a mechanism for overseeing the standards process within the society. The Working Group supports these efforts toward the creation of formal procedures within SAA for developing, implementing, and monitoring standards.

The Working Group recommends that SAA establish a standards board that would: (1) review proposals from other SAA subgroups for new or revised standards, (2) identify which SAA groups should participate in the development of specific proposals, (3) ensure that the development process provides for consultation and review by all affected parties inside and outside the archival profession, (4) approve (or recommend for council's approval) new or revised standards that meet its established development and review criteria, (5) publicize and encourage the implementation of accepted standards, and (6) establish a process for the periodic review of all standards which would include an attempt to identify new areas in which standards are needed. To be successful, the board would need to maintain active communication with SAA's executive director, staff, officers, and council.

In addition, the standards board could monitor the activities of and provide overall liaison with standards-developing organizations outside of SAA. In this capacity, it would work closely with the SAA representatives to specific bodies to coordinate SAA's internal responses to outside initiatives and prevent SAA from duplicating efforts already under way elsewhere.

Recommendation 2: The Society of American Archivists should establish a full-time staff position devoted to coordinating the development, implementation, and monitoring of description standards and to the training of archivists in their use.

Many archivists have come to depend on the advice and services offered through the grant-funded position of automation project officer, held first by Lisa Weber and then by Marion Matters. SAA sections and committees have also benefitted directly from the availability of staff support in pursuing their important but largely volunteer efforts. In addition, this individual has provided SAA with a key link to other organizations that control or influence important standards for archival description, including the Library of Congress, MARBI, CC:DA, and RBMS.[1] With the end of grant support in November 1989, archivists have lost what has come to be a pivotal link to the many parties that are involved in establishing and implementing description standards.

The archival community has made a substantial investment in the USMARC Format for Archival and Manuscripts Control (USMARC AMC), the development of cataloging rules for archival materials, and in the other description standards, like controlled vocabularies, that archivists use and maintain in common trust with other professional groups. Individual practitioners have undergone extensive training (or

---

[1]MARBI (the common name for the Committee on Representation in Machine-Readable Form of Bibliographic Information) is a joint committee with representatives from three American Library Association divisions (the Library and Information Technology Association, the Association for Library Collections & Technical Services, and the Reference and Adult Services Division). MARBI also has representatives and official liaison members from other groups, including a nonvoting liaison sent by SAA. It advises the Library of Congress Network Development and MARC Standards Office on the USMARC formats. CC:DA (the Committee on Cataloging: Description and Access within ALA's Association for Library Collections & Technical Services) is the body that advises ALA's representative to the Joint Steering Committee for the Revision of *Anglo-American Cataloguing Rules*; CC:DA has nine voting members plus thirty nonvoting liaisons (nineteen from other ALA divisions and eleven from other associations including one from SAA). RBMS (the Rare Books and Manuscripts Section within ALA's Association of College and Research Libraries) has developed a number of guidelines in conjunction with SAA.

retraining) in the new methods and techniques; repositories have installed expensive new hardware and committed significant resources to converting old description systems; and the profession as a whole has worked long and hard to make its voice heard effectively in the forums where decisions are made that affect both library and archival practice.

Archivists must protect this investment. The work required to do so is too important and demanding to continue to depend on efforts of a few devoted archivists working on a volunteer basis. A staff member in the SAA office would provide the necessary continuity and focus for communicating professional needs and interests, both internally among archivists themselves and, even more importantly, to those external bodies that now have so much influence on how archivists practice.

At the same time, the archival profession is faced with substantial challenges in the rapidly evolving area of electronic records. Archivists will need to work hard to influence the proper development and application of data exchange standards in order to ensure long-term access to information stored in electronic media. While most of the research and development and much of the advocacy required in this area will have to be undertaken elsewhere (see Recommendation 7), this staff person would provide an important conduit to the profession at large for advances made by the National Archives and Records Administration staff and others.

The responsibilities of the standards officer could include: (1) coordinating SAA's contacts with organizations and associations that develop and/or influence standards (e.g., MARBI, AIIM Standards Board, LC, Bureau of Canadian Archivists Planning Committee on Descriptive Standards); (2) coordinating a standards education program to provide in-service training on the application of *Archives, Personal Papers, and Manuscripts (APPM)*, USMARC AMC, and related topics; (3) providing staff support to the SAA standards board, the Committee on Archival Information Exchange (CAIE), the Committee on Automated Records and Techniques (CART), and other groups in the association that have standards-related responsibilities or activities; (4) maintaining regular communications with SAA members through the *SAA Newsletter* and with outside individuals and organizations through formal and informal channels; and (5) overseeing project development and reviewing and/or conducting research as appropriate.

Recommendation 3: The Society of American Archivists should provide sufficient resources to participate fully in the deliberations of organizations that control the development and implementation of those library standards that are also employed in archival description. SAA should require its designated representatives to these groups to report to SAA Council and the profession in a timely and effective manner.

Archivists regularly use many standards developed by other professions in the course of their work. Certain standards that originated in the library community have become especially important to archival description. The USMARC AMC format, jointly maintained by SAA and the Library of Congress, has been pivotal in enabling full archival participation in the burgeoning national bibliographic networks.

SAA has been invited to send official "liaisons" to two of these groups, MARBI and CC:DA, and has been doing so for several years. These liaisons cannot vote, but do provide an important conduit for making archival needs and interests known before decisions are made by the voting members. SAA also has a voting representative on the

Network Advisory Committee (NAC).[2] Currently each of the three designated liaisons/representatives is a volunteer chosen because of his or her active participation in related SAA subgroups or breadth of experience with the specific standards dealt with by each group. Financial support for attending meetings has been limited, and other than the routine annual reports to council required of every SAA committee and representative, there is no established way for the individuals to communicate with the profession at large or to gather archival responses to forward to the standards bodies.

The ALA committee known as MARBI is the body through which all USMARC format changes must pass, including those affecting the USMARC AMC format. It is crucial that archivists strengthen their voice in MARBI so that the data structure that has come to serve so many archivists continues to meet their needs. The possibility of full voting membership for SAA should be explored.

Similarly, archivists should also be prepared to work more actively with CC:DA, the group responsible for reviewing the *Anglo-American Cataloguing Rules*, especially now that SAA has published the new version of *APPM*. The Network Advisory Committee provides advice to the Library of Congress on major policy issues in the development and maintenance of bibliographic networks and, as such, is an appropriate forum for archivists to use in expressing their needs regarding these integrated systems.

SAA should recognize its participation in MARBI, CC:DA, and the Network Advisory Committee as one of its most important professional responsibilities. The principal national professional association for archivists is the logical standard-bearer to other professions. SAA should give strong support to SAA's representatives to these bodies and provide the means necessary for each representative's active participation in developing policy positions and political support for archival initiatives.

Recommendation 4: The Society of American Archivists should become a voting member and participate fully in the work of the National Information Standards Organization (NISO Z39).

NISO's work affects the practices of archivists and archival institutions more than any other single standards organization in the United States. Among the fifty standards developed and maintained by NISO are several that many archivists use every day, including Z39.2, Bibliographic Information Interchange, which is the basic communication format for MARC, and Z39.48-1984, which is the American National Standard for Permanent Paper. NISO

committees are currently working on standards development in a number of areas of interest to archivists, including definitions of optimal environmental conditions for both storage and exhibition of archival materials, basic criteria for indexes, and eye-legible information on microfilm leaders.

Archivists should be active participants in the development of these standards. The most effective first step toward becoming full participants in the standards process would be for the Society of American Archivists to become a voting member of NISO. In so doing, SAA would join with some sixty-five other professional associations, private corporations, and government agencies that share a broad range of common interests in the preservation and exchange of information. Successful stan-

---

[2]The Network Advisory Committee (NAC) was established by the Library of Congress to advise it on major policy issues related to the development and maintenance of bibliographic networks. NAC members currently include representatives from a number of professional associations (including SAA), bibliographic utilities, and consortia, as well as the Council on Library Resources and the National Commission on Libraries and Information Science.

dards development and implementation requires cooperation and collaboration and, simply stated, NISO is the place where that happens for most issues of archival concern.

It is important to acknowledge that full participation in NISO does not come cheaply, however, either in terms of money or time. The annual cost for a voting membership is based on the size of an organization's budget. With membership comes "the responsibility and right to critique and vote on the draft standards which NISO's Standards Committees are developing." NISO's members also review and comment on international standards being considered by the International Organization for Standardization's Technical Committee 46 on Documentation; the NISO members' responses are used to formulate the official U.S. vote on ISO TC 46 proposals. This review and comment would entail significant direct and indirect costs in addition to the annual membership fee, both within the SAA staff which would be most likely to coordinate NISO-related activities, and

among the substantial number of volunteers from the SAA membership who would be needed to conduct the evaluations.

The National Archives and Records Administration (NARA) is already a member of NISO. Up until now, NARA's active work in NISO has been focused primarily in the area of preservation standards. The profession might be wise to capitalize on NARA's existing membership and work through it to promote a broader range of archival interests, especially until the time comes that SAA has sufficient resources to sustain its own membership.

NISO is not the only standards organization with which archivists need to be concerned. There are a wide range of public and private, national and international, standards developers whose products affect archival work in some way. But for the standards that archivists apply themselves, especially in the areas of archival description and preservation, NISO is where the key decisions are made and archivists should become active participants in that process.

Recommendation 5: Archivists in the United States should establish formal links to the description standards working groups in Canada and the United Kingdom to work toward a broadly based Anglo-American agreement on standards for describing archives and manuscripts.

As many archivists in this country are aware, the concern about standards for archival description is not limited to the United States alone. Indeed, Canadian archivists have been working actively in this area since the early 1980s and issued a report in 1985 that provided useful background material for our own work.[3] The recommendations of that report are being implemented by the Bureau of Canadian Archivists' Planning Committee on Descriptive Standards and its working groups.

In 1986 the (British) Society of Archivists published its *Manual of Archival Description*, a "basic manual of archival practice in description which sets out the underlying principles, and also seeks to establish specific rules for applying them."[4]

The International Council on Archives (ICA) convened an Invitational Meeting of Experts on Descriptive Standards in October 1988 in Ottawa. Participants from around the world produced a number of resolutions

---

[3]Bureau of Canadian Archivists, *Toward Descriptive Standards: Report and Recommendations of the Canadian Working Group on Archival Descriptive Standards* (Ottawa: 1985).

[4]Michael Cook and Kristina C. Grant, *A Manual of Archival Description* (Liverpool: University of Liverpool, 1985); Michael Cook, "The Move Towards Standards of Description and What To Do With Them," *Janus* (1987): 29-30.

calling on the ICA to become more involved in development of archival description standards. To begin the process, ICA sponsored "An Expert Consultation on the Planning of a Long-Term International Action for the Development of Descriptive Standards for Archives" in December 1989. Delegates from a wide range of nations, including representatives from the United States, Canada, and the United Kingdom, concluded that among the necessary first steps would be to agree on general principles about what constitutes archival description and to compare existing standards.

It is incumbent upon archivists in the United States to maintain contact with these and other groups as all strive to meet common goals. American archivists should be participating in the development of mu- tually agreed-upon standards for the benefit and use of all. The Society of American Archivists should communicate with these groups on a regular basis, perhaps by formally assigning this responsibility to one of its subgroups with special interest in this area. This might appropriately fall within the jurisdiction of the Committee on Archival Information Exchange. If SAA establishes the new staff position described in Recommendation 2 above, that individual could also take responsibility for active communication. The SAA Description Section newsletter editor should also make a concerted effort to report regularly on international activities; when there is broad enough interest, of course, the *SAA Newsletter* should carry reports to the entire membership.

Leadership Responsibilities of National Institutions

The National Archives and Records Administration and the Library of Congress have special leadership responsibilities in the archival community. Their particular roles in the areas of standards and archival description are addressed in the following three recommendations.

Recommendation 6: The National Archives and Records Administration (NARA) should work to develop more effective means for informing the professional archival community about its research-in-progress relating to description standards.

The archival community is fortunate that the National Archives and Records Administration has made an ongoing commitment to research. No other archival institution in the United States has the intellectual or technological resources that NARA can bring to bear on such topics as archival information systems development, electronic data exchange standards, life-cycle tracking, optical disk technology, or the conversion of text on paper to automated files. Over the past several years, NARA's staff has pursued in-depth studies in these areas and others that will eventually affect every archival repository in the country.

Many of the recent projects undertaken by NARA have important implications for the future of standards for archival descrip- tion. Within the past five years, NARA staff have been involved in the development of three major archival information systems and have commissioned studies of electronic data exchange standards and expert systems for retrieval of descriptive information. The results of these efforts could contribute significantly to the introduction of description standards within the profession, but only if information about them is widely disseminated.

Unfortunately, it appears that a significant proportion of the archival community remains largely unaware of NARA's work in these fruitful areas. Effective communication about complex issues is always difficult to achieve. But NARA should build on those techniques that have proven suc-

cessful and work with the Society of American Archivists, the National Association of Government Archives and Records Administrators, and other professional groups that include archivists to:

- open and maintain regular channels of communication regarding the results of research that affect description standards;

- designate a reliable source of information about standards-setting activity within NARA; and

- plan effective programs for informing all archivists about standards-related work-in-progress at NARA.

In addition to adopting an aggressive program for reporting on its own standards-

related activities, NARA could better serve the archival community by building its recently established Archives Library Information Center (ALIC) to emphasize literature relating to description standards. To increase ALIC's coverage, and therefore its usefulness in this area, archivists both on the NARA staff and from outside institutions should commit themselves to routinely and promptly submitting copies of reports, manuals, innovative finding aids, and research papers to the National Archives Library collection. With appropriate cooperation from all members of the archival profession, ALIC can serve as a much needed centralized source for current information about description standards.

Recommendation 7: The National Archives and Records Administration (NARA) should take a strong leadership role in the development and application of standards that will ensure long-term access to and preservation of electronic records.

There is broad consensus that the appropriate and consistent use of data exchange standards by the creators of electronically stored records offers the only hope for the long-term preservation and use of this information. The information processing industry has developed data exchange standards in order to move information from one machine or application to another regardless of differences in manufacturers. But their interests are admittedly short-term; it is up to archivists to ensure that the data exchange standards being used today are adequate to provide long-term access.

Archivists must learn what these standards are and how they are used and then be prepared to work with records creators so that they are applied correctly. Ultimately, archivists should seek to participate in the development or revision of these standards so that archival needs are accommodated.

NARA is in a unique position that should enable it to provide strong leadership, on behalf of the entire U.S. archival community, in the development and application of technical standards that are incorporated in the creation and identification of electronic records. It has already begun working directly with the National Institute of Standards and Technology (NIST) toward addressing archival needs in the Federal Information Processing Standards (FIPS), the regulations that govern the procurement of data processing equipment and software by the federal government. Because of the large number of purchases made under these regulations, economies of scale often turn a federally mandated standard into a de facto standard for the private sector as well, so persistent efforts at this level could have a significant positive impact on archival concerns far beyond the federal government.

No other archival organization has the depth of expertise or access to key players in the development of these standards that the National Archives does. Thus, NARA is the most appropriate body to represent the needs and interests of the U.S. archival

community to those organizations participating in the development and use of electronic data exchange standards, including the ASC X3: Information Processing Systems,[5] the Institute of Electrical and Electronics Engineers (IEEE), and NIST.

The National Historical Publications and Records Commission (NHPRC) should also encourage and provide support for archivists in other institutions to address these issues. Electronic records are being generated by every type of organization and institution, public and private, and by many individuals as well. Every archival repository will be faced with the problems they present in the not-so-distant future and the entire profession must be prepared to face the challenge.

Recommendation 8: The Library of Congress (LC) plays a critical role in the development and maintenance of standards used for archival description; the Society of American Archivists should communicate regularly with the offices in LC that conduct this work to ensure that archival needs and concerns are addressed.

The Library of Congress (LC) plays a major role in establishing and maintaining description standards for the library community that also affect archival description. The staffs in the Office of Descriptive Cataloging Policy, the Network Development and MARC Standards Office, and the *National Union Catalog of Manuscript Collections* have been particularly responsive to the archival community.

If library standards such as the USMARC formats, the LC Subject Headings, and the LC Name Authority File are to accommodate and support archival description practices, then archivists must find a way to provide LC with adequate information on archival needs and concerns.

SAA already participates in two groups that provide advice on LC activities, MARBI and the Network Advisory Committee. For issues not within the mandate of either of these two groups, SAA must establish other mechanisms for communicating with LC about archival needs and concerns. For instance, Recommendation 16 calls for the development of guidelines or protocols to standardize the application of LC Subject Headings to archival descriptions, an application which has proved so far to be problematical. To be most effective, this should be done cooperatively, which may require new SAA/LC working relationships.

Endorsement of Specific Standards for Archival Description

In 1982 the council of the Society of American Archivists endorsed the USMARC Format for Archival and Manuscripts Control and the NISTF Data Element Dictionary as the first and, until 1989, the only formally recognized standards for archival description. In October 1989, the Working Group sent a preliminary copy of Recommendation 9, printed below, to council for its consideration when it met at the SAA annual meeting in St. Louis. Council voted at that meeting to endorse *APPM* as a standard for archival description, for which the Working Group expresses its

[5]ASC X3 is the American National Standards Institute's Accredited Standards Committee X3: Information Processing Systems. Responsible for much of the current activity in the area of data exchange standards, ASC X3 is comprised primarily of manufacturers of data processing equipment, although the American Library Association is one of a handful of professional associations that also has a voting membership.

appreciation. Council has yet to act on the remainder of the recommendation, however, which deals with the need for establishing a process for the ongoing review and revision of *APPM*. The full recommendation is printed here to retain the full scope of the Working Group's conclusions.

Recommendation 9: The Society of American Archivists should endorse *Archives, Personal Papers, and Manuscripts* (*APPM*) as a standard for archival descriptive cataloging and establish a formal process for the continuing review and updating of *APPM*.[6]

Archival description is accomplished in a series of stages and yields a number of descriptive products, each of which is integrally connected to the others. At the heart of most archival description programs is the inventory which contains detailed information about the creator of the records and the records themselves. Archivists extract information from these inventories to prepare archival catalog records. Such cataloging may be done for entry in a repository's own manual or automated catalog, for publication in such national guides as the *National Union Catalog of Manuscript Collections*, or for entry into and distribution through one of the national bibliographic networks.

Steven Hensen's *Archives, Personal Papers, and Manuscripts* (*APPM*) has received broad acceptance since it was first published in 1983, especially among those entering records of archival description in national bibliographic networks. One of three interpretative manuals prepared at the time by staff members in the Library of Congress,[7] it provided an alternative to *Anglo-American Cataloguing Rules*, 2nd edition, Chapter 4, with rules more oriented toward collective description of archival material and the historical context of its creation.

APPM provides for the incorporation of most archival descriptive elements and permits the successful integration of archival and library cataloging records in a single bibliographic file. Evidence of its success in achieving both of these goals is its early adoption as the source for cataloging rules by archival repositories participating in RLIN (Research Libraries Information Network) and OCLC that now have more than 250,000 and 103,000 AMC records in their files, respectively.

A second, substantially revised edition of *APPM* was published by the Society of American Archivists in late 1989. It incorporates many of the lessons learned by its users during the first six years of use. It expands upon certain critical topics not covered in detail by the first edition, such as choice and form of headings and access points, and is more broadly applicable to nontextual material.

It is significant and appropriate that SAA has produced this second edition, but its responsibilities, have not ended with the manual's publication. *APPM*, like all standards, will continue to evolve and SAA must establish formal mechanisms for monitoring its implementation and use, preparing future revisions, and training archivists in its proper application. The continuing review should focus not only on its use as an internal standard within the archival community but also on its relationship to the *Anglo-American Cataloguing Rules*, 2nd edition revised (*AACR 2*), and the other special format cataloging manuals as they also evolve and change.

---

[6]In response to this recommendation, SAA Council voted to endorse *Archives, Personal Papers, and Manuscripts* at its meeting on 24 October 1989.

[7]The other two are Elisabeth W. Betz's *Graphic Materials: Rules for Describing Original Items and Historical Collections* (1982) and Wendy White-Hensen's *Archival Moving Image Materials: A Cataloging Manual* (1984).

Of the existing subgroups within SAA, the Committee on Archival Information Exchange (CAIE) is perhaps the most appropriate to conduct this ongoing review. CAIE already has responsibility for carrying out SAA's work in the maintenance of the closely related USMARC AMC Format.

Education and Training Needs

As new standards are developed and implemented or existing ones revised, it is essential that new and experienced practitioners alike be informed of their content and purpose and trained adequately to use them.

Recommendation 10: All archival and library education programs should include instruction in archival description that addresses the use of existing standards and the potential application of those under development.

Education plays a key role in promoting the wide and proper use of standards. Archival education takes place in a variety of forums. All of them, including graduate education programs, workshops offered by SAA and regional organizations, in-service training programs, and introductory training institutes, should cover such essential concepts as the application and use of *APPM* and *AACR 2*, subject analysis, indexing, and the use of various authority sources for headings. It is also important that all library students be introduced, however briefly, to the differences in approach that are inherent in archival description. The development of a model curriculum on archival description should also be explored.

In keeping with this concern for educating new practitioners about standards and their role in archival description, the examination that will be used to admit experienced archivists to the Academy of Certified Archivists should test for knowledge of those standards that have become basic components of current description practice.

Recommendation 11: Archivists should seek funds to support the preparation of a basic handbook on standards and their application in the practice of archival description.[8]

In order to make effective use of standards, archivists have to know what the existing standards are and what the appropriate processes are for revising them or developing new ones. The Working Group recommends that a manual on standards for archival description be prepared that would contain an introduction to the types and levels of standards, the participants in the standards setting process, and a review, probably in the form of abstracts, of the standards already in existence that affect archival descriptive practices.

A wide range of tools are now available for archivists who are describing records; many of them take the form of standards at varying levels and of varying types. We have prepared a checklist of the many cataloging manuals, controlled vocabularies and other authorities, and other standards and guidelines for description. It would be helpful to have a manual that would contain a fuller explanation of the contents and application of each one. The manual could

[8]At its October 1989 meeting, the National Historical Publications and Records Commission approved a project time extension and supplemental funds to the Working Group on Standards for Archival Description to prepare a manual on standards for archival description as proposed in this recommendation.

also provide some guidance on when to choose one over another for a specific situation and might document how widely each is being used and by whom.

There has also been a significant amount of activity and interest in standards in other areas of the archival practice. Certification has become a reality for individual practitioners, graduate education guidelines have been approved by the SAA Council, and institutional evaluation has been further refined through the issuance of a self-assess-ment workbook. Technical standards are an everyday part of conservation and preservation work, and they often enter the appraisal process, especially when records held in electronic information systems are being evaluated for retention. In addition to a handbook devoted solely to description-related standards, serious consideration should also be given to one or more handbooks on standards governing other areas of archival practice.

Research and Development Needs

During the course of its deliberations, the Working Group came to a better understanding about the processes of developing and implementing standards and about how certain standards function in an archival context. It also, perhaps inevitably, identified at least six areas in which significantly more research and development must take place in order to fully develop the potential of archival description.

It is easy to say that research should proceed but more difficult to assign responsibility for seeing that it is accomplished. Most of the following recommendations will require contributions of intellect, time, and money from a combination of private and public sources. All will entail multi-part projects to address each particular problem, either through simultaneous cooperative ventures at several sites or through staged investigations and implementations in which each step builds on earlier work.

All sectors of the archival community can and should participate in this effort. SAA and several of its subgroups, especially the Committee on Automated Records and Techniques and the Committee on Archival Information Exchange, could coordinate or sponsor activities related to several of these recommendations. The National Archives and Records Administration could provide an excellent testing ground for large-scale applications of information systems and for user studies. The cooperation and leadership of the Library of Congress will be required for progress in such areas as authority control and integrated cataloging. Graduate archival education programs could encourage students to investigate specific topics for term papers or theses with the best of this work published in professional journals. The Bentley Library, University of Michigan, could focus on these areas when selecting fellows for its research program as could the National Endowment for the Humanities and the National Historical Publications and Records Commission when approving grants.

Recommendation 12: Since one of the primary purposes of archival description is to provide access to archival materials, research should be conducted to discover how users currently obtain access to materials to provide a benchmark for the improvement of archival description and the subsequent development of standards.

It is striking that archivists can spend a great deal of time and energy talking about description, one of the primary purposes of which is to provide access to records, while invoking the needs or interests of those seeking that access so rarely. For too long the archival profession has remained scandalously negligent in studying its users.

Many, perhaps most, current users of archival finding aids are archivists themselves. But how do users, archivists or otherwise, actually find information in archives? How do they determine success or failure?

Automated descriptive systems are being structured on the basis of unverified assumptions—what archivists think some people want. Better system design requires evidence, based on user studies, to prove or disprove the assumptions. Armed with sound data about use, archivists would be able to evaluate the effectiveness of archival description in general and finding aids in particular, and, if necessary, to improve it.

Although logically this should have been a first step, the Working Group is not advocating that all description work stop until user studies have been completed. On the contrary, the databases that archivists are now constructing are perfect testing grounds for examining how people gain access to archival materials.

Recommendation 13: In order to achieve a better understanding of the information management needs for the effective administrative, physical, and intellectual control of archival materials, archivists should give the definition of an archival information architecture a high priority on their research agenda and seek the resources for its development.

At the outset of its work, this Working Group defined archival description to encompass the entire life cycle of records and the broadest range of information about the records themselves, their creators, and the repositories in which the records reside. This definition holds that traditional archival finding aids are only one part of a larger information system, and that a full understanding about how that information system operates and is used is essential for effective archival management of the records and the repository.

One approach used by information scientists is the development of an "information architecture," essentially a model identifying the sources and users of information; the processes by which it is collected, transformed, and used; and the structures within which it resides. The definition of such an information architecture for archival description would present the community with a comprehensive structure within which archivists can develop more effective and efficient description practices and systems. With this model, archivists could better understand the environment in which their institutions operate and make informed decisions about the types and levels of description they need to support.

Archivists should undertake research projects that utilize standard information science methodologies to begin developing such an architecture. The results of this research should be widely disseminated and discussed in the professional literature, and professional organizations should consider ways in which practical applications of these results can be encouraged.

Recommendation 14: Archivists should thoroughly evaluate existing description practices and systems in order to encourage development and implementation along the most effective lines.

Archivists produce a wealth of description products within a variety of description systems. Rarely do they subject these products and systems to the kind of searching criticism that can identify their strengths and weaknesses and that contributes to the ongoing improvement of archival description.

Tools that archivists could use to examine their practices are embodied in the model information architecture proposed in Recommendation 13, the functional requirements for archival description systems that RLG and others are developing, and the definitive user studies called for in Recommendation 12. While these are under development, the archival profession might consider how the process of peer review could serve to improve the content and use of finding aids, archival information systems, and other products of archival description.

Recommendation 15: Archivists should explore the concept of authority control for archival materials, define the multiple types of authority records required in archival information systems, work for their acceptance through MARBI, and develop information systems that fully exploit the potential for authority control to enhance access and use.

Authority control is an information retrieval concept developed in the library profession. The purpose of basic authority control is "headings management," to provide standardization of terminology for improved retrieval of the information in bibliographic records. If authority data already used for headings management were augmented with additional reference information, the result could have tremendous potential for enhancing access to archival materials.

Expanded authority records could contain "information about the history and characteristics of cultural entities that could be used to determine which persons, geographic locations, concepts, or other entities (headings for which have been included in bibliographic records) would be useful concepts to incorporate as access points in a search strategy."[9]

Authority control is most frequently defined in association with the construction of name authorities (personal, corporate, geographic) and topical subject authorities. But any category of information that is used as an access point for description is a candidate for authority control. Sometimes simple headings management is the most desirable level of authority control. For example, access by language of materials might be satisfied with relatively simple "value tables" (lists of authorized terms, or values) containing a few cross references. Value tables might also suffice for archival management actions as access points. Access points for topical subjects generally require the type of authority control provided by more complex hierarchical thesauri, with substantial scope notes and multiple cross references from synonyms, broader and narrower terms, and related terms. The same may be true for occupation, genre, or other descriptive elements as access points.

In order to significantly enhance access, authority control for names of persons, corporate bodies, and places should go well beyond headings management to the construction of reference files that identify these entities not just by a unique name, but in terms of their biographical, historical, and cultural roles, in the manner of an encyclopedia. Other elements of archival description may also merit this kind of expanded authority control: form of material, which is often used as a predictor of record content; and general record schedules, in which retention decisions are combined with in-

[9]David Bearman and Richard Szary, "Beyond Authorized Headings: Authorities as Reference Files in a Multi-disciplinary Setting," in Karen Muller, ed., *Authority Control Symposium*, ARLIS Occasional Papers #6 (Tucson, AZ: Art Libraries of North America, 1987): 72.

formation about form of material.[10] There has been much exhortation and some ad hoc experimentation toward expanding archival uses of authority control,[11] but it is time to begin a more thorough and systematic approach to the problem. Archivists must determine the elements of archival description (or entities described) that require authority control and the level or type of authority control necessary for each element or entity. They must analyze and describe the relationships between entities in terms that demonstrate their usefulness for retrieval. This goes hand in hand with Recommendation 12 concerning user needs and Recommendation 13 concerning an information architecture.

Archivists must also create structures for recording and exchanging expanded authority data, either by modifying existing structures (such as the USMARC Authority Format) or by devising new ones. Structures are not enough, however. It is essential that archivists encourage systems design and implementation that fully exploits the power of expanded authority data.

Finally, to avoid wasteful duplication of effort, archivists should find and use authority data that has already been created by others (e.g., in government organizational manuals, the *Federal Register*, and biographical dictionaries). Archivists should actively pursue methods to import that data into archival information systems.

Recommendation 16: Developers of controlled vocabularies used for subject and name indexing should provide thorough guidelines for assigning terms during the description of records and for searching databases that employ the vocabularies.

There has been a rapidly growing interest in the use of controlled vocabularies (e.g., thesauri, authority lists, value tables) to provide values (or terms) for access points in archival description. The most heavily populated cells in the matrix developed by this Working Group of standards used for archival description are those for data values. Some controlled vocabularies have long and widespread use, such as the Library of

Congress Subject Headings (LCSH) and the Library of Congress Name Authority File (LCNAF). Others, like the *Art and Architecture Thesaurus*, are relative newcomers.

The compilation of a controlled vocabulary is a complex and evolutionary process. The developers and managers of successful vocabularies usually have established channels for receiving input from practitioners as they apply the vocabulary in their work so that its terms and linkages can be refined and continually updated to meet current needs.

Vocabulary users, however, are seldom given guidance about when and how to apply the terms. The staff of the *Art and Architecture Thesaurus (AAT)* has recognized this need. It is in the process of refining an "application protocol" that it hopes will provide an indexing system for combining terms from the *AAT* into object descriptions or subject index entries. Other managers of controlled vocabularies should be encouraged to do the same, both to improve quality and consistency of archival applications of the vocabularies and to enhance re-

---

[10]In the RLG Government Records Project, supported by a grant from the NHPRC, participants are experimenting with agency history authorities that contain provenance information about the creators of archival records, general record schedules, and some specific form of material records.

[11]See, for example, David Bearman and Peter Sigmond, "Explorations of Form of Material Authority Files by Dutch Archivists," *American Archivist* 50 (Spring 1987): 249-253; Max J. Evans, "Authority Control: An Alternative to the Record Group Concept," *American Archivist* 49 (Summer 1986): 249-261; Avra Michelson, ed., *Archives and Authority Control* [proceedings of a seminar sponsored by the Smithsonian Institution, 27 October 1987], published as part 2 of *Archival Informatics Newsletter and Technical Report* 2:2 (Summer 1988); and David Bearman, "Authority Control Issues and Prospects," *American Archivist* 52 (Summer 1989): 286-299.

searchers' chances of conducting success-
ful searches and retrieving the records they
desire.

LCSH deserves special attention because
of its widespread use and the difficulties
encountered by archivists in using it in their
descriptive work. The application guide-
lines presented by the Library of Congress
in its *Subject Cataloging Manual: Subject
Headings* (also referred to as the H-manual)
assume that the vocabulary user is working

with books (or near equivalents). While
many archivists use LCSH in their descrip-
tion systems, many others have tried and
abandoned it in frustration. Better guid-
ance, in the form of application protocols
that acknowledge the characteristics of ar-
chival description, could promote wider ar-
chival use of LCSH, improve indexer
consistency, and ultimately improve end-
user searching.

**Recommendation 17: Archivists should explore further the integration of cataloging
rules for archival materials, special media materials, library materials, and museum
materials.**

Integrated catalogs depend on integrated
cataloging. If records for such diverse ma-
terials are to function in the same system,
they must be based on compatible rules for
description. It sounds reasonable, but, in
fact, no one knows to what extent the pre-
vious statements are really true.

In current practice, archivists can choose
to use *Archives, Personal Papers, and
Manuscripts* (referred to as *APPM*) for cat-
aloging any archival material, textual or
nontextual (especially with the publication
in December 1989 of a second edition). They
could, instead, choose to follow *Anglo-
American Cataloguing Rules*, 2nd ed. re-
vised (*AACR 2*). For archival graphic ma-
terials, they could use *Graphic Materials:
Rules for Describing Original Items and
Historical Collections* (*GIHC*), and for
moving images, *Archival Moving Image
Materials: A Cataloging Manual* (*AMIM*).
There are other manuals that expand or in-
terpret *AACR 2* for maps, computer files,
music, and a variety of other media and
materials. Because "archival material" can
be in any medium, there is no easy corre-
lation between "archival material" and a
single set of rules for archival cataloging.

While asserting in Recommendation 9
(above) that *Archives, Personal Papers, and
Manuscripts* should be formally endorsed
as a standard for archival description, the

Working Group acknowledges that *APPM*,
like *AACR 2*, cannot meet all the needs of
specialist catalogers, those working pri-
marily with graphic materials, moving im-
ages, electronic records, and other
nontextual records. On the other hand, cat-
alogers working with the same kinds of
nontextual records in a general repository
may find that using a single manual (*APPM*)
is preferable to using a host of special man-
uals.

In her background paper for this Work-
ing Group, Marion Matters suggests that
repositories try the approach of selecting
one set of rules as primary. That set could
then be supplemented judicious use of rules
provided in other manuals when needed for
guidance in formulating media-specific in-
formation, especially physical description
and some notes, or for information related
to provenance and archival control.

The aspect of "control" has recently as-
sumed importance equal to the aspect of
medium or type of material in determining
the nature or characteristics of descriptive
records. The American Library Associa-
tion's MARBI committee, prompted by a
proposal to change the USMARC format
so that "type of material" and "type of
control" would be separately designated,
has worked on definitions. The process of
archival cataloging (reflecting the aspect of

archival control) consists predominantly of interpreting, extrapolating, or extracting information from the material and its context. It is generally applied to collections of material organically related by provenance. Information about provenance is especially important, as is information about archival management actions, since such actions cause evolutionary changes in both the description and the materials described. By contrast, a bibliographic approach is characterized by item-oriented cataloging to provide a description, usually of a published item, as a physical entity. The cataloging process consists predominantly of transcribing information that appears on or with the item.

These definitions are new. Will they work to describe practical distinctions among descriptive records? How does the control aspect relate to choice of cataloging rules? Can the relationships between type of material, type of control, and type of cataloging rules be made clearer, so that catalogers can use the appropriate rules more confidently?

Answers to these questions and proof (or disproof) of the assumptions made above will require, among other things, further analysis of the role of the control aspect in description and retrieval, and analysis of the function and purpose of archival catalogs in particular, and integrated catalogs in general. Perspectives on indexing will come from user studies (see Recommendation 12) and must include the analysis of use by archivists themselves. Better understanding of control will require thorough systems analysis (see Recommendation 13).

While awaiting answers based on research, archival catalogers should be encouraged to explore the range of tools available to them. SAA and its subgroups should promote active discussions of real-life cataloging problems and how to solve them. The Description and Visual Materials Sections along with the MARC-VM Users Roundtable, for instance, might establish a joint forum on cataloging special materials. These groups should also work closely with the Committee on Archival Information Exchange and with any additional body in SAA which may become responsible for reviewing and updating *APPM*. Of course, discussions and joint investigations involving SAA with other professional associations, including the American Library Association, the Special Libraries Association, and the many others devoted to the care of specific media or materials, should also be promoted.

Standards: Resources

Checklist of Standards for Archival Description

THIS CHECKLIST OF STANDARDS applicable to the description of archives and manuscripts is arranged according to the placement of the standards in the matrix described in the "Report of the Working Group on Standards for Archival Description," (pp. 440-461). The cells of the matrix, and hence this checklist, are arranged along three dimensions:

- level of description (from broadest to narrowest, i.e., information system, data structure, data content, and data value);
- primary developer of the standard ("external" vs. "internal" in relation to the archival profession); and
- strength of the standard (from most exacting to most general i.e., technical standards, conventions, and guidelines).

The accompanying table offers the title (sometimes shortened or abbreviated) of each standard in the cell of the matrix to which it has been assigned. This serves as a table of contents to the checklist, where the following information has been provided for each standard:

- name of the standard and standard number (when applicable);

- date of most recent version (or status for proposed standards);
- identity of the source or compiler of the standard, both individuals and institutions, when applicable;
- form of publication, including number of volumes and/or pages when available; and
- source(s) from which copies of the standard or information about the standard can be obtained.

Following the checklist are the addresses and telephone numbers of the organizations that publish or distribute standards. Copies of most of the items in this checklist should soon be available through the Archives Library Information Center (ALIC), which operates as part of the National Archives and Records Administration's library. The ALIC staff has indicated an intention to acquire copies of as many of the standards contained in this checklist as possible. ALIC can provide documents through interlibrary loan or will make photocopies when copyright permits.

Figure 1. Table showing standards for archival description assigned to cells within the matrix (continued on pp. 480–481).

INFORMATION SYSTEMS

	TECHNICAL STANDARDS	CONVENTIONS	GUIDELINES
EXTERNAL	Common Command Language for Online Interactive Information Retrieval (CCL) (ANSI Z39.58); Specification for a Data Descriptive File for Information Interchange (ANSI/ISO 8211)	Information Resource Dictionary System (IRDS) (ANSI X3.138); Information Retrieval Service Definition and Protocol Specification for Library Applications (ANSI Z39.50); Open Systems Interconnection Basic Reference Model (ISO 7498)	Guidelines for Selecting Automated Systems
INTERNAL			Archives Assessment and Planning Workbook

DATA STRUCTURES

	TECHNICAL STANDARDS	CONVENTIONS	GUIDELINES
EXTERNAL	Basic Criteria for Indexes (ANSI Z39.4); Bibliographic Information Interchange (ANSI Z39.2); Computer Graphics—Metafile for the Storage and Transfer of Picture Description Information (CGM) (ANSI X3.122/ISO 8632); Directories of Libraries and Information Centers (ANSI Z39.10); Document Filing and Retrieval (DFR) (ISO TC97/SC18/N1264); Electronic Manuscript Preparation and Markup (ANSI Z39.59); Facsimile Transmission Standards (FAX) (CCITT Group 3 and Group 4); Message Handling System (MHS) (CCITT x.400 series/ISO 8505, 8883, 9065); Standard Generalized Markup Language (SGML) (ISO 8879); USMARC Specifications for Record Structure, Character Sets, Tapes; Writing Abstracts (ANSI Z39.14)	Computer Software Description (proposed ANSI Z39.67); Eye-Legible Information on Microfilm Leaders and Trailers and on Containers of Process Microfilm on Open Reels (ANSI Z39.62); Guidelines for Thesaurus Structure, Construction, and Use (ANSI Z39.19); Information on Microfiche Headings (ANSI Z39.32); [Museum] Data Definition Language and Data Standards; USMARC Format for Authority Data; USMARC Format for Bibliographic Data (UFBD); USMARC Format for Holdings Data	Alphabetic Filing Rules; Guidelines for State Documents Checklists; Library Statistics (ANSI Z39.7)
INTERNAL		USMARC Format for Archival and Manuscripts Control (USMARC AMC) [contained in UFBD, above]	Inventories and Registers: A Handbook of Techniques and Examples; [NAGARA] Program Reporting Guidelines for Government Records Programs

DATA CONTENTS

	TECHNICAL STANDARDS	CONVENTIONS	GUIDELINES
EXTERNAL	East Asian Character Code for Bibliographic Use (ANSI Z39.64) Representation for Calendar Date and Ordinal Date for Information Interchange (ANSI X3.30) Representation of Local Time of the Day for Information Interchange (ANSI X3.43) Romanization of Hebrew (ANSI Z39.25) Structure for the Representation of Names of Countries, Dependencies, and Areas of Special Sovereignty for Information Interchange (ANSI Z39.27) System for the Romanization of Arabic (ANSI Z39.12) System for the Romanization of Armenian (ANSI Z39.37) System for the Romanization of Japanese (ANSI Z39.11) System for the Romanization of Lao, Khmer, and Pali (ANSI Z39.35) System for the Romanization of Slavic Cyrillic Characters (ANSI Z39.24)	Anglo-American Cataloguing Rules, 2nd ed. rev. (AACR 2) LC Rule Interpretations (Hiatt) LC Rule Interpretations for AACR 2 (Oberlin) LC Rule Interpretations of AACR 2 (Tseng) Recommended Practice for Identification of Microforms (ANSI/AIIM MS19)	Cartographic Materials: A Manual of Interpretation for AACR 2 Cataloging Government Documents: A Manual of Interpretation for AACR 2 Cataloging Machine-Readable Data Files Cataloging Microcomputer Files Conservation Information Network Data Dictionary Glossary of Micrographics (AIIM TR02) Glossary of Records Management Terms Guidelines for Inputting State Documents into Data Bases Guidelines for the Establishment and Development of Monolingual Thesauri Guidelines for Using AACR 2, Chapter 9, for Cataloging Microcomputer Software Vocabulary for Acquisition, Identification and Analysis of Documents and Data (ISO 5127/3a)
INTERNAL		Archival Moving Image Materials: A Cataloging Manual Archives, Personal Papers, and Manuscripts: A Cataloging Manual for Archival Respositories, Historical Societies, and Manuscript Libraries (APPM) Criteria for Describing Manuscripts and Documents Graphic Materials: Rules for Describing Original Items and Historical Collections Report of the [Canadian] Working Group on Description at the Fonds Level Rules for Archival Cataloging of Sound Recordings	Basic Glossary for Archivists, Manuscript Curators, and Records Managers Data Elements Used in Archives, Manuscripts, and Records Repository Information Systems: A Dictionary of Standard Terminology Dictionary of Archival Terminology: English and French with Equivalents in Dutch, German, Italian, Russian, and Spanish Federal Records Management Glossary OCLC Archives and Manuscript Control Format [manual] RLIN Supplement [to UFBD]

DATA VALUES

	TECHNICAL STANDARDS	CONVENTIONS	GUIDELINES
EXTERNAL	Coded Character Sets—7-Bit American National Standard Code for Information Interchange (7-Bit ASCII) (ANSI X3.4) Codes for the Representation of Languages for Information Interchange (ANSI Z39.53) Codes—Identification of the States, the District of Columbia, and the Outlying and Associated Areas of the U.S. for Information Interchange (ANSI X3.38) Codes—Structure and Data Requirements for the Identification of Named Populated Places, Primary County Divisions, and Other Locational Entities of the U.S. and its Outlying and Associated Areas for Information Interchange (ANSI X3.47) Codes—Structure for the Identification of the Counties and County Equivalents of the U.S. and its Outlying and Associated Areas for Information Interchange (ANSI X3.31) Symbols of American Libraries (NUC Codes) USMARC Code List for Countries USMARC Code List for Geographic Areas USMARC Code List for Languages USMARC Code List for Relators, Sources, Description Conventions	Art and Architecture Thesaurus (AAT) Binding Terms: Thesaurus for Use in Rare Books and Special Collections Cataloguing General Material Designators (GMDs) Genre Terms: A Thesaurus for Use in Rare Book and Special Collections Cataloguing Library of Congress Name Authority File (LCNAF) Library of Congress Subject Headings (LCSH) Medical Subject Headings (MeSH): Annotated Alphabetic List and Tree Structures Moving Image Materials: Genre Terms Paper Evidence: Thesaurus for Use in Rare Books and Special Collections Cataloguing Printing and Publishing Evidence: Thesauri for Use in Rare Books and Special Collections Cataloging Provenance Evidence: Thesaurus for Use in Rare Books and Special Collections Cataloguing Revised Nomenclature for Museum Cataloging Sears List of Subject Headings Standard Industrial Classification Manual (SIC Codes) Standard Terminology for USMARC Field 583 [action notes re: preservation] Urban Information Thesaurus Type Evidence: Thesaurus for Use in Rare Books and Special Collections Cataloguing	Guidelines for the Subject Analysis of Audiovisual Materials Guidelines on Subject Access to Microcomputer Software
INTERNAL		Descriptive Terms for Graphic Materials: Genre and Physical Characteristics Headings (DTGM) Form Terms for Archives and Manuscript Control Library of Congress Thesaurus for Graphic Materials (LCTGM) [NARA] Life-Cycle Systems Data Elements Manual (Data Elements 800) Thesaurus of University of Terms	

INFORMATION SYSTEMS
External technical standards

Common Command Language for On-line Interactive Information Retrieval (CCL) (ANSI Z39.58). Proposed. Source/compiler: National Information Standards Organization (NISO). Copy/information available from: NISO.

Specification for a Data Descriptive File for Information Interchange (ANSI/ISO 8211). 1985. Source/compiler: International Organization for Standardization. Copy available from: ANSI.

INFORMATION SYSTEMS
Internal technical standards

None identified.

INFORMATION SYSTEMS
External conventions

Information Resource Dictionary System (IRDS) (ANSI X3.138). 1988. Source/compiler: Accredited Standards Committee X3: Information Processing Systems (ASC X3). Copy/information available from: ANSI.

Information Retrieval Service Definition and Protocol Specification for Library Applications (ANSI Z39.50). 1988. Source/compiler: National Information Standards Organization (NISO). Copy available from: Transaction.

Open Systems Interconnection Basic Reference Model (ISO 7498). 1984. Source/compiler: International Organization for Standardization. Copy/information available from: ANSI.

INFORMATION SYSTEMS
Internal conventions

None identified.

INFORMATION SYSTEMS
External guidelines

Guidelines for Selecting Automated Systems. 1986. Source/compiler: Joseph R. Matthews; Library Information Technology Association (LITA). Book (1 vol., 20 pp.). Copy/information available from: ALA.

INFORMATION SYSTEMS
Internal guidelines

Archives Assessment and Planning Workbook. 1989. Source/compiler: Paul H. McCarthy, editor; Society of American Archivists. Book (1 vol., looseleaf, 84 pp.). Copy/information available from: SAA.

DATA STRUCTURES
External technical standards

Basic Criteria for Indexes (ANSI Z39.4). 1984. Source/compiler: National Information Standards Organization (NISO). Copy available from: Transaction.

Bibliographic Information Interchange (ANSI Z39.2). 1985. Source/compiler: National Information Standards Organization (NISO). Copy available from: Transaction.

Computer Graphics—Metafile for the Storage and Transfer of Picture Description Information (CGM) (ANSI X3.122/ISO 8632). 1986. Source/compiler: American National Standards In-

stitute/International Organization for Standardization. Copy/information available from: ANSI.

Directories of Libraries and Information Centers (ANSI Z39.10). 1977. Source/compiler: National Information Standards Organization (NISO). Copy available from: Transaction.

Document Filing and Retrieval (DFR) (ISO TC97/SC18/N1264). Proposed. Source/compiler: International Organization for Standardization. Copy/information available from: ANSI.

Electronic Manuscript Preparation and Markup (ANSI Z39.59). 1988. Source/compiler: National Information Standards Organization (NISO). Copy available from: Transaction.
ANSI Z39.59 is an implementation of ISO 8879, below.

Facsimile Transmission Standards (FAX) (CCITT Group 3 and Group 4). 1984. Source/compiler: International Telephone and Telegraph Consultative Committee. Copy/information available from: CCITT.

Message Handling System (MHS) (CCITT X.400 series/ISO 8505, 8883, 9065). Source/compiler: International Telephone and Telegraph Consultative Committee/International Organization for Standardization. Copy/information available from: ANSI.

Standard Generalized Markup Language (SGML) (ISO 8879). 1986. Source/compiler: International Organization for Standardization. Copy/information available from: ANSI.
ANSI Z39.59, above, is an implementation of ISO 8879.

USMARC Specifications for Record Structure, Character Sets, Tapes. 1990. Source/compiler: Network Development and MARC Standards Office, Library of Congress. Book (1 vol.). Copy/information available from: LC.

Writing Abstracts (ANSI Z39.14). 1979. Source/compiler: National Information Standards Organization (NISO). Copy available from: Transaction.

DATA STRUCTURES
Internal technical standards

None identified.

DATA STRUCTURES
External conventions

Computer Software Description (proposed ANSI Z39.67). Proposed. Source/compiler: National Information Standards Organization (NISO). Copy/information available from: NISO.

Eye-Legible Information on Microfilm Leaders and Trailers and on Containers of Process Microfilm on Open Reels (ANSI Z39.62). Proposed. Source/compiler: National Information Standards Organization (NISO). Copy/information available from: NISO.

Guidelines for Thesaurus Structure, Construction, and Use (ANSI Z39.19). 1980. Source/compiler: National Information Standards Organization (NISO). Copy available from: Transaction.

Information on Microfiche Headings (ANSI Z39.32). 1981. Source/compiler: National Information Standards Organization (NISO). Copy available from: Transaction.

[Museum] Data Definition Language and Data Standards. 1989-. Source/compiler: Museum Documentation Association. (145 pp.). Copy/information available from: Museum Documentation

Association, Building O, 347 Cherry Hinton Road, Cambridge, England CB1 4DH.

USMARC Format for Authority Data. 1987, with updates through 1989. Source/compiler: Network Development and MARC Standards Office, Library of Congress. Book (1 vol., looseleaf). Copy/information available from: LC.

USMARC Format for Bibliographic Data: Including Guidelines for Content Designation (UFBD). 1988, with updates through 1989. Source/compiler: Network Development and MARC Standards Office, Library of Congress. (3 vols., looseleaf). Copy/information available from: LC.

USMARC Format for Holdings Data: Including Guidelines for Content Designation. 1989. Source/compiler: Network Development and MARC Standards Office, Library of Congress. Book (1 vol., looseleaf). Copy/information available from: LC.

DATA STRUCTURES
Internal conventions

USMARC Format for Archival and Manuscripts Control (USMARC AMC). Contained in USMARC Format for Bibliographic Data (above).

DATA STRUCTURES
External guidelines

Alphabetic Filing Rules (ANSI/ARMA-1). 1990. Source/compiler: Association of Records Managers and Administrators (ARMA). (40 pp.). Copy/information available from: ARMA.

Guidelines for State Documents Checklists. 1982. Source/compiler: American

Library Association (ALA)/Government Documents Round Table (GODORT). Copy/information available from: ALA.

Library Statistics (ANSI Z39.7). 1983. Source/compiler: National Information Standards Organization (NISO). Copy available from: Transaction.

DATA STRUCTURES
Internal Guidelines

Inventories and Registers: A Handbook of Techniques and Examples. 1976. Source/compiler: SAA Committee on Finding Aids. Book (1 vol., 36 pp.). Copy/information available from: SAA.

Program Reporting Guidelines for Government Records Programs. 1987. Source/compiler: National Association of Government Archives and Records Administrators (NAGARA). Book (1 vol., 36 pp.). Copy/information available from: NAGARA.

DATA CONTENTS
External technical standards

East Asian Character Code for Bibliographic Use (ANSI Z39.64). 1989. Source/compiler: National Information Standards Organization (NISO). Copy available from: Transaction.

Representation for Calendar Date and Ordinal Date for Information Interchange (ANSI X3.30). 1985. Source/compiler: Accredited Standards Committee X3: Information Processing Systems (ASC X3). Copy/information available from: ANSI.

Representation of Local Time of the Day for Information Interchange (ANSI X3.43). 1986. Source/compiler: Ac-

credited Standards Committee X3: Information Processing Systems (ASC X3). Copy/information available from: ANSI.

Romanization of Hebrew (ANSI Z39.25). 1975. Source/compiler: National Information Standards Organization (NISO). Copy available from: Transaction.

Structure for the Representation of Names of Countries, Dependencies, and Areas of Special Sovereignty for Information Interchange (ANSI Z39.27). 1984. Source/compiler: National Information Standards Organization (NISO). Copy available from: Transaction.

System for the Romanization of Arabic (ANSI Z39.12). 1984. Source/compiler: National Information Standards Organization (NISO). Copy available from: Transaction.

System for the Romanization of Armenian (ANSI Z39.37). 1979. Source/compiler: National Information Standards Organization (NISO). Copy available from: Transaction.

System for the Romanization of Japanese (ANSI Z39.11). 1972. Source/compiler: National Information Standards Organization (NISO). Copy available from: Transaction.

System for the Romanization of Lao, Khmer, and Pali (ANSI Z39.35). 1979. Source/compiler: National Information Standards Organization (NISO). Copy available from: Transaction.

System for the Romanization of Slavic Cyrillic Characters (ANSI Z39.24). 1976. Source/compiler: National Information Standards Organization (NISO). Copy available from: Transaction.

DATA CONTENTS
Internal technical standards

None identified.

DATA CONTENTS
External conventions

Anglo-American Cataloguing Rules, 2nd ed., rev. 1988. Source/compiler: Michael Gorman and Paul W. Winkler, editors; under the direction of the Joint Steering Committee for Revision of AACR. Book (1 vol., 704 pp.). Copy/information available from: ALA.

Library of Congress Rule Interpretations. 2nd ed. 1989. Source/compiler: Robert M. Hiatt, ed. (1 vol., looseleaf). Copy/information available from: LC.

Library of Congress Rule Interpretations for AACR 2: A Cumulation from Cataloging Service Bulletins. 1982-. Source/compiler: Lois Lindberg, Alan Boyd, and Elaine Druesdow, compilers. (1 vol., looseleaf). Copy/information available from: Catalog Department, Oberlin College Library, Oberlin, OH 44074.

Library of Congress Rule Interpretations of AACR 2. 1982-. Source/compiler: Sally C. Tseng. (1 vol.). Copy available from: Scarecrow Press, Metuchen, NJ.

Recommended Practice for Identification of Microforms (ANSI/AIIM MS19). 1987. Source/compiler: Association for Information and Image Management. Book (1 vol.). Copy/information available from: AIIM.

DATA CONTENTS
Internal conventions

Archival Moving Image Materials: A Cataloging Manual (AMIM). 1984. Source/compiler: Wendy White-Hensen, compiler. Book (1 vol., 217 pp). Copy/information available from: LC.

Archives, Personal Papers, and Manu-

scripts: A Cataloging Manual for Archival Repositories, Historical Societies, and Manuscript Libraries (APPM). 2nd ed. 1989. Source/compiler: Steven Hensen; Society of American Archivists. Book (1 vol., 196 pp.). Copy/information available from: SAA.

Criteria for Describing Manuscripts and Documents. 1989 (draft). Source/compiler: The Manuscript Society. Photocopy (8 pp.). Copy/information available from: The Manuscript Society Criteria Committee, Norman F. Boas, M.D., chairman, 6 Brandon Lane, Mystic, CT 06355.

Graphic Materials: Rules for Describing Original Items and Historical Collections. 1982. Source/compiler: Elisabeth W. Betz, compiler. Book (1 vol., 159 pp.). Copy/information available from: LC.

Report of the Working Group on Description at the Fonds Level to the Planning Committee on Descriptive Standards of the Bureau of Canadian Archivists [draft for circulation]. March 1988. Source/compiler: Canadian Working Group on Description at the Fonds Level, Planning Committee on Descriptive Standards. (Photocopy, 78 pp.). Copy/information available from: Bureau of Canadian Archivists, c/o National Archives of Canada, 344 Wellington Street, Room 4101, Ottawa, ON, Canada K1A 0N3.

Rules for Archival Cataloging of Sound Recordings. 1980. Source/compiler: Association for Recorded Sound Collections (ARSC). (65 pp.). Copy/information available from: ARSC.

DATA CONTENTS
External guidelines

Cartographic Materials: A Manual of Interpretation for AACR 2. 1982.

Source/compiler: Hugo L. P. Stibbe, general editor. Book (1 vol., 258 pp.). Copy/information available from: ALA.

Cataloging Government Documents: A Manual of Interpretation for AACR 2. 1984. Source/compiler: Documents Cataloging Committee, Government Documents Roundtable (GODORT), ALA, coordinated by Bernadine Hoduski. Book (1 vol., 272 pp.). Copy/information available from: ALA.

Cataloging Machine-Readable Data Files: An Interpretative Manual. 1982. Source/compiler: Sue A. Dodd. Book (1 vol., 247 pp.). Copy/information available from: ALA.

Cataloging Microcomputer Files: A Manual of Interpretation for AACR 2. 1985. Source/compiler: Sue A. Dodd and Ann M. Sandberg-Fox. Book (1 vol., 288 pp.). Copy/information available from: ALA.

Conservation Information Network Data Dictionary. Source/compiler: Conservation Information Network. Information available from: Conservation Information Network, The Getty Conservation Institute, 4503 Glencoe Avenue, Marina del Rey, CA 90292-6537.

Glossary of Micrographics (AIIM TR02). 1980. Source/compiler: Association for Information and Image Management. Pamphlet (1 vol.). Copy/information available from: AIIM.

Glossary of Records Management Terms. 1989. Source/compiler: Association of Records Managers and Administrators (ARMA). Book (1 vol., 22 pp.). Copy/information available from: ARMA.

Guidelines for Inputting State Documents into Data Bases. 1979. Source/compiler: Government Documents Round Table (GODORT), ALA. Copy/information available from: Karen Smith,

Documents Department, Lockwood Library, SUNY/Buffalo, Amherst, NY 14260.

Guidelines for the Establishment and Development of Monolingual Thesauri (PGI-81/WS/15). 2nd rev. ed. 1981. Source/compiler: Derek Austin and Peter Dale. Book (1 vol., 64 pp.). Copy/information available from: UNESCO.

Guidelines for Using AACR 2, Chapter 9, for Cataloging Microcomputer Software. 1984. Source/compiler: Resources and Technical Services Division (RTSD), ALA. Book (1 vol., 32 pp.). Copy/information available from: ALA.

Vocabulary for Acquisition, Identification and Analysis of Documents and Data (ISO 5127/3a). Source/compiler: International Organization for Standardization. Copy/information available from: ANSI.

Copy/information available from: K. B. Saur, 245 West 17th Street, New York, NY 10011.

Federal Records Management Glossary. 1989. Source/compiler: National Archives and Records Administration, Office of Records Administration, Agency Services Division. Book (1 vol., 48 pp.). Copy/information available from: NARA.

OCLC Archives and Manuscript Control Format [manual]. 1986, plus updates. Source/compiler: OCLC, Inc. Book (1 vol., looseleaf). Copy/information available from: OCLC.

RLIN Supplement [to USMARC Format for Bibliographic Data]. 1989-. Source/compiler: Research Libraries Information Network (RLIN), Research Libraries Group, Inc. (RLG). (1 vol., looseleaf). Copy/information available from: RLG.

DATA CONTENTS
Internal guidelines

Basic Glossary for Archivists, Manuscript Curators, and Records Managers. 1974. Source/compiler: Frank B. Evans, et al.; Society of American Archivists. Pamphlet (1 vol., 19 pp.). Copy/information available from: SAA.

Data Elements Used in Archives, Manuscripts, and Records Repository Information Systems: A Dictionary of Standard Terminology. 1984. Source/compiler: National Information Systems Task Force (NISTF), Society of American Archivists. Photocopy (34 pp.). Copy/information available from: SAA.

Dictionary of Archival Terminology: English and French with Equivalents in Dutch, German, Italian, Russian, and Spanish. 1984. Source/compiler: Frank B. Evans, compiler. Book (1 vol.).

DATA VALUES
External technical standards

Coded Character Sets—7-Bit American National Standard Code for Information Interchange (7-Bit ASCII) (ANSI X3.4). 1986. Source/compiler: Accredited Standards Committee X3: Information Processing Systems (ASC X3). Copy/information available from: ANSI.

Codes for the Representation of Languages for Information Interchange (ANSI Z39.53). 1987. Source/compiler: National Information Standards Organization (NISO). Copy available from: Transaction.

Codes—Identification of the States, the District of Columbia, and the Outlying and Associated Areas of the United States for Information Interchange (ANSI X3.38). 1988. Source/compiler: Accredited Standards Committee X3: In-

formation Processing Systems (ASC X3). Copy/information available from: ANSI.

Codes—Structure and Data Requirements for the Identification of Named Populated Places, Primary County Divisions, and Other Locational Entities of the United States and its Outlying and Associated Areas for Information Interchange (ANSI X3.47). 1988. Source/compiler: Accredited Standards Committee X3: Information Processing Systems (ASC X3). Copy/information available from: ANSI.

Codes—Structure for the Identification of the Counties and County Equivalents of the United States and its Outlying and Associated Areas for Information Interchange (ANSI X3.31). 1988. Source/compiler: Accredited Standards Committee X3: Information Processing Systems (ASC X3). Copy/information available from: ANSI.

Symbols of American Libraries (NUC Codes). 13th ed. 1985. Source/compiler: Library of Congress. Copy/information available from: LC.

USMARC Code List for Countries. 1988. Source/compiler: Network Development and MARC Standards Office, Library of Congress. Book (1 vol.). Copy/information available from: LC.

USMARC Code List for Geographic Areas. 1988. Source/compiler: Network Development and MARC Standards Office, Library of Congress. Book (1 vol.). Copy/information available from: LC.

USMARC Code List for Languages. 1989. Source/compiler: Network Development and MARC Standards Office, Library of Congress. Book, (1 vol.). Copy/information available from: LC.

USMARC Code List for Relators, Sources, Description Conventions. 1988. Source/compiler: Network Devel-opment and MARC Standards Office, Library of Congress. Book (1 vol.). Copy/information available from: LC.

DATA VALUES
Internal technical standards

None identified.

DATA VALUES
External conventions

Art and Architecture Thesaurus (AAT). 1989. Source/compiler: Toni Peterson, et al., eds.; Getty Art History Information Program. Computer printout of finished hierarchies and alphabetical list; first published edition due in Spring 1990 from Oxford University Press. Copy/information available from: AAT.

Binding Terms: Thesaurus for Use in Rare Books and Special Collections Cataloguing. 1988. Source/compiler: Rare Books and Manuscripts Section, Association of College and Research Libraries, ALA. Book (1 vol., 37 pp.). Copy/information available from: ALA.

General Material Designators (GMDs). Listed in Rule 1.1C1, Anglo-American Cataloguing Rules, 2nd ed., rev. 1988. Source/compiler: Michael Gorman and Paul W. Winkler, editors; under the direction of the Joint Steering Committee for Revision of AACR. Book (1 vol., 704 pp.). Copy/information available from: ALA.

Genre Terms: A Thesaurus for Use in Rare Book and Special Collections Cataloguing. 1983. Source/compiler: Rare Books and Manuscripts Section, Association of College and Research Libraries, ALA. Book (1 vol., 41 pp.). Copy/information available from: ALA.

Library of Congress Name Authority File (LCNAF). 1977, with updates through 1990. Source/compiler: Catalog Publication Division, Library of Congress. Available on microfiche and CD-ROM (updated quarterly), magnetic tape (updated weekly), as well as on-line through RLIN and OCLC. Copy/information available from: LC.

Library of Congress Subject Headings (LCSH), 13th ed. 1990. Source/compiler: Subject Cataloging Division, Processing Services, Library of Congress. Book (3 vols.) published annually; also available on microfiche and CD-ROM (updated quarterly), magnetic tape (updated weekly), as well as on-line through RLIN and OCLC. Copy/information available from: LC.

Medical Subject Headings Annotated Alphabetic List. 1990. Source/compiler: Medical Subject Headings Section, National Library of Medicine. Book (992 pp.). Copy available from: NTIS (Order #PB90-100009/GBB).

Medical Subject Headings Tree Structures. 1990. Source/compiler: Medical Subject Headings Section, National Library of Medicine. Book (712 pp.). Copy available from: NTIS (Order #PB90-100017/GBB).

Moving Image Materials: Genre Terms. 1988. Source/compiler: Martha M. Yee, comp.; National Moving Image Database Standards Committee, National Center for Film and Video Preservation at the American Film Institute. Book (1 vol., 108 pp.). Copy available from: LC.

Paper Evidence: Thesaurus for Use in Rare Books and Special Collections Cataloguing. Forthcoming, Spring 1990. Source/compiler: Rare Books and Manuscripts Section, Association of College and Research Libraries, ALA. Copy/information available from: ALA.

Printing and Publishing Evidence: Thesauri for Use in Rare Books and Special Collections Cataloguing. 1986. Source/compiler: Rare Books and Manuscripts Section, Association of College and Research Libraries, ALA. Book (1 vol., 28 pp.). Copy/information available from: ALA.

Provenance Evidence: Thesaurus for Use in Rare Books and Special Collections Cataloguing. 1988. Source/compiler: Rare Books and Manuscripts Section, Association of College and Research Libraries, ALA. Book (1 vol., 24 pp.). Copy/information available from: ALA.

The Revised Nomenclature for Museum Cataloging. 1989. Source/compiler: James R. Blackaby; Nomenclature Committee, American Association for State and Local History. Book (1 vol., 528 pp.), plus periodic updates by subscription. Copy/information available from: AASLH.

Sears List of Subject Headings. 13th ed., 1986. Source/compiler: Minnie Earl Sears; edited by Carmen Rovira and Caroline Reyes. Book (1 vol., 681 pp.). Copy/information available from: Wilson Publishing Co.

Standard Industrial Classification Manual (SIC Codes). 1987. Source/compiler: U.S. Office of Management and Budget. (1 vol., 703 pp.). Copy available from: NTIS.

Standard Terminology for USMARC Field 583 [Action Note]. 1988. Source/compiler: Preservation of Library Materials Section, Association for Library Collections and Technical Services, ALA. Photocopy (3 pp.). Copy/information available from: ALA.

Urban Information Thesaurus: A Vocabulary for Social Documentation. 1977. Source/compiler: Paul M. Rosenberg, comp.; University of Baltimore,

Baltimore Region Institutional Studies Center (BRISC). (375 pp.). Copy available from: Greenwood Press, Westport, CN.

Type Evidence: Thesaurus for Use in Rare Books and Special Collections Cataloguing. Forthcoming, Spring 1990. Source/compiler: Rare Books and Manuscripts Section, Association of College and Research Libraries, ALA. Copy/information available from: ALA.

DATA VALUES
Internal conventions

Descriptive Terms for Graphic Materials: Genre and Physical Characteristic Headings (DTGM). 1986. Source/compiler: Helena Zinkham and Elisabeth Betz Parker, compilers and editors; Prints and Photographs Division, Library of Congress. Book (1 vol., 135 pp.). Copy/information available from: LC.

Form Terms for Archives and Manuscript Control. 1985. Source/compiler: H. Thomas Hickerson and Elaine Engst, comps.; Research Libraries Group, Inc. Copy/information available from: RLG.

Library of Congress Thesaurus for Graphic Materials: Topical Terms for Subject Access (LCTGM). 1987. Source/compiler: Elisabeth Betz Parker, comp.; Prints and Photographs Division, Library of Congress. Book (1 vol., 591 pp.). Copy/information available from: LC.

[NARA] Life-Cycle Systems Data Elements Manual (Data Elements 800). 1988, with updates through 1989. Source/compiler: National Archives and Records Administration. Book (1 vol., looseleaf). Copy/information available from: NARA.

Thesaurus of University Terms. 1986.

Source/compiler: Jill Tatem and Jeff Rollison, comps.; Case-Western Reserve University; Society of American Archivists. Book (1 vol., 46 pp.). Copy/information available from: SAA.

DATA VALUES
External guidelines

Guidelines for the Subject Analysis of Audiovisual Materials. 1978. Source/compiler: Resources and Technical Services Division (RTSD), ALA. (2 pp.). Copy/information available from: ALA.

Guidelines on Subject Access to Microcomputer Software. 1986. Source/compiler: Resources and Technical Services Division (RTSD), ALA. Book (1 vol., 27 pp.). Copy/information available from: ALA.

DATA VALUES
Internal guidelines

None identified.

PUBLISHERS/DISTRIBUTORS OF STANDARDS

AASLH

American Association for State and Local History
172 Second Avenue North
Nashville, TN 37201
(615) 255-2971

AAT

Art and Architecture Thesaurus
Getty Art History Information Program
62 Stratton Road
Williamstown, MA 01267
(413) 458-2151

AIIM

> Association for Information and
> Image Management
> 1100 Wayne Avenue, Suite 1100
> Silver Spring, MD 20910
> (301) 587-8202

ALA

> ALA Publishing Services
> American Library Association
> 50 East Huron Street
> Chicago, IL 60611-2795
> (800) 545-2433; (800) 545-2444 in
> Illinois

ALIC

> Archives Library Information Center
> National Archives Library (NNRS-L)
> National Archives & Records
> Administration
> Washington, DC 20408
> (202) 501-5423
> *Photocopies or interlibrary loans only*

ANSI

> American National Standards Institute
> 1430 Broadway
> New York, NY 10018
> (212) 354-3300

ARMA

> Association of Records Managers
> and Administrators
> 4200 Somerset, Suite 215
> Prairie Village, KS 66208
> (913) 341-3808

ARSC

> Association for Recorded Sound
> Collections
> P.O. Box 10162
> Silver Spring, MD 20904

LC

> Customer Service Section
> Cataloging Distribution Service
> Library of Congress
> Washington, DC 20541
> (202) 707-6100

NAGARA

> National Association of Government Archives and Records Administrators
> New York State Archives
> Room 10A75, Cultural Education Center
> Albany, NY 12230
> (518) 473-8037

NARA

> National Archives & Records
> Administration
> Publications Services Branch
> (NEPS)
> Washington, DC 20408
> (202) 501-5240

NISO

> National Information Standards Organization (Z39)
> National Institute for Science and Technology
> Administration 101, RIC E-106
> Gaithersburg, MD 20899
> (301) 975-2814
> *Distributes copies of draft Z39 standards; copies of approved standards are available from Transaction Publishers*

NTIS

> National Technical Information Service
> U.S. Department of Commerce
> 5285 Port Royal Road
> Springfield, VA 22161
> Document sales desk: (703) 487-4650

OCLC

> Online Computer Library Center
> 6565 Frantz Rd.
> Dublin, OH 43017-0702
> (614) 764-6000

RLG

> Research Libraries Group, Inc.
> 1200 Villa Street
> Mountain View, CA 94041-1100
> (415) 962-9951

UNESCO

United Nations Educational, Sci-
entific and Cultural Organization
Division of the General Information
Programme
7 Place de Fontenoy
75700 Paris, France
*Archivists in the U.S. may find it
easier to obtain copies of RAMP
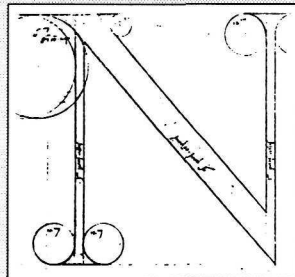reports through ALIC, ERIC, or
interlibrary loan.*

SAA

Society of American Archivists
600 South Federal, Suite 504
Chicago, IL 60605
(312) 922-0140

Transaction

Transaction Publishers
Rutgers University
New Brunswick, NJ 08903
*Distributes approved NISO Z39
standards*

Archives, Personal Papers, and Manuscripts

A Cataloging Manual for Archival Repositories, Historical Societies, and Manuscript Libraries

compiled by Steven Hensen

In this second edition (the first was published in 1983 by the Library of Congress), the descriptive elements covered in the rules correspond more closely to USMARC format equivalents. Several rules include USMARC-oriented explications and an appendix contains USMARC-coded versions of the examples used throughout the manual. Where possible, Library of Congress rule interpretations have been incorporated.

The biggest change has been the addition of an entirely new section, larger than the original rules, that contains guidelines for choosing and formulating headings. In this section the manual draws heavily on chapters 21-25 of AACR 2 dealing with choice of access points, personal and corporate names, geographic names, and uniform titles. It includes the rules most likely to be encountered by archivists and manuscript catalogers, incorporates relevant rule interpretations, and provides additional commentary and examples to reflect archival context. This manual, like the original, does not include rules or guidelines for subject indexing.

Standards: Resources

List of Manuals Providing Guidance or Instruction on the Description of Archives and Manuscripts

While archivists have demonstrated a rapidly growing interest in the kinds of standards enumerated in the checklist of standards, most of which are consensus documents resulting from group efforts, it is also important to acknowledge the impact made by the writings of individual expert practitioners on the development of description practices. The manuals listed here have all, in varying degrees, shaped the way archivists described the materials in their care. Many of them might be considered de facto standards because they have been adopted so broadly and have served as basic teaching tools in archival training programs. The influence of each one emanates from the recognized expertise of the author(s) and/or from the professional stature of the organization that sponsored or published the work.

Manuals on Archival Practice: United States

Listed in reverse chronological order by date of publication

Miller, Fredric. *Arranging and Describing Archives and Manuscripts*. Chicago: Society of American Archivists, due to be published in 1990.

Thibodeau, Sharon Gibbs. "Archival Arrangement and Description," in James Gregory Bradsher, ed., *Managing Archives and Archival Institutions*. Chicago: University of Chicago Press, 1989.

Evans, Linda J., and Maureen O'Brien Will. *MARC for Archival Visual Materials: A Compendium of Practice*. Chicago: Chicago Historical Society, 1988.

Evans, Max, and Lisa B. Weber. *MARC for Archives and Manuscripts: A Compendium of Practice*. Chicago: Society of American Archivists, 1985.

Hill, Edward E. *The Preparation of Inventories*. National Archives Staff Information Paper #14. Reprinted with slight revisions by author in Timothy Walch and Maygene Daniels, eds., *A Modern Archives Reader*, 211-235. Washington, DC: National Archives and Records Administration, 1984.

Munoff, Gerald J., "Chapter 4: Arrangement and Description," in Mary Lynn Ritzenthaler, Gerald J. Munoff, and Margery S. Long, *Archives and Manuscripts: Administration of Photographic Collections*, 71-93. Chicago: Society of American Archivists, 1984.

Gracy, David B. *Archives and Manuscripts: Arrangement and Description*.

Chicago: Society of American Archivists, 1977.

Duckett, Kenneth W. "Chapter 5: Establishing Bibliographic Control" and "Chapter 6: Information Retrieval: Automation, the Computer, and Microphotography," in *Modern Manuscripts: A Practical Manual for Their Management, Care, and Use*, 113-175. Nashville: American Association for State and Local History, 1975.

Bordin, Ruth B., and Robert M. Warner. "Chapter 4: Preparing Finding Aids," in *The Modern Manuscript Library*, in 50-68. New York: The Scarecrow Press, Inc., 1966.

Kane, Lucille. "Cataloging," in *A Guide to the Care and Administration of Manuscripts*, 2nd ed., 51-63. Nashville: American Association for State and Local History, 1966.

Schellenberg, T. R. *The Management of Archives*. Ithaca, NY: Cornell University Press, 1965.

Schellenberg, T. R. "Chapter 15: Description Practices," in *Modern Archives*, 194-214. Chicago: University of Chicago Press, 1956, reprinted 1975.

National Archives and Records Service. *The Control of Records at the Record Group Level*. Staff Information Circular #15. Washington, DC: NARS, 1950.

Manuals on Archival Practice: International

Listed in reverse chronological order by date of publication

Brunton, Paul, and Tim Robinson, "Chapter 5: Arrangement and Description," and Kathleen Oakes and Sigrid McCausland, "Chapter 6: Finding Aids," in Ann Pederson, ed., *Keeping Archives*, 129-188. Sydney: Australian Society of Archivists, Inc., 1987.

Cook, Michael. *The Management of Information from Archives*. Brookfield, VT: 1986.

Cook, Michael. *Introduction to Archival Automation: A RAMP Study with Guidelines* (PGI-86/WS/15). Paris: UNESCO, 1986.

Cook, Michael, and Kristina C. Grant. *A Manual of Archival Description*. Liverpool: University of Liverpool, 1985.

Charman, Derek. *Records Surveys and Schedules: A RAMP Study with Guidelines* (PGI-84/WS/26). Paris: UNESCO, 1984.

Hildesheimer, Françoise. *Guidelines for the Preparation of General Guides to National Archives: A RAMP Study* (PGI-83/WS/9). Paris: UNESCO, 1983.

Evans, Frank B., and Eric Ketelaar. *A Guide for Surveying Archival and Records Management Systems and Services: A RAMP Study* (PGI-83/WS/6). Paris: UNESCO, 1983.

Taylor, Hugh A. *The Arrangement and Description of Archival Materials*. With a contribution, "Les Instruments de Recherches dans les Archives" by Etienne Taillemite. International Council on Archives, Handbooks Series Volume 2. New York: K. G. Saur [distributed by Gale Research, Detroit], 1980.

Jenkinson, Sir Hilary. *A Manual of Archives Administration*, 2nd rev. ed. London: Lund Humphries, 1965.

Muller, S., J.A. Feith, and R. Fruin. *Manual for the Arrangement and Description of Archives*. Translated by Arthur H. Leavitt, 1938. Reissue with new foreword by Ken Munden. New York: H.W. Wilson Company, 1968.

Cataloging Manuals Available for use with Archival Materials

Listed alphabetically by author; several of these, produced with an extensive review process, are also included in the checklist of standards

Association for Recorded Sound Collections. *Rules for Archival Cataloging of*

Sound Recordings. [Albuquerque, NM?]: ARSC, 1980.

Betz, Elisabeth W., comp. *Graphic Materials: Rules for Describing Original Items and Historical Collections.* Washington, DC: Library of Congress, 1982.

Dodd, Sue A. *Cataloging Machine-readable Data Files: An Interpretive Manual.* Chicago: American Library Association, 1982.

Dodd, Sue A., and Ann M. Sandberg-Fox. *Cataloging Microcomputer Files: A Manual of Interpretation for AACR 2.* Chicago: American Library Association, 1985.

Gorman, Michael, and Paul W. Winkler, eds. *Anglo-American Cataloguing Rules*, 2nd ed., 1988 revision. Chicago: American Library Association, 1988.

Hensen, Steven L. *Archives, Personal Papers, and Manuscripts: A Cataloging Manual for Archival Repositories, Historical Societies, and Manuscript Li-braries*, 2nd ed. Chicago: Society of American Archivists, 1989.

Olson, Nancy B. *Cataloging Microcomputer Software: A Manual to Accompany AACR 2, Chapter 9, Computer Files.* Englewood, CO: Libraries Unlimited, 1988.

Smiraglia, Richard P. *Cataloging Music: A Manual for Use with AACR 2*, 2nd ed. Lake Crystal, MN: Soldier Creek Press, 1987.

Stibbe, Hugo L. P., gen. ed. *Cartographic Materials: A Manual of Interpretation for AACR 2.* Chicago: American Library Association, 1982.

Swanson, Edward. *A Manual of AACR 2 Examples for Manuscripts.* Lake Crystal, MN: Soldier Creek Press, 1981. [Published for the Minnesota AACR 2 Trainers.]

White-Hensen, Wendy, comp. *Archival Moving Image Materials: A Cataloging Manual.* Washington, DC: Library of Congress, 1984.

RECORDS MANAGEMENT
H A N D B O O K

by Ira A. Penn, Anne Morddel,
Gail Pennix, and Kelvin Smith

This *Handbook* examines all the main aspects of records
management, with emphasis on practice. It is a valuable
guide to those both new to and experienced in the manage-
ment of records. Within the framework of the 'information
life cycle' the book moves from an examination of active records,
records scheduling and appraisal of archiving, and classification.

Published by Gower Publishing Company, 1989;
249 pages, hardcover;
$56 SAA members, $63 nonmembers;
plus shipping and handling.

To order this publication, contact SAA at (312) 922-0140.

Standards: Resources

Select Bibliography on Standards for Archival Description

Bibliographies, Directories, and Lists

American Library Association. "American Library Association Standards and Guidelines." Photocopy. Chicago: American Library Association, August 1988.

_____. Library and Information Technology Association. "Selected Bibliography 1974-1986 on Technical Library Standards." Photocopy. Chicago: American Library Association, 1986.

"Bibliography on Authority Control." In *Archives and Authority Control* [proceedings of a seminar sponsored by the Smithsonian Institution, 27 October 1987], edited by Avra Michelson, 55-62. Published as Part 2 of *Archival Informatics Newsletter and Technical Report* 2:2 (Summer 1988).

Library of Congress. Prints and Photographs Division. "Cataloging Graphic Materials: Selected Bibliography." Photocopy. Washington, DC: Library of Congress, April 1988.

Myers, Katherine. "Select Archival Descriptive Standards Bibliography." In *Toward Descriptive Standards: Report and Recommendations of the Canadian Working Group on Archival Descriptive Standards*, 103-192. Ottawa: Bureau of Canadian Archivists, December 1985.

Roper, Michael. *Directory of National Standards Relating to Archives Administration and Records Management: A RAMP Study*. Paris: International Council on Archives, December 1986.

Society of American Archivists. "Bibliography" in the workbook for the SAA Workshop on Understanding the MARC Format for Archival and Manuscripts Control. Photocopy. [1989].

Vajda, Erik, comp. *UNISIST Guide to Standards for Information Handling* [prepared for the UNISIST Working Group on Bibliographic Data Interchange]. Paris: UNESCO, 1980.

Recent Commentaries on Archival Description and Description Standards

Bearman, David. *Archival Methods*. Archives and Museum Informatics Technical Report, vol. 3, no. 1. Pittsburgh, PA: Archives and Museum Informatics, 1989.

_____. *Archives and Museum Data Models and Dictionaries*. Archives and Museum Informatics Technical Report, vol. 3, no. 10. Pittsburgh, PA: Archives and Museum Informatics, 1990.

Bearman, David, and Richard H. Lytle. "The Power of the Principle of Prove-

nance.'' *Archivaria* 21 (Winter 1985-86): 14-27.

Dowler, Lawrence. ''The Role of Use in Defining Archival Practice and Principles: A Research Agenda for the Availability and Use of Records,'' with commentaries by Jacqueline Goggin and Anne R. Kenney. *American Archivist* 51 (Winter and Spring 1988): 74-95.

Hensen, Steven L. ''Squaring the Circle: The Reformation of Archival Description in AACR2.'' *Library Trends* 36 (Winter 1988): 539-552.

Hickerson, H. Thomas. ''Expanded Access to Archival Sources.'' *Reference Librarian* 13 (Fall 1985/Winter 1985-86): 195-199.

Lytle, Richard H. ''Intellectual Access to Archives: I. Provenance and Content Indexing Methods of Subject Retrieval.'' *American Archivist* 43 (Winter 1980): 64-75.

———. ''Intellectual Access to Archives: II. Report of an Experiment Comparing Provenance and Content Indexing Methods of Subject Retrieval.'' *American Archivist* 43 (Spring 1980): 191-207.

Michelson, Avra. ''Description and Reference in the Age of Automation.'' *American Archivist* 50 (Spring 1987): 192-208.

———. ''Introduction: Descriptive Standards and the Archival Profession.'' In *Archives and Authority Control* [proceedings of a seminar sponsored by the Smithsonian Institution, 27 October 1987], edited by Avra Michelson, 1-4. Published as Part 2 of *Archival Informatics Newsletter and Technical Report* 2:2 (Summer 1988).

Orbach, Barbara. ''Integrating Concepts: Corporate Main Entry and Graphic Materials.'' *Cataloging and Classification Quarterly* 8:2 (1987/88): 71-89.

Ostroff, Harriet. ''From Clay Tablets to MARC AMC: The Past, Present, and Future of Cataloging Manuscript and Archival Collections.'' *Provenance* 4 (Fall 1986): 1-11.

Toward Descriptive Standards: Report and Recommendations of the Canadian Working Group on Archival Descriptive Standards. Ottawa: Bureau of Canadian Archivists, 1985.

USMARC Formats

Cloud, Patricia D. ''The Cost of Converting to MARC AMC: Some Early Observations.'' *Library Trends* 36 (Winter 1988): 573-583.

Crawford, Walt. *MARC for Library Use: Understanding Integrated USMARC*. Boston: G.K. Hall, 1989.

Evans, Linda J., and Maureen O'Brien Will. *MARC for Archival Visual Materials: A Compendium of Practice*. Chicago: Chicago Historical Society, 1988.

Evans, Max, and Lisa B. Weber. *MARC for Archives and Manuscripts: A Compendium of Practice*. Chicago: Society of American Archivists, 1985.

Hensen, Steven L. ''The Use of Standards in the Application of the MARC Format.'' *American Archivist* 49 (Winter 1986): 31-40.

Holmes, William M., Edie Hedlin, and Thomas E. Weir. ''MARC and Life Cycle Tracking in the National Archives: Project Final Report.'' *American Archivist* 49 (Summer 1986): 305-309. [Letter from David Bearman commenting on the article appeared in *American Archivist* (Fall 1986) with a response from Thomas E. Weir in *American Archivist* (Spring 1987).]

Honhart, Frederick L. ''The Application of

Microcomputer-based Local Systems with the MARC AMC Format." *Library Trends* 36 (Winter 1988): 585-592.

Morton, Katherine D. "The MARC Formats: An Overview." *American Archivist* 49 (Winter 1986): 21-30.

Sahli, Nancy. "Interpretation and Application of the AMC Format." *American Archivist* 49 (Winter 1986): 9-20.

———. *MARC for Archives and Manuscripts: The AMC Format*. Chicago: Society of American Archivists, 1985.

Smiraglia, Richard, ed. *Cataloging and Classification Quarterly* [forthcoming special issue on the MARC AMC format and archival description, Winter 1990].

Stout, Leon J., and Janet Gertz. "The MARC Archival and Manuscripts Control (AMC) Format: A New Direction in Cataloging." *Cataloging and Classification Quarterly* 9:4 (1989): 5-25.

National Information Systems/ Bibliographic Networks

Bearman, David. "Archives and Manuscript Control with Bibliographic Utilities: Opportunities and Challenges." *American Archivist* 52 (Winter 1989): 26-39.

———. *Towards National Information Systems for Archives and Manuscript Repositories: The National Information Systems Task Force (NISTF) Papers, 1981-1984*. Chicago: Society of American Archivists, 1987.

Hickerson, H. Thomas. "Archival Information Exchange and the Role of Bibliographic Networks." *Library Trends* 36 (Winter 1988): 553-571.

Lytle, Richard H. "An Analysis of the Work of the National Information Systems Task Force." *American Archivist* 47 (Fall 1984): 357-365.

Sahli, Nancy. "National Information Systems and Strategies for Research Use." *Midwestern Archivist* 9 (1984): 5-13.

Automation and Planning

Gilliland, Anne J. "The Development of Automated Archival Systems: Planning and Managing Change." *Library Trends* 36 (Winter 1988): 519-537.

Kesner, Richard. *Information Systems: A Strategic Approach to Planning and Implementation*. Chicago: American Library Association, 1988.

Weber, Lisa. "Educating Archivists for Automation." *Library Trends* 36 (Winter 1988): 501-518.

Authority Control

Bearman, David. "Authority Control Issues and Prospects." *American Archivist* 52 (Summer 1989): 286-299.

Bearman, David, and Peter Sigmond. "Explorations of Form of Material Authority Files by Dutch Archivists." *American Archivist* 50 (Spring 1987): 249-253.

Bearman, David, and Richard Szary. "Beyond Authorized Headings: Authorities as Reference Files in a Multi-Disciplinary Setting." In *Authority Control Symposium*, edited by Karen Muller, 69-78. Occasional Papers #6. Tucson, AZ: Art Libraries of North America, 1987.

Dooley, Jackie M. "An Introduction to Authority Control for Archivists." In *Archives and Authority Control* [proceedings of a seminar sponsored by the Smithsonian Institution, 27 October 1987], edited by Avra Michelson, 5-18.

Published as Part 2 of *Archival Informatics Newsletter and Technical Report* 2:2 (Summer 1988).

Dryden, Jean. "Subject Headings: The PAASH Experience." *Archivaria* 24 (Summer 1987): 173-180.

Evans, Max J. "Authority Control: An Alternative to the Record Group Concept." *American Archivist* 49 (Summer 1986): 249-261.

Gagnon-Arguin, Louise. *An Introduction to Authority Control for Archivists*. Ottawa: Bureau of Canadian Archivists, 1989.

Matters, Marion. "Authority Files in an Archival Setting." In *Archives and Authority Control* [proceedings of a seminar sponsored by the Smithsonian Institution, 27 October 1987], edited by Avra Michelson, 29-33. Published as Part 2 of *Archival Informatics Newsletter and Technical Report* 2:2 (Summer 1988).

Szary, Richard V. "Technical Requirements and Prospects for Authority Control in the SIBIS-Archives Database." In *Archives and Authority Control* [proceedings of a seminar sponsored by the Smithsonian Institution, 27 October 1987], edited by Avra Michelson, 41-44. Published as Part 2 of *Archival Informatics Newsletter and Technical Report* 2:2 (Summer 1988).

Weber, Lisa B. "Development of Authority Control Systems within the Archival Profession." In *Archives and Authority Control* [proceedings of a seminar sponsored by the Smithsonian Institution, 27 October 1987], edited by Avra Michelson, 35-38. Published as Part 2 of *Archival Informatics Newsletter and Technical Report* 2:2 (Summer 1988).

Zinkham, Helena, Patricia D. Cloud, and Hope Mayo. "Providing Access by Form of Material, Genre, and Physical Characteristics: Benefits and Techniques." *American Archivist* 52 (Summer 1989): 300-319.

Electronic Records and Standards

Bearman, David. *Electronic Records Guidelines: A Manual for Policy Development & Implementation*. New York: United Nations, forthcoming Spring 1990.

Canadian Bureau of Management Consulting. *Data and Document Interchange Standards and the National Archives* [Project No. 1-6465]. Photocopy. Ottawa: Canadian Bureau of Management Consulting, June 1987.

Dollar, Charles. *Electronic Records Management and Archives in International Organizations: A RAMP Study with Guidelines*. Paris: UNESCO, 1986. [PGI-86/WS/12]

Hedstrom, Margaret. *Archives and Manuscripts: Machine-Readable Records*. Chicago: Society of American Archivists, 1984.

Massachusetts, Secretary of State. *Report of the First National Conference on Issues Concerning Computerized Public Records*. 2 vols. Boston: Massachusetts Public Records Division, 1987.

Moline, Judi. *Document Interchange Standards: Description and Status of Major Document and Graphics Standards* [NISTR 88-3851]. Gaithersburg, MD: National Institute of Standards and Technology, September 1988.

National Academy of Public Administration. *The Effects of Electronic Recordkeeping on the Historical Record of the U.S. Government: A Report for the National Archives and Records Administration*. Washington, DC: NAPA, January 1989.

Naugler, Harold. *The Appraisal of Machine-Readable Records: A RAMP Study with Guidelines*. Paris: UNESCO, 1984. [PGI-84/WS/27]

New York State Archives. *Computer and Audiovisual Records in the State Government: Preliminary Report of the Special Media Records Project*. Albany: Governor's Office of Management and Productivity, April 1986.

New York State Archives and Records Administration. *A Strategic Plan for Managing and Preserving Electronic Records in New York State Government: Final Report of the Special Media Records Project*. Albany: New York State Archives and Records Administration, August 1988.

Commentaries on Related Practices in Other Disciplines

Avram, Henriette D., Sally H. McCallum, and Mary S. Price. "Organizations Contributing to Development of Library Standards." *Library Trends* 31 (Fall 1982): 197-223.

Blackaby, James R., chair. *Managing Historical Data: The Report of the Common Agenda Task Force*. American Association for State and Local History Special Report 3. Supplement to *History News* 44 (September/October 1989).

Cargill, Carl F. *Information Technology Standardization: Theory, Process, and Organizations*. Bedford, Massachusetts: Digital Press, 1989.

Crawford, Walt. *Technical Standards: An Introduction for Librarians*. White Plains, NY: Knowledge Industry Publications, Inc., 1986.

Henderson, Madeline M. "Standards: Developments and Impacts." *Special Libraries* 7 (April 1981): 142-156.

Library of Congress, Network Development and MARC Standards Office. *Format Integration and Its Effect on the USMARC Bibliographic Format*. Washington, DC: Library of Congress, 1988.

Paul, Sandra K., and Johnnie E. Givens. "Standards Viewed from the Applications Perspective." *Library Trends* 31 (Fall 1982): 325-341.

Standards: Background Papers

Abstracts of Background Papers Prepared for the Second Meeting

During its first meeting in December 1988, the Working Group used the matrix described on p. 453 and in the checklist on pp. 478-492 as a framework for the its discussion. It worked through the matrix, cell by cell, evaluating the standards that it had placed within each cell and applying the criteria (p. 455) to standards that might be developed within that cell's area of coverage.

The Working Group often found that it had as many questions as answers about the types of standards occupying a particular cell or block of cells. It decided in several cases that it needed additional information or research before it could come to any conclusions or make recommendations to the profession about the issues at hand.

As a result, the Working Group enlisted ten of its members to prepare background papers prior to its second meeting in June 1989. The version of the matrix presented in Figure 1 shows which cells were addressed by which authors. Abstracts of the papers are printed below. The full text of each of the ten papers will be published in the next issue of the *American Archivist* (volume 53, number 1, Winter 1990).

Standards for Archival Information Management Systems

H. THOMAS HICKERSON, Cornell University

An archival information management system is comprised of several interrelated functional components. These components and the specific activities they incorporate are generally accepted in the archival profession. This paper addresses whether a standard for such systems should be established and whether such a standard should be developed as a technical standard, a convention, or a guideline. Utilizing the criteria adopted by the Working Group to evaluate the importance and viability of the various types of standards, the author examines two generalized functional requirements statements and five requests for proposals for archival information management systems. He concludes that a guideline could be effective as a model for vendors to use as a baseline for system design and could serve as a foundation for other description standards.

Figure 1. Background Papers Prepared for Second Meeting

	Technical Standards	Conventions	Guidelines	
INFORMATION SYSTEMS	Walch	Walch		External
	Hickerson	Hickerson	Hickerson	Internal
DATA STRUCTURES	Walch	Weber	Szary	External
	Roe	Roe	Roe Stout	Internal
DATA CONTENTS	Thibodeau	Matters		External
		Matters Dryden		Internal
DATA VALUES	Thibodeau	Ostroff		External
		Ostroff Dryden		Internal

From Archival Gothic to MARC Modern: Are We Building the Same Descriptive Edifices?

KATHLEEN ROE, New York State Archives

This paper focuses on past practices and potential considerations in developing guidelines, conventions, or technical standards for common data structures in archival description. It focuses especially on the elements of information included in particular types of finding aids as recommended in a number of widely used manuals on archival description. Recent developments, often resulting from automation, are also considered. This information is then analyzed to consider the problems and issues needing to be addressed in order for standardization of archival descriptive data structures to be accomplished.

Reconciling Sibling Rivalry in the AACR 2 Family: The Potential for Agreement on Rules for Archival Description of All Types of Materials

MARION MATTERS, Society of American Archivists

Archivists and others faced with the cataloging of special materials have been searching for ways to resolve existing conflicts among the large number of special descriptive cataloging manuals that have been prepared to clarify or expand upon rules presented in the *Anglo-American Cataloguing Rules*, 2nd edition (*AACR 2*). The author discusses the problems, issues, and conflicts that surfaced when the cataloging rules in *AACR 2* and the special manuals were compared to each other and to the 5XX fields (the "containers" available for notes in the USMARC format). Three manuals used widely by archivists in their own repositories and in bibliographic networks which include archival materials receive special attention: *Archives, Personal Papers, and Manuscripts; Graphic Materials*; and *Archival Moving Image Materials*.

The "Other" USMARC Formats: Authorities and Holdings, Do We Care to Be Partners in This Dance Too?

LISA B. WEBER, National Historical Publications and Records Commission

The archival profession's attention to the USMARC Format for Archival and Manuscripts Control (AMC), which is part of the USMARC formats for bibliographic data, has been to the exclusion of the two other USMARC formats: authorities and holdings. This paper examines the implications of adopting the USMARC formats for authorities and holdings by looking at the purposes and structures of the authorities and holdings formats, analyzing how the two formats relate to archival descriptive practice, discussing the changes required for the two formats to meet archival descriptive needs, and exploring strategies for the adoption of the USMARC formats to be used in archival information exchange.

External Data Structure Guidelines

RICHARD V. SZARY, Yale University

By the conclusion of its first meeting, the Working Group had identified no standards that fit in the cell for external data structure guidelines. The absence of standards in this cell may reflect either the non-existence of such standards affecting archival description, or the profession's inability to recognize them. This paper explores the role of such standards, offers some examples from the library community, and suggests strategies for influencing their development to support archival requirements.

Subject Access to Archival and Manuscript Material

HARRIET OSTROFF, National Union Catalog of Manuscript Collections, Library of Congress

The numerous vocabulary lists that are available for use in cataloging often present difficulties when applied in the cataloging of archival and manuscript material. In some cases the problems arise because the lists were compiled originally and primarily for use in cataloging books or other nonarchival materials; having not participated in the creation of the lists and with little ability to influence their maintenance or revision, archivists find that these vocabularies do not adequately meet their needs. Even more significant, many lists that could be successfully used for archives and manuscripts lack sufficient guidelines for such use, so that they are inadequately or inconsistently applied or not used at all. The author discusses these problems and proposes possible solutions by examining subject access tools used for USMARC fields 072 (subject category code), 600-654 (subject added entries), 655/755 (index term - genre/form and added entry - physical characteristics), and 656 (index term - occupation).

External Technical Standards for Data Contents and Data Values: Prospects for Adoption by the Archival Community

SHARON THIBODEAU, National Archives and Records Administration

Certain recurrent types of information (e.g., dates, times, geographic locations, languages) are so broadly used in data processing that standard code lists (data values) or standard formats for entering the information (data contents) have been developed and widely adopted. Many of these have direct applications in archival information systems. The author summarizes the issues to be considered by the archival community before adopting these standards. Several specific standards are described as examples and evaluated using the criteria developed by the Working Group.

Doing It By the Numbers: Standard Statistics for Describing Archives

LEON J. STOUT, Pennsylvania State University

The Working Group's definition of archival description encompasses not only bibliographic data and finding aids, but the collection and analysis of administrative and statistical data about archival institutions and their holdings. The author examines several efforts at standardizing library and archival statistical gathering processes, focusing in particular on the recent efforts by the National Association of Government Archives and Records Administrators and its *Program Reporting Guidelines* (1987).

The Role of Standards in the Archival Management of Electronic Records

VICTORIA IRONS WALCH, Archival Description Standards Project Coordinator

Technical standards developed by national and international standards-setting organizations to facilitate the exchange of data among computer systems could provide archivists with mechanisms for ensuring long-term access and use of information stored in electronic form. Staff at the Canadian and United States national archives and the United Nations have conducted several valuable studies in this area as well as con- tracting for additional investigations by outside experts. The author digests the findings of several of these studies, describing the organization and processes followed by the principal national and international standards developers and summarizing the elements of thirteen standards identified as having the greatest potential for archival use.

Dancing the Continental: Archival Descriptive Standards in Canada

JEAN DRYDEN, United Church Archives

The author summarizes the descriptive standards development process underway in Canada which focuses on rules for de- scription and means of providing access points.

Standards for Archival Description

Members of the Working Group on Standards for Archival Description

Lawrence Dowler, director of the Working Group, currently associate librarian of Harvard College for public services and special assistant to the director of the Harvard University Library for Special Collections, has served as the librarian of the Houghton Library at Harvard University, acting director of the Bieneke Rare Book and Manuscript Library, and associate librarian for Manuscripts and Archives at Yale University. He planned and coordinated a project for the machine-readable cataloging of manuscripts and archives in RLIN as well as the joint project to survey and enter records of manuscripts and archives at Yale, Stanford, Cornell, and later at Harvard into RLIN. He has served as a member of several SAA bodies including the National Information Systems Task Force, the Committee on Reference and Access Policy, and the Task Force on Archival Standards, as well as RLG/RLIN and OCLC task forces on archives and manuscripts.

David Bearman has been involved in archival standards activity since the late 1970s, when he served as a member and then director of the National Information Systems Task Force. Since 1987 he has published and edited *Archives and Museum Informatics,* which covers archival standards activity on a quarterly basis. He is

past president of the Museum Computer Network (MCN) and currently chairs MCN's Committee on Computer Interchange of Museum Information (CIMI). He participated in the October 1988 international Invitational Meeting of Experts on Descriptive Standards and has published extensively on archival description and standards.

Lynn L. Bellardo is an archivist in the Reference Services Branch, National Archives and Records Administration. Prior to joining NARA in 1989, she served as an archivist and systems consultant at the Georgia Historical Society and as manager of the Systems Control and Access Branch, Kentucky Department for Libraries and Archives. While at the Kentucky State Archives, she directed a state-wide guide project and coedited *A Guide to Archival and Manuscript Repositories in Kentucky.* She is currently the chair of the SAA Reference, Access, and Outreach Section and former chair of the Descriptive Standards Working Group for the NHPRC-funded RLG Government Records project. Bellardo is also coauthor of *The Vocabulary of Archives and Manuscripts* (forthcoming 1990), a volume in the SAA Archival Fundamentals Series.

Jean E. Dryden has worked at the Na-

tional Archives of Canada and the Provincial Archives of Alberta; she is presently the chief archivist of the United Church/Victoria University Archives. She has been involved in the description of textual records, photographs, and audio-visual materials. She was a member of the Bureau of Canadian Archivists' Working Group on Archival Descriptive Standards from 1984 to 1986 and served as the first chair of the Bureau's Planning Committee on Descriptive Standards from 1986 to 1989. She also participated in the October 1988 international Invitational Meeting of Experts on Descriptive Standards and was a member of SAA's Committee on Archival Information Exchange.

Steven L. Hensen was program officer for the Archives, Manuscripts, and Special Collections Program at the Research Libraries Group, 1989-90, while on leave from Duke University where he is associate director for Special Collections. He has also worked at the Library of Congress, Yale University, the University of Chicago, and the State Historical Society of Wisconsin. Hensen is the author of both the first and second editions of *Archives, Personal Papers, and Manuscripts: A Cataloging Manual for Archival Repositories, Historical Societies, and Manuscript Libraries*. He was a member of SAA's National Information Systems Task Force and was an instructor in the first series of SAA-sponsored workshops on the USMARC AMC format, as well as author of several articles and papers on the general subject of applying standards to archival description.

H. Thomas Hickerson is assistant director of Olin Library for Rare Books, Manuscripts, and Archives at Cornell University. He coauthored the first general review of archival automation in the U.S. (*SPINDEX II at Cornell University and a Review of Archival Automation in the United States*, 1976) and authored the SAA basic manual on automated access published in

1981 in addition to several articles on the impact of library bibliographic networks on access to archival information and on archival management. He has served on the SAA's National Information Systems Task Force and Committee on Archival Information Exchange and is currently chairing the SAA Task Force on Archival Standards. He was the first chair of the Research Libraries Group's Task Force on Archives, Manuscripts, and Special Collections, directing the work of that group during the initial implementation of RLIN AMC (1983-84), and has served on the Steering Committee and chaired the Bibliographic Standards Subcommittee of RLG's Archives, Manuscripts, and Special Collections Program Committee (1988-89).

Marion Matters served as automation program officer for the Society of American Archivists while on leave from the Minnesota Historical Society from August 1988 to November 1989. In that capacity she coordinated the society's workshops on the USMARC AMC format and on *AACR 2* and Library of Congress Subject Headings. She also worked closely with Steven Hensen, supervising the editorial process leading to publication of a second edition of *Archives, Personal Papers, and Manuscripts*. At the Minnesota Historical Society, she was instrumental in the conversion of that institution's existing state archives descriptions from SPINDEX to RLIN as part of the RLG Seven States Project, and coordinated the preparation and entry of new descriptive records. She is also a former chair of SAA's Description Section.

Fredric Miller is a program officer in the Office of Preservation of the National Endowment for the Humanities. From 1973 to 1989 he was curator of the Urban Archives Center at Temple University, and he also directed a graduate archival education program in Temple's History Department. Miller is the author of a number of books and articles on the history of Philadelphia

and archival theory and practice. His most recent publication is *Arranging and Describing Archives and Manuscripts* (forthcoming 1990), a volume in the SAA Archival Fundamentals Series.

Harriet Ostroff has been the editor of the *National Union Catalog of Manuscript Collections* and head of the Manuscripts Section, Special Materials Cataloging Division, Library of Congress, since 1975. She has served on the editorial committees for both editions of *Archives, Personal Papers, and Manuscripts* and on various task forces and groups concerned with the development of the USMARC AMC Format and is a member of the SAA Description Section.

Kathleen D. Roe is associate archivist with the New York State Archives and Records Administration, where she supervises arrangement, description, and automation of the Archives' holdings. She serves as the chair of the Descriptive Standards Working Group for the NHPRC-funded RLG Government Records Project, is a member of the Committee on Archival Information Exchange, and is a former chair of the Description Section. Roe also serves as the SAA liaison to MARBI (the ALA advisory committee on the MARC formats) and is an SAA workshop instructor on the MARC format.

Nancy Sahli is director of the Records Program at the National Historical Publications and Records Commission. A member of the National Information Systems Task Force, she is the author of *MARC for Archives and Manuscripts: The AMC Format* (Society of American Archivists, 1985), for which she received the C.F.W. Coker Prize. Her articles on national information systems, databases, and the USMARC format have appeared in the *American Archivist*, the *Midwestern Archivist*, and other automation and archives-related publications.

Leon J. Stout is university archivist and librarian, Special Collections, at Pennsylvania State University. He is a former chair of the SAA Description Section and member of the Committee on Archival Information Exchange. As a longtime member of SAA's Committee on Automated Records and Techniques, he has taught a number of SAA workshops on computer use in archives. He was responsible for planning the implementation of the MARC AMC Format in Penn State's Library Information Access System (LIAS) and is coauthor of an article on the format which was published in *Cataloging and Classification Quarterly*.

Richard V. Szary is university archivist and assistant head of Manuscripts and Archives at Yale University. Prior to joining Yale in 1988, he served at the Smithsonian Institution for thirteen years in the Office of Information Resource Management and the Smithsonian Archives. While at the Smithsonian, he managed archival description and automation programs, including the Guide to the Smithsonian Archives and the Smithsonian Institution Bibliographic Information System (SIBIS). He currently serves as chair of the SAA Committee on Archival Information Exchange and as SAA representative on the Library of Congress's Network Advisory Committee.

Sharon Gibbs Thibodeau is director of the Archival Publications and Accessions Control Staff, National Archives and Records Administration, where she develops guidelines for the description of federal records and ensures that these guidelines are implemented in the Office of the National Archives. For the last three years she has been involved in the development of an automated archival information system (AIS) at NARA and participated in the October 1988 international Invitational Meeting of Experts on Descriptive Standards. In December 1989 she was the United States representative at the International Council on

Archives expert consultation on international standards for archival description.

Lisa B. Weber is assistant director for technological evaluation, Records Program, of the National Historical Publications and Records Commission. Previously, Weber held the position of program officer for automation at the Society of American Archivists (SAA) and also worked at the State Historical Society of Wisconsin. She is the coauthor of *MARC for Archives and Manuscripts: A Compendium of Practice*, for which she received the C.F.W. Coker Prize. Weber was also awarded the 1989 Esther J. Piercy Award by the American Library Association's Association for Library Collections and Technical Services

and participated in the October 1988 international Invitational Meeting of Experts on Descriptive Standards.

Victoria Irons Walch, project coordinator for the Working Group, is a free-lance archivist who has worked at the National Archives and Records Administration, the Chicago Historical Society, and the Illinois State Archives. She directed the compilation of the first comprehensive guide to the Illinois State Archives and received SAA's Leland Commendation as its coauthor. Within the SAA, she has been a member of council, the Task Force on Archival Standards, and the Committee on Archival Information Exchange, and has chaired the Description Section.