Standards: Background Paper

Archival Description Standards: Concepts, Principles, and Methodologies

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Abstract: Members of the archival profession have demonstrated an increasing interest in standards-related issues, particularly in archival description standards. The author discusses the concepts, principles, and methodologies associated with archival description standards, first by defining the phrase *archival description*, and then by introducing similar standards in the library profession as a frame of reference. She summarizes existing archival description standards at three levels (data structure, data content, and data value), reviews reasons to develop and use standards along with obstacles blocking their emergence, and explores possible future developments.

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STANDARDS ARE CRUCIAL TO the way we live our lives in a complex society; they prescribe our behavior as well as define many of the products we create. Mercifully, most product standards are transparent to us—we are blissfully unaware that elaborate sets of mutually agreed-upon practice govern so many aspects of our daily existence. From our beds to our electrical outlets to the oil in our automobiles—all are governed by common standards.

What are standards? In the broadest sense, standards are prescribed guides for action or mutually agreed-upon "benchmarks which are established for the measure of quantity, weight, extent, value, or quality."[1] In other words, they are the means by which individuals compare or judge. It is critical to recognize that standards are never ends in themselves, but are rather means to achieving ends. Although people develop standards for many specific reasons, the most apparent purpose is to enable individuals and groups to share and cooperate in a variety of activities.

Though we tend to use the word *standards* loosely, precise categories or types exist, each defined separately and associated with different expected results. There are guidelines, which suggest practice but do not compel the compliance that would be necessary to produce identical results. These are very different from formal consensus technical standards, whose explicit definitions or specifications are not subject to unilateral change and which will produce consistent results if followed properly.[2]

Standards are developed for various constituencies. Internal or local standards are created to establish consistency within one organization. Standards can also be regional, national, or even international. Additionally, standards can be characterized as *pseudo,* i.e., practices that appear to be standards but are not, or *de facto,* standards that arise through common practice without any formal agreement.

This litany of definitions is intended to demonstrate that the topic of standards is complex and involved. Description standards are product standards that fall into a range of categories and types and can also be identified at different levels. This paper discusses the concepts, principles, and methodologies associated with archival description standards by first defining the phrase *archival description,* and then introducing, as a frame of reference, similar standards in the library profession. Using three levels of description standards (data structure, data content and data value standards) the paper next summarizes major archival description standards in use primarily in the United States. The paper then reviews reasons to develop and use archival description standards and the obstacles blocking their development. It concludes with some thoughts about future developments.[3]

Archival Description

Before discussing standards associated with archival description, we must first define what archival description means. Acknowledging, after careful study, that the profession does not have an adequate definition of archival description, the Canadian Working Group on Archival Descriptive Standards provided a preliminary one:

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[1]*Towards Descriptive Standards: Report and Recommendations of the Canadian Working Group on Archival Descriptive Standards* (Ottawa: Bureau of Canadian Archivists, 1986), 15.

[2]For an exhaustive study of technical standards relating to library and information science see Walt Crawford, *Technical Standards: An Introduction for Librarians* (White Plains: Knowledge Industry Publications, 1985).

[3]This paper uses the terms *descriptive* and *description* interchangeably. The term *archival* is used in its broadest sense, encompassing both organizational and personal manuscript materials. The author recognizes the existence of a fourth, broader level for which standards exist, that of information systems, which is incorporated in the Working Group's final report.

"[D]escription is a major function in the processing of archival materials, and the products of this function are finding aids of various sorts which give administrators control over their holdings and enable users and archivists to find information about particular topics."[4]

If the purpose of archival description is to provide access to materials, then archival description standards are mutually agreed-upon guidelines, rules, and specifications that prescribe methods of producing uniform and consistent results or products for use in providing access to primary source materials. These definitions are important because people should develop and embrace standards as strategies to further ends—in this case, improved access to archival materials. These definitions, however, are exceedingly broad. The creation of successful descriptive practice and standards to guide that practice requires archivists to articulate the objectives of description systems in measurable ways.

The archival profession traditionally has balked at rigorously examining archival description, let alone developing and using archival description standards. We are not obstinately anti-standards, as is shown by the profession's acceptance of preservation standards governing optimum temperature and humidity conditions for proper storage and technical microfilming standards for archival-quality film. Until recently, however, description standards have been another matter. The uniqueness of archival materials has long served as an excuse to perpetuate our idiosyncratic descriptive practices. But this situation is changing, as evidenced by the recent appearance of reports and manuals in Canada, Great Britain, and the United States.[5] Each country

is taking a somewhat different approach; those taken by Great Britain and the United States differ markedly, with Canada falling somewhere in the middle.

Both the British and Canadian archival communities are examining archival description from "first principles." This requires that they initially establish principles of archival description from which archival description standards follow.[6] One result of this approach is the central principle of levels of records and the subsequent identification of categories of information for each specific level. The Canadian Working Group on Archival Descriptive Standards proposed that Canadian archivists describe materials at the fond level.[7] The group is supporting work in the development of fond-level standards for description.

U.S. archivists, in order to avoid the problem of archival levels that are not absolute and therefore difficult to standardize outside a repository, have concentrated instead on access. U.S. archivists are putting descriptions of archival holdings into library bibliographic databases, in national networks such as the Research Libraries Information Network (RLIN) and the Online Computer Library Center (OCLC) as well as in local online public access catalogs. The U.S. archival description standards are therefore more library-oriented to permit this integration to take place.

The library profession is far advanced in its development of description standards due to the economic benefits of derivative cataloging. More importantly, librarians have

[4]*Towards Descriptive Standards*, 9.

[5]See *Towards Descriptive Standards*; Michael Cook and Kristina Grant, *A Manual of Archival Description* (Liverpool: Society of Archivists, 1985); and Steven L. Hensen, *Archives, Personal Papers, and Manuscripts* (Washington: Library of Congress, 1984).

[6]Michael Cook, "The Move Towards Standards of Description and What To Do About Them," *Janus* 2 (1987): 29-32; and Cook, "Standards of Archival Description," *Journal of the Society of Archivists* 8 (April 1987): 181-188.

[7]The Canadian Working Group uses the term *fond d'archives* or simply *fond* to describe a group of records (regardless of medium) that are accumulated in the course of the creator's activities or functions. Fond is somewhat comparable to the U.S. concept of record groups and manuscript collections.

been grappling systematically with the issues, problems, and associated standards of improved access and retrieval far longer than archivists. Despite the acknowledged differences between the two professions, there is enough commonality for the framework developed by librarians to serve as a useful point of departure for archivists.

Library Description Standards

Although the two processes are not the same, cataloging is the library function most analogous to archival description. Archival description encompasses a lengthy process of providing access to collections or groups of materials, resulting in a wide variety of (often fragmented and unintegrated) finding aids such as registers, inventories, repository guides, indexes, and sometimes catalog records. Creating library-like catalog records for archival materials is only one activity in the process and usually *not* the most important one. Comparatively, library cataloging is generally at the item level, involves less time per item, and represents *the* primary means of providing access to published materials. These distinctions aside, the purpose of archival description and library cataloging is the same: to provide access to materials.

The objectives of a library catalog, as *first codified by Charles Cutter in 1876 and* restated in the Paris Principles of 1961, are to enable users to (1) locate a particular work by author or title; (2) locate all works of an author; (3) locate all editions of a work; and (4) locate all works in a particular subject. These explicit objectives determine the kinds of information and access points (or index terms) that librarians include in their catalogs.

Librarians divide the process of cataloging into two separate components: descriptive and subject. Descriptive cataloging encompasses transcribing elements from the work itself in order to identify the work, i.e. copying bibliographic data such as the

name of the author, the title of the work, and the edition and publication information from the item in hand. (The contrast between this definition that librarians give to *descriptive cataloging* and archivists' broader use of the term *description* is often a source of confusion or misunderstanding.)

Using this descriptive data, the cataloger chooses and formulates access points, such as the name of the author and the title of the work, for information retrieval purposes. These access or entry points serve as index terms to the bibliographic description. Descriptive cataloging fulfills the first three objectives of the library catalog—locating a known work by author or title, locating a group of works by an author, and locating all editions of a particular work.

Library subject cataloging satisfies the fourth objective of the catalog—to locate all works on a particular subject. Although viewed as distinct, it builds upon descriptive cataloging. In subject cataloging librarians analyze the contents of the work and assign subject terms from controlled vocabulary lists in order to provide access to the content and lead users to relevant works on a particular topic of interest.

Successful library catalogs require that the choice and formation of access points be consistent. Librarians achieve consistency of language through the use of authority control. Authority control is a concept that refers to the regulation of terminology used as access points in catalog records. It provides standardization of terminology in three ways: by distinguishing terms; showing relationships; and documenting decisions. To record decisions, librarians create authority records that show the choice of heading used as the "official" form, the cross-references from variant forms to the authorized heading, and the relationships of the heading to other headings in the file.[8]

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[8]For a superb discussion of authority control in the

Library catalog cross-references such as "Charlotte Nicholls see Charlotte Brontë" and "see also" references such as "physicians see also women physicians" are all products of authority control work.

Several of these library information retrieval concepts have direct applicability to archival descriptive practice. For example, archivists produce finding aids that characterize the archival materials themselves (analogous to library descriptive cataloging) as well as provide access points to the subject content of the materials (library subject analysis). Archivists, however, have never viewed these activities as separate. Furthermore, although they have not always recognized it as a problem, archivists need to maintain consistency of language through the use of authority control. Librarians have developed separate but related standards for these various cataloging components. An analysis of library cataloging standards from an archival point of view is important, not only as a point of comparison, but also as a means to integrate descriptions about archival materials into library bibliographic databases.

Even assuming that some library standards can accommodate archival needs, clear distinctions exist between library and archival materials. Common sense suggests that archival descriptive systems[9] will need to answer questions beyond those encompassed by the four objectives of the library catalog. This implies that, in order to produce consistent access, archival descriptive systems must provide different and/or additional categories of access points. For example, if provenance is often more important than authorship in the context of archival materials, how can archival descriptive systems improve access to the corporate entity that created the records? Does an archival descriptive system need to provide access to the functions of a creating agency or body?[10] Must archival systems be able to provide access to the occupation of an individual? Should systems be able to retrieve materials of like form such as diaries, birth certificates, or land deeds, or a particular physical medium such as daguerreotypes? The answers to these questions should determine the categories of data that archivists include in an archival description system. To determine the answers we must study users to learn how they discover the archival materials they seek. Any new categories of access points will, of course, require standards to insure their consistent interpretation.

Current Archival Description Standards

Archival description standards do indeed exist, among them the many local guidelines for the creation of finding aids specific to a single repository. As previously mentioned, the profession has moved towards national standards for description and a recent conference held in Ottawa,

context of archival description see Jackie M. Dooley, "Introduction to Authority Control for Archivists," in *Archives and Authority Control* [proceedings of a seminar sponsored by the Smithsonian Institution, 27 October 1987], Avra Michelson, ed., *Archival Informatics Technical Report* 2:2 (Summer 1988): 5-18.

[9]The term *system*, in this context, does not imply automated access but refers to the entire array of finding aids such as guides, registers, inventories, indexes, and catalog records that, taken together, comprise an integrated functional whole.

[10]Access by function provides a means for identifying information based on the intent or purpose with which the organizational or institutional records were created. Identifying the function of the materials answers the question of *why* the records were created, because corporate bodies come into existence for identifiable purposes. For example, one function of a corporate body may be to inspect (as in the case of a government agency) or to lobby (as in the case of a professional association). A major advantage to assigning "function" access points is the possibility of co-locating similar materials by function of creating body. The names of the corporate bodies or the position in a larger organizational structure take on secondary importance, because the critical access point would be function.

Ontario, cosponsored by the International Council on Archives and the National Archives of Canada, is evidence of an international direction.[11]

Existing standards are numerous and varied. Some are familiar to most archivists; others are less well-known. Some were developed principally by and for archivists; others were developed elsewhere but have archival applications. Some define the format for providing information about archival materials; others focus on the information that goes into that format. A useful way of beginning to comprehend the range of standards is to consider three levels at which they exist: data structures, data contents, and data values.

Data Structures Standards. A data structure refers to the format or container in which we organize information. People connect data structures to computer database designs, but data structures exist in nonautomated environments as well. For example, inventories and registers are data structures. Data structures provide a specific place and uniform format for pieces or categories of information. Examples of data structure standards include the International Standard Bibliographic Description (ISBD) and the Common Communications Format (CCF). The US-MARC (United States Machine-Readable Cataloging) format for Archival and Manuscripts Control (AMC) is a standard data structure that U.S. archivists have adopted primarily to exchange information about their holdings. Use of the USMARC AMC format allows archivists to integrate descriptions of archival materials with those of other kinds of research materials.

The entire USMARC format, of which USMARC AMC is a part, is based on the American National Standards Institute (ANSI) standard Z39.2-1979, entitled "American National Standard for Bibliographic Information Interchange." This ANSI standard is based on International Organization for Standardization (ISO) standard 2709, entitled "Documentation Format of Bibliographic Information on Magnetic Tape." Some countries have their own national versions of the MARC format such as CANMARC, UKMARC, and JAPANMARC. The UNIMARC format, developed by the International Federation of Library Associations and Institutions (IFLA) "provides the mechanism for exchanging records among the national bibliographic agencies, bypassing the inherent difficulties created by multiple national MARC formats."[12] The Archival and Manuscripts Control component of the format is unique to USMARC and CANMARC. The MARC format shows what kind of information should be put where (it is a container) but deciding which parts of the format to use, and the form of information to put into the categories, is controlled by a separate set of data content and data value standards.

Data Content Standards. Standards for data contents and data construction provide guidelines for the content of the data structures. The British *Manual for Archival Description* (MAD) is an example of a data content standard. As previously mentioned, the Canadians are also producing a series of data content standards. Cataloging rules are a type of data content standard for libraries. Many data content standards are guidelines, namely "rules for activities that should be applied as consistently as possible but which, by their nature, will not necessarily produce the identical results even when followed."[13]

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[11]The Invitational Meeting of Experts on Descriptive Standards, hosted and sponsored by the National Archives of Canada in cooperation with the International Council on Archives was held in Ottawa, Ontario, 4-7 October 1988.

[12]Walt Crawford, *MARC for Library Use: Understanding the USMARC Formats* (White Plains: Knowledge Industry Publications, 1984), x.

[13]Henriette D. Avram, Sally H. McCallum, and Mary S. Price, "Organizations Contributing to Develop-

The well-known library data content standard, the *Anglo-American Cataloguing Rules*, 2nd ed. rev. (*AACR 2*), offers detailed instructions for formulating the data that librarians use to create catalog entries (often called bibliographic records) and authority records. *AACR 2* is not a technical standard because strict adherence will not produce uniform results. It is, however, an international formal consensus standard created and maintained by a joint steering committee composed of representatives from the U.S., Canada, Great Britain, and Australia.

AACR 2 is divided into two parts. Part I ("Description") contains rules that instruct the cataloger on how properly to describe various forms of materials as bibliographic items. Part II ("Headings...") offers guidance in choosing and formulating non-subject access points. *AACR 2* does not contain instructions for establishing subject headings or classifying materials. Chapter 4 of Part I ("Manuscripts") contains instructions for describing manuscript materials. Because of the U.S. archival community's dissatisfaction with Chapter 4, Steven L. Hensen, in conjunction with an advisory committee, subsequently compiled *Archives, Personal Papers, and Manuscripts* (*APPM*).[14] Many in the U.S. archival community have embraced *APPM* as a principal archival description standard. Essentially a rewriting of *AACR 2*'s chapter 4, *APPM* concentrates on the rules for the description of archival materials at the collection level. *APPM* contains minimal information about choice of headings and includes no information about the formulation of access points. Archivists must refer to *AACR 2* for instructions on the construction of cross-

references for personal, corporate, and geographic place names.[15]

Data Value Standards. Data value standards, the third level of description standards, comprise the actual lists of terms used in particular elements of data structures. Data value standards are the authority files, controlled vocabularies, and thesauri used to achieve language consistency. The two most important U.S. data value standards are the Library of Congress Name Authority File (LCNAF) and the *Library of Congress Subject Headings* (*LCSH*). Other countries have their own versions of these kinds of standards.

A thesaurus is a particular kind of authority list, the design of which is governed by the U.S. ANSI standard Z39.19 1980 and internationally by ISO 2788.[16] Other countries, including France and Great Britain, have their own thesaurus construction standards also based on ISO 2788. The ANSI standard defines a thesaurus as "a compilation of words and phrases showing synonyms, hierarchical, and other relationships and dependencies, the function of which is to provide a standardized vocabulary for information storage and retrieval."[17] Hundreds of thesauri provide controlled vocabularies to improve subject retrieval for particular categories of information.

As mentioned previously, within the context of the MARC AMC format and li-

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ment of Library Standards," *Library Trends* 31 (Fall 1982): 198.

[14]Steven L. Hensen, "Squaring the Circle: The Reformation of Archival Description in *AACR 2*," *Library Trends* 36 (Winter 1988): 539-552.

[15]Steven L. Hensen's revision of *APPM* (Chicago: SAA, 1989), supported by funds from the National Endowment for the Humanities, parallels the US-MARC format more closely. It includes rules from chapters in part II of *AACR 2* for constructing personal, corporate, and geographic place names and offers advice on how archivists can use these rules more easily.

[16]American National Standards Institute, *American National Standards Guidelines for Thesaurus Structure, Construction, and Use*, ANSI Z39.19-1980 (New York: ANSI, 1980); and International Standards Organization, *Documentation—Guidelines for the Establishment and Development of Monolingual Thesauri*, ISO 2788-1974.

[17]*American National Standards Guidelines*, 1.

brary bibliographic networks, American archivists are interested in providing access to categories of information beyond those normally assigned by librarians. These categories include physical form of material, function of creating agency, and occupation of creators. In the U.S., several thesauri have been developed or are under development to control these particular kinds of vocabularies. Three thesauri of particular interest are the *Art and Architecture Thesaurus*, the *Descriptive Terms for Graphic Materials: Genre and Physical Characteristics Headings*, and the "Seven States Spheres of Activities and Processes Lists."[18]

Why Develop Standards?

In the for-profit world of industry and technology there are obvious economic incentives that either motivate or discourage standards development. In the archival profession, the economic incentives are not so apparent. Nonetheless, there are compelling reasons on a local as well as national scale for archivists to put resources into description standards development.

Development of description standards avoids the "reinvent the wheel" syndrome and forces archivists to make decisions once, document them, and not return to the same questions endlessly. Although the development effort initially increases the workload, implementing descriptive standards makes for a more efficient internal operation in the long run. In a larger context, mutually agreed-upon description standards create a variety of possibilities, including the exchange of information about

archival holdings and processes and thus the creation of union databases. In the same vein, it makes possible the sharing of authority data. Descriptive standards provide a common base for the profession to develop, refine, and improve descriptive practice and allow the creation of computer systems based on standard data structures. Archival descriptive standards also encourage more consistent and better archival education and training because they offer a corpus of agreed-upon knowledge, skills, and techniques that students must learn.

The Problems

With so much to gain from the development and implementation of archival descriptive standards, why have archivists avoided the process until recently? Because there are real obstacles as well. Several kinds of barriers exist. Successful description standards need to have well-defined objectives comparable to those of the library catalog. Archivists do not have clearly articulated, precise statements about descriptive requirements. Quite frankly, the profession lacks a clear understanding of the role of archival description. We do not know what the purpose of our descriptive systems is, other than the broadly defined goal of improving access to materials. We do not understand the relationship among various kinds of finding aids or how to integrate them into a whole descriptive system. It is difficult if not impossible to develop adequate standards to guide the development of archival description when we are so vague about its very purpose.

Included in this general problem of inadequate descriptive requirements are the complex issues of depth and levels of indexing. The British and Canadian archivists are approaching their standards development from the perspective of levels of arrangement and description. Though American archivists are concentrating on less hierarchically confined levels of ac-

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[18]Toni Peterson, et al., eds., *Art and Architecture Thesaurus* (New York: Oxford University Press, forthcoming 1990); Helena Zinkham and Elisabeth Betz Parker, *Descriptive Terms for Graphic Materials: Genre and Physical Characteristics Headings* (Washington: Library of Congress, 1987); "Seven States Spheres of Activities and Processes Lists" is being incorporated into the forthcoming *Art and Architecture Thesaurus*.

cess, all archivists must be concerned about these issues. At what depth and level should archivists provide access? What kinds of access points should be made available? How specific or broad should the terms be?

Shifting to the economic arena, the cost of consensus standards development is high for the often resource-poor archival profession. Consensus standards must represent a general agreement among interested parties which, in turn, requires participants to meet, discuss, develop, and review standards documents. Standards are not static; they must be monitored and revised as the context in which they exist changes. It is exacting and time-consuming work. The costs in travel, time, printing, and distribution are not trivial. Inextricably tied to the fact that consensus standards development is expensive is the question of who should pay for the work.

Equally important is the question of responsibility for standards development and maintenance. The U.S. archival community is currently working to determine the group or groups to be responsible. Added to the confusion is the fact that some standards affect both the library and archival communities, thus cutting across professional boundaries. In these cases the question of responsibility becomes more clouded. Numerous standards-setting bodies already exist, but the fact remains that consensus standards need to be developed and maintained by groups with adequate resources.

One final problem associated with standards development is enforcement. Once national description standards are available, how can we ensure that people will use them? In business and industry, the strongest motive for following product standards is economic. Additionally, some standards are mandatory and enforced by laws and regulations. For archival description standards, enforcement, although less obvious, still exists. On a formal level, if an archival repository is part of an automated network or cooperative description

project, the agreement to participate in the endeavor usually entails adherence to specific standards. For example, both the Research Libraries Group (RLG) and OCLC have minimum-level catalog record requirements that commit repositories contributing USMARC AMC records to their databases to use the description standards of *AACR 2*, *APPM*, and LCSH.

Informally, archival description standards are enforced by peer scrutiny. When archivists enter into cooperative projects that put their descriptive work on prominent display, they want to create exemplary records for their colleagues to view. When browsing through a national database, one quickly makes judgments about the quality of work and recognizes which repositories create superior descriptions. As the number of archival repositories involved in cooperative projects increases, peer scrutiny will become more widespread.

Conclusion

There are exciting changes in the archival profession that may provide some answers to the various archival descriptive standards questions. The first is the profound impact of automation as a tool to provide access and as a force moving the profession towards developing description standards.

The second concerns the expanding knowledge of archival theory and practice. One of the most valuable lessons U.S. archivists learned from developing the data element dictionary and the USMARC AMC format was the recognition that archivists collect and distribute different categories of information. These categories include data about the provenance or context, data about the content, data about the physical aspects of the materials, data about access to the materials, and data about the actions archivists perform on the materials. The ability to separate these categories is helping us to articulate what we do and to see new

options and possibilities. The expansion of the conventional library use of authority control is one example of a formerly unrecognized option. The use of authority control to provide better access to archival materials holds much promise.[19]

Even more encouraging are the positive steps being taken to develop and promote archival description standards in Canada, Great Britain, and the United States. Although we are taking different tacks, the fact that we are communicating with each other within and across international boundaries means that our varied experiences and insights will only help us to create the most successful description standards possible.

If we are to succeed with the development of useful archival descriptive standards, we must remember two things: first, the adoption and implementation of archival description standards is not a goal in itself, but a strategy to improve access; and second, because we are building these retrieval systems for users (including ourselves), we must study users in order to implement successful descriptive practice. We may think that we know who our users are but in truth these are only unverified impressions. We need analytical research based on scientific methods and models to find out how people really achieve access to archival materials.

Description and access are the most important aspects of the archival profession. What is the point of collecting and saving materials if we cannot provide access to what we preserve?

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[19]See Lisa B. Weber, "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], Avra Michelson, ed., *Archival Informatics Technical Report* 2:2 (Summer 1988).