Advancing Archival Description: A Model for Rationalising North American Descriptive Standards[1]

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This paper reviews North American and international initiatives to standardise archival descriptive practice. The authors also present ideas about integrating current work in this area in Canada and the US into a 'comprehensive model' for archival description, and suggest that this endeavour might be extended to include developments in the UK and Australia.

This is a refereed article.

> By attempting a theory-neutral standardization, at the level where consensus exists, we avoid the need to reinvent the wheel, without requiring that everyone drive a particular brand of bicycle.[2]

In July 1996, a small group of United States and Canadian archivists met for one week at Ann Arbor, Michigan under the auspices of the Bentley Library Fellowship Program for Study of Modern Archives.[3] The purpose of the meeting was to examine issues arising out of the development of archival description standards in Canada (*Rules for Archival Description*), the United States (*Archives, Personal Papers and Manuscripts*) and internationally (the *General International Standard for Archival Description (ISAD(G))* over the previous ten years. In addition, the participants would take into account initiatives by the Library of Congress to integrate the Archives and Manuscript Control format and other national MARC formats (eg CANMARC, UKMARC, USMARC). They would also consider the future of MARC and its relationship to other data structure standards being designed to define containers for holding archival metadata.[4]

One of the specific objectives of the research prospectus for the Bentley Fellowship Program was to consider the impact of Internet-based digital information systems on the larger world of bibliographic and archival metadata with a view to preparing a collaborative research paper that would consist of a model that would delineate the components of an archival descriptive system capable of accommodating not only existing bibliographic structures, but also new structures under development, most notably Encoded Archival Description (EAD) and the Dublin Core set of data elements.[5] This paper describes the development of descriptive standards in Canada and the United States, leading up to the Bentley meeting, and presents some of the conclusions drawn from it.

National descriptive standards

In 1984 the Canadian Working Group on Archival Descriptive Standards surveyed Canadian archives to obtain a comprehensive overview of the types of finding aids created by these repositories. The survey discovered that archival repositories created nine distinct types of finding aids that used a

total of twenty-one different data elements. The most common data elements used by institutions for a variety of finding aids were the call number, title, and/or name of creator, form of material, quantity or extent, inclusive dates, descriptive note, index terms, and provenance or source. Not all finding aids used the same data elements. For example, only 7% of the finding aids noted the language of material and only 8% recorded the location of the original. In addition, institutions produced a variety of finding aids for different purposes. Some filled an administrative purpose, while others provided researchers with information at the *fonds* and/or collection level of description. The Committee used the results of this survey to make a series of recommendations for the development of descriptive standards in Canada in their report, entitled *Toward Descriptive Standards.*[6] Subsequently, the Planning Committee on Descriptive Standards (PCDS), established by the Bureau of Canadian Archivists, considered those recommendations in *Towards Descriptive Standards* that would provide archivists with a comprehensive set of rules to describe all types of archival material.

The PCDS focused its energies on standardising data content (ie standardising data elements that can be used in a variety of findings aids) rather than on standardising data structures (ie developing separate standards for each type of finding aid).[7] Accordingly, the ensuing *Rules for Archival Description* (*RAD*) emphasised that inputs instead of outputs should be standardised, and these data elements could then be used in a variety of administrative, physical, and intellectual control tools, ranging from location registers and accession records to inventories, guides, and indexes.

RAD therefore provides archivists with a standard set of data elements used in the creation of all types of finding aids. It identifies a minimum set of data elements required for describing archival material at each level of description, eg *fonds*, series, file, but it does not dictate the elements any particular finding aid should have. It sets out punctuation for all outputs and establishes multilevel rules for the creation of multilevel descriptions, but it fails to elaborate on how finding aids using *RAD* should incorporate, for example, the multilevel technique into an output design. Furthermore, it does not identify a preferred data structure standard for

the different inventories and catalogue records that might follow *RAD* for the purposes of communicating information about archival material between repositories.

Archivists in the United States took a very different route in their efforts at standardising archival description.[8] The American archival community, like the Canadians, began their process of descriptive standards development with a survey of existing finding aids. The Society of American Archivists (SAA) assigned to the National Information Systems Task Force (NISTF) the task of examining systems for exchanging information about archival material. The group decided that archivists required a data structure standard to exchange information, and they set about developing this standard. They surveyed archives to discover the data elements used in finding aids systems. This list was then incorporated into the data dictionary that NISTF developed.[9] This list was subsequently used to identify the MARC fields required to carry descriptive information about archives which eventually evolved into the MARC AMC format.[10]

At the same time, archivists at the Library of Congress were concerned that the only data content standard for creating catalogue records of archival material, AACR2, was totally inadequate. To alleviate this inadequacy Library of Congress staff developed three different manuals for describing archival textual records, graphic material and moving images.[11] In turn, the SAA endorsed the NISTF data dictionary, the MARC AMC information exchange format, and *Archives, Personal Papers and Manuscripts* (*APPM*) as professional standards and the American archival community started to create and exchange cataloguing records that described their archival material in standardised formats. The SAA also published a manual on arrangement and description[12] which set out a format for creating finding aids, but no effort was made to develop standards for inventories, accession records or indexes etc. At the same time, the Research Libraries Group (RLG), in a related initiative, was willing to accommodate the requirements of the archival community so that their descriptive, ie catalogue, records could be put into the Research Libraries Information Network (RLIN).[13] During the last three years, Americans have become concerned with developing a standard for encoding finding aids for the Internet, the EAD, and the equivalent of a data content standard for the information that would be

encoded in their new standard is in development.[14]

Although Canadian and American archivists chose different approaches to the development of descriptive standards in their respective countries, they shared a common set of assumptions derived from both archival and bibliographic descriptive traditions that they applied to their standardisation efforts. First among these assumptions is the principle of *respect des fonds*, which governs the arrangement and description of archival materials. A second tenet is that archival description proceeds from a description of collectivities of archival material to successively lower levels of description until the last level of description, the item. Thirdly, description focuses on describing records and/or personal papers, but it must also include a description of the creator of the archival materials, as well as the functions, activities, and transactions from which the records emanated. Finally, archival standards should attempt to incorporate and be compatible with library standards and traditional practice.

Australian archivists have also begun to take an interest in the standardisation of their descriptive systems and have acknowledged the importance of doing so, particularly in conjunction with the management of electronic records. As Chris Hurley recently noted:

> The heart and soul of any organisation (not just an archives, but any organisation) is its data system. Standardisation is not just(!) about improving our data systems ... The current preoccupation of the profession [in Australia] with electronic records needs to be extended to standards for archival data.[15]

Accordingly, Australian archivists have embarked on a descriptive standards project of their own. In March 1993, the Australian Society of Archivists announced their intention to produce an *Australian Common Practice Manual: ACPM.*

International descriptive standards

While descriptive standards projects were advancing in Canada and the

United States, initiatives were also moving forward at the international level. The International Council on Archives (ICA) established an Ad Hoc Commission on Descriptive Standards in 1990 and over the course of the next six years the Commission produced a 'Statement of Principles Regarding Archival Description' (1992), the *ISAD(G): General International Standard Archival Description* (1993), and *ISAAR(CPF): International Standard Archival Authority Record for Corporate Bodies, Persons, and Families* (1995).[16]

The *ISAD(G)* establishes twenty-six data elements within six information areas (Identity Statement, Context, Content and Structure, Conditions of Access and Use, Allied Materials, and Notes), and specifies only five data elements as essential for international exchange of descriptive information: a reference code, title, dates of creation/accumulation, extent, and level of description. As an international standard, *ISAD(G)* provides for a high degree of flexibility and 'widespread applicability' within a general set of rules for archival description. Recognising that the description of the creators of archival material is as important as the description of the archival material itself, the Ad Hoc Commission established a standardised framework for information about creators of records within the structure of an authority control record. Another equally important rationale for the development of an international standard authority record for archival descriptions was a recognition on the part of the commission members of the importance of standardisation of the form and content of access points. The *ISAD(G)* introduced access points, an unfamiliar concept to most archivists outside North America, as an integral component of archival description important for efficient and effective retrieval and exchange of descriptive information. The *ISAAR(CPF)* was designed not only to separate the capture and maintenance of contextual information but also to enable their linking to descriptive records. With the acceptance and approval of both these standards, the international archival community had, for the first time, established a uniform framework for the description of information about archival materials.

Encoded Archival Description (EAD)

In October 1995, the UCLA Berkeley Library began an investigation of

the feasibility of creating a platform-independent encoding standard for archival finding aids in machine readable form that were being used to provide access to archival holdings.[17] This investigation became known as the Berkeley Finding Aid Project. It was born out of the dissatisfaction felt by some archivists with the growing number of HTML-based finding aids appearing on web sites that were a simple, scanned replication of existing finding aid pages. There was a recognition that emerging technologies and standards could offer enhanced access to archival information beyond that which could be obtained from descriptions contained in MARC catalogue records or manual finding aids, and at the same time enable better use of the potential offered by Internet access.

Daniel Pitti, principal investigator for the project, identified the following functional requirements necessary to make archival finding aids available to network users:[18]

- presentation of comprehensive and inter-related descriptive information;
- preservation of hierarchical relationships existing between levels of description;
- representation of descriptive information inherited from one level of description to another;
- navigation within a hierarchical information architecture;
- element-specific indexing and retrieval.

Various encoding techniques were considered (gopher presentation of ASCII data; HTML tagging of data; tagging of text based on SGML, ISO Standard 8879) and, after an analysis of each, SGML was selected as the technique most capable of meeting the functional requirements.[19]

The next step was to establish a Document Type Definition (DTD) which prescribes Standard Generalised Markup Language (SGML) tags in an ordered sequence set which could accommodate and represent archival finding aids. The assumption was made, based on the analysis of numerous examples, that archival finding aids, particularly inventories and [accession]

registers, 'share similar parts and structure'.[20] As a result, it would be possible to develop a DTD based on these structural similarities. Subsequently, when the sample finding aids were encoded and tested (200 finding aids from 15 repositories), preliminary results suggested that:

- catalogue records could be linked to finding aids;
- groups of networked finding aids could be searched;
- folders or items buried in container lists could be retrieved through keyword searching.

Following this testing of the SGML, the Berkeley Finding Aid project focussed on a set of principles that would form the foundation for an alpha version of the EAD-DTD. Referred to as the 'Ann Arbor Accords', the following general principles were articulated:[21]

- finding aids, and the DTD that contains them, are not objects of study but rather tools leading to such objects;
- EAD content designation identifies essential elements for finding aids rather than the intellectual content for them, providing for a minimum of required elements but permitting more detailed levels of description; and
- the EAD is based on a platform-independent standard in order to facilitate interchange and portability and accordingly will endure changing hardware and software platforms.

With these foundations established the developers of the DTD advanced to a Beta Test Version, which they heralded as having:

> the potential to revolutionize the world of finding aids by providing a single standardized encoding through which archival descriptions can be exchanged and used [and by simplifying] the process of creating machine-readable finding aids in the future as the use of SGML tools becomes more widespread and better understood.[22]

The Dublin Core

At the same time that the EAD-DTD initiative was being advanced in the archival community, a segment of the bibliographic community began to examine the possibility of developing a simple resource description record that would support 'resource discovery'.[23] The Internet and the advent of networked resources has caused information professionals to re-examine many of the underlying assumptions about descriptive methodologies, applications and practices. The first metadata workshop sponsored by OCLC and NCSA took place in March 1995 in Dublin, Ohio. From that first meeting a consensus emerged amongst participants representing libraries, the Internet, and digital library projects on a set of 13 core metadata elements that were essential for a simple resource description record.[24] The Dublin Core, as the elements came to be known, was viewed as an intermediary model between unstructured indexes, such as those found on the World Wide Web, and more complex structures like MARC. These core elements were not intended to replace other descriptive records but to provide an interchange format for descriptive metadata and identify the content for self-described networked objects.[25] As such, authors or creators of documents could supply metadata for their own data or documents, which in turn could be converted to a full MARC record if desirable. There was a recognition that Dublin Core records would need to be linked to richer description schemes (like MARC, for example) and that they would need to develop an architecture that could accommodate a diversity of models and levels of description. The object of the Dublin Core was thus viewed as providing a common set of tags with recognisable meaning across description models.

Following upon this first meeting, a second metadata workshop was held in April 1996 at Warwick University in England where a framework was proposed that could support overlapping and complementary but separately maintained metadata models. The architecture envisions the development of packages of metadata that could serve different material, different users and different constituents.[26]

The Bentley Research Project

At the beginning of the deliberations, the Bentley research group decided

to identify the goals and objectives for the development of archival description standards. The group emphasised that the primary objective should focus on the users of archival material. They then considered the purposes behind standardisation of archival description. This was an essential first step for the group's subsequent analysis of archival description in order to ensure that the team shared the same vision before discussing any specific topics. This analysis helped to frame subsequent deliberations, and it also provided a mechanism for evaluating the implementation of any proposed standards.

At the same time, the group agreed that the purpose should stress the integration of descriptive information from different sources. In the future, descriptive information will be drawn from a variety of sources including information supplied by the creators of the records, and repositories holding the records. Archivists must pay careful attention to potential applications offered in this new and rapidly evolving technological environment for the management of their finding aid systems. Steven J. DeRose has noted that:

> as we move from catalogs and abstracts on toward finding aids and eventually full content, correlating the levels of information and using it to increase ease of use will continue to grow in importance.[27]

The Bentley group emphasised that any model would have to highlight enhanced interconnectivity among information systems. Such new initiatives require a fresh approach to archival description, one that takes advantage of recent developments in information technology and telecommunications, and integrates them with archival theory and practice.

Purpose and methods of archival description

The following purpose and methods *(overleaf)* were articulated by the research group.

Once this statement of purposes was articulated, the principles on which archival description is based were examined, the most important being the principle of provenance and its representation in archival description.

PURPOSE AND METHODS OF ARCHIVAL DESCRIPTION

We describe archival material in order to:

Provide access to archival materials by:

Communicating information about the content and context of archival material through a description which is retrievable. At a minimum, access by provenance (ie the person(s) or office(s) of origin responsible for the creation and/or accumulation and use of records in the conduct of personal or business life) must be provided if known. Additional methods of access shall be provided; these are dependent on the needs of users, the nature of documentation, and the function of the archival descriptive system.

Integrating access to description of archival material with access to descriptions of other cultural resources (eg books, museum materials, art objects).

Enable users to understand archival materials by:

Documenting and communicating the creation and/or accumulation and use of records in the conduct of business or personal activity.

Documenting and communicating the relationship between records.

Documenting and communicating the scope and content.

Documenting and communicating information about the documentary structure(s) of the record (eg diary, minutes).

Describing from the general to the specific.

Preserve the authenticity of archival materials by:

Documenting and communicating information related to the chain of custody.

Providing descriptions that reflect arrangement.

Documenting and communicating the creation and/or accumulation and use of records in the conduct of personal or business activity.

Structures for access to archival material

The group then undertook an examination of potential models in which to build an information system for archival description in the context of emerging electronic information environments. The challenge for the group was to identify a model that would support the statement of purposes it had just articulated. The group acknowledged that the statement it had drafted was not dissimilar from the purposes articulated for the Warwick Workshop, and from which a systems architecture referred to as the Warwick Framework was designed, that is: '... to promote greater operability among content providers, content cataloguers, and indexers, and automated resource discovery and description systems'.[28]

The group wanted to design a model that was formulated from archival principles and based on the above-quoted purposes of description, and that would accommodate a variety of standardised metadata models, including the Dublin Core, MARC, *APPM*, *RAD* and *ISAD(G)*. The group also believed that this model would have to function in various electronic information systems environments and be compatible with other existing standards. In short, the system would have to be, as much as possible, standards compliant and software independent. This approach was consistent with the approach taken by the framers of the Dublin Core, who saw the advantages of using:

> existing standards or practices [serving] as templates for the development of guidelines, thereby jump-starting interoperability and reducing the effort necessary to develop description standards.[29]

The research group envisaged not just one comprehensive standard that addressed all descriptive needs, but rather a suite of standards that would be able to incorporate the various components of a descriptive system and that could accommodate and exchange descriptive information in a variety of electronic formats. The various standards would have to be complementary and enable the creation of various products for communicating information about archival material that could be delivered to users in a variety of ways. Archival descriptions consist of data elements

that are structured to create descriptive products such as accession records, inventories, finding aids (registers or lists), authority records or catalogue records. As a survey of finding aids had revealed, different types of products often share the same data elements but these elements are presented to meet the purpose of a particular product.[30] The products are communicated to users in a particular delivery system which dictates the structure and coding of the product. For example, an inventory may be printed on paper, or it may be encoded in an EAD and delivered over the web. A catalogue record may exist on a paper catalogue card, or reside in a local computerised information system, or be maintained in a bibliographic utility such as RLIN. For a record to be input into RLIN, it must be coded in the MARC format, but it may have the same data elements as the catalogue record that resides in a card catalogue and have many of the same elements as the inventory.

The research group agreed that any finding aid standard that would have international acceptance should concentrate on normalising the data elements, not the structure for output products. Decisions about the levels a particular product includes, its punctuation, format, etc., are systems dependent and international standardisation efforts should be systems independent. Guidelines for the creation of particular products can be standardised at the national or local level where national conventions are more likely to be accepted. Therefore, the group did not want to create a separate standard for each type of descriptive record (eg *APPM* for catalogue records, and EAD for finding aids). Instead, a model was envisaged that provided rules for the creation of any data element that might be used in any type of description (eg accession records, catalogue records, finding aids), and guidelines for using these data elements to create particular output products.

The Bentley model

The group drafted an overarching model of an archival descriptive system that incorporated these principles, purposes and guidelines into its design (Figure 1).

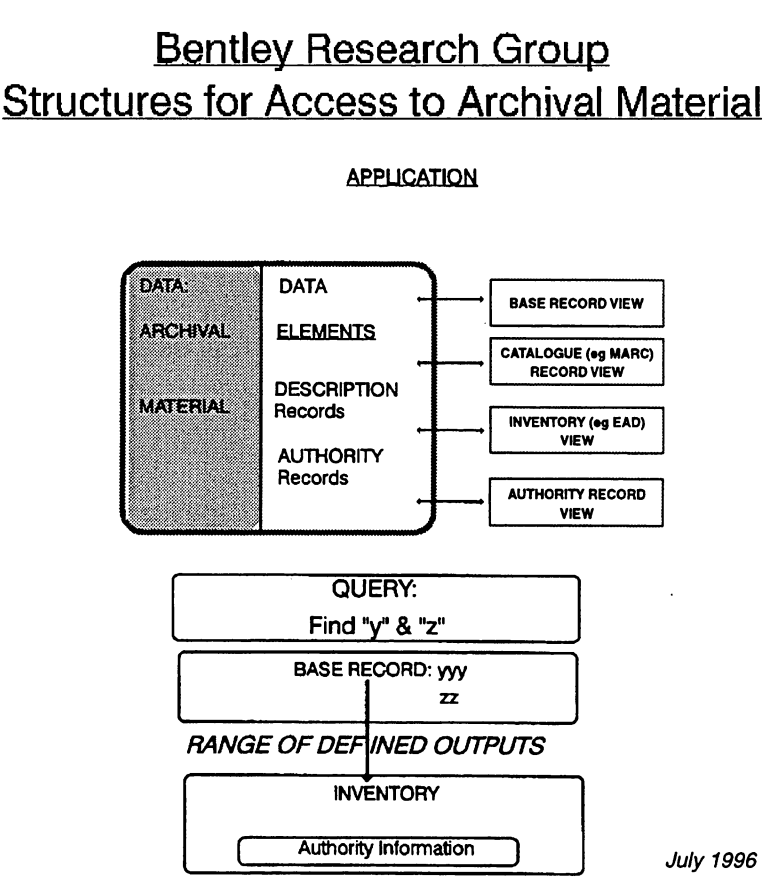

FIGURE 1

This model presents a new way of looking at archival descriptive standards. It segregates the components of an archival descriptive system into categories and thus enables, for example, the standardisation of particular elements as a task distinct from choosing elements for a particular finding aid. The model is consistent with the *Australian Common Practice Manual* which seeks 'to describe what elements of information will be used as part of archival description in all types (rather than a given type) of archival description'.[31] Standardisation efforts involve collaboration at the international, national

and local level. By identifying the components of an archival descriptive system, responsibility can then be delegated to the appropriate level. For example, rules for data elements should be accepted at the international level; data elements for a finding aid should be agreed upon at the national or local level. The model was divided into four parts:

1. Data which resides in the archival material;
2. Rules for capturing and presenting data elements, which include data content standards, and guidelines for creating output products;
3. Guidelines for output; and
4. Delivery environments for the presentation of output products.

The data

The first component of an archival information system is the archival material that has content, context and structure. Information, or metadata, about all three characteristics must be communicated to users to facilitate access to the records. For electronic records, the metadata may be embedded in the record itself and retrieved as a self-describing object.

Rules for capturing and presenting data elements

The group envisioned that the rules for capturing and creating data elements would include data content standards or specifications for creating data elements for all types of material and at all levels of description. For example, the rules would provide instructions on how to transcribe a title, or how to record dates of creation of the material. If different types of material required special instruction, separate rules for creating the data element would be given for each type of material. For example, specific rules might be required for recording extent statements for sound recordings, or graphic materials. If different levels of description, eg series or files, required separate rules, specific rules would be given for creating the data element at every relevant level of description. For example at the service level *RAD* instructs archivists:

> for the content of a series give information about the internal structure of the series, including the arrangement, classification scheme documentary form of the records.

At the file item level archivists are instructed to:

> give information about the processes and procedures generating the file and/or the transactions to which the file pertains. For the internal structure of the file, give information about the arrangement of the file and its documentary forms and their relationships.[32]

These rules reflect the reality that series are organised to reflect an organisation's functions and activities while files are put together to document transactions. The different context of the records' creation should be communicated to the users of the material. The rules would not require that an archivist describe at any particular level, but if a level was chosen, the rules would provide guidance on how to construct the content of that element. Separate rules for describing at different levels of description or different types of material would only be given when the description of the material or the level required special instructions. To create this pool, the group recommended that future work use the rules for creating data elements in existing standards, eg *RAD, APPM, ISAD(G), ISAAR (CPF).*[33]

Data value standards or lists that contain standardising terminology and access points, eg subject headings and name authority files, supply content for data elements. *RAD* and *APPM* contain rules for creating standard entries for personal names and corporate bodies, while many archivists use Library of Congress Subject Headings (LCSH) and the Art and Architecture Thesaurus (ATT) to standardise their subject access. Existing data value standards and controlled vocabularies will have to be evaluated to discover how well they meet archival requirements. Further work will also be need to enhance the lists with terminology needed to describe archival material, such as more form and function terms.

Guidelines for output

The guidelines for output would provide guidance for the levels of description used in a particular product and how the separate data elements would fit together. For example, the guidelines would delineate whether an archivist should provide a supplied title if a formal title already existed. The guidelines would also need to include multi-level rules for finding aids

that included descriptions at more than one level. They would also have to differentiate between descriptions that depict whole/part relationships from those that stand alone. For example, instructions for describing a series that was part of a *fonds* might be different from instructions for describing an item that is independent of any hierarchical relationship.

Different outputs include varying degrees of detail or depth of description and the guidelines would have to provide instructions on the level of analysis suitable for a particular product. They would provide guidance on the amount of information (or the number of data elements) conveyed, the amount of detail in each data element, and structure or syntax of the data elements, including the structure within each level.

Delivery environments

The group identified a number of output products for which guidelines would have to be developed. The list is not comprehensive but it includes inventories, catalogue records, accession records, indexes, schedules, appraisal reports, guides (thematic), and Dublin Core record.

Each of the different products can be delivered through a number of different mechanisms or delivery systems. For example, information about archival material can be presented with the aid of SGML browsers, OPACS, bibliographic utilities, through the World Wide Web or the more traditional paper/printed products. Often the archivist is part of the delivery system but in other cases users access the material without mediation or assistance. Special rules for formatting the products for a particular delivery system are sometimes needed. For example, EAD contains coding rules for the presentation of inventories presented on the web.

Future directions

Given the necessity of revising *APPM*, the research group agreed that the Canadian *Rules for Archival Description* should be taken as a base document for an American revision of *APPM* and that a 'North American Rules for Archival Description' or NARAD be developed by a North American Committee on Archival Description (NACAD) comprising Canadian and

American archivists.[34] Initially, the NACAD will concentrate on harmonising the rules of *RAD, APPM* and *ISAD(G).* Over time, this initiative may broaden its scope to incorporate rules from the *Australian Common Practice Manual,* from the British *Manual of Archival Description* (*MAD*)[35], and from other guidelines, conventions and rules developed by archivists in various countries to standardise data content and data structures for archival description. The Bentley research group's call for greater collaboration between national archival communities was echoed at a recent international seminar on the description of audio-visual materials held in Budapest, Hungary in August 1996 and sponsored by the Soros Foundation. Acknowledging that there are common elements of description applied by archivists to the description of the materials in their care, they recommended that

> there should be common recognition of standards work already achieved and in progress by the different Non-Government Organizations [and] that building on the common elements of description, a convergence of standards may be achieved in future, which would be of considerable mutual benefit.[36]

As greater collaboration takes place locally, nationally, and internationally amongst archivists, information systems analysts, records managers and documentalists, all of whom are engaged in metadata projects, it will be necessary to conduct a variety of studies associated with such projects. Furthermore, archivists presently lack in-depth knowledge about the needs of their users and they have failed to test the effectiveness of their present descriptive tools. The development of descriptive standards requires a firm foundation of knowledge derived from numerous research studies. As the Report of the Canadian Subject Indexing Working Group pointed out:

> before a retrieval system for archives can be developed, it is imperative that archivists know who is going to use the system and what their expectations will be. A number of critical questions need to be answered: Who uses archives? What do users want? Why do users want it? How do users go about getting what they want?[37]

The Bentley research group emphasised that a research agenda, identified below, needs to be articulated to test our present assumptions about user

needs, systems requirements and the effectiveness of current descriptive practices. The following topics are by no means exhaustive but they do identify important areas for investigation, in order to test assumptions about user needs, systems requirements, the objectives of archival description, and the effectiveness of archival information systems.

Research Agenda

User studies:

Do users care about structures of description?

How do we measure improvements in access to, and navigation through, descriptive records?

How important is the integration of archival descriptions with those of other cultural resources, particularly library and museum resources?

Comparison studies of the effectiveness of different systems.

What do users understand about what is conveyed about form?

What models/maps can best track archival research strategies?

Description of electronic records:

How different are the descriptive needs of electronic records?

How are the principles of arrangement and description affected by the description of electronic records?

Does systems-generated metadata replace formal descriptions produced by archivists? Who are its users?

Life-cycle of recorded information and description:

Does description change over the life cycle?

Do the descriptive needs of creating agencies change over the life cycle?

How are the descriptive requirements for private records different from public records?

Authenticity:

How can requirements for the documentation of authenticity be met?

How can authenticity requirements be met on the World Wide Web?

Context:

How can the various facets of context be best delineated? What is the value of providing contextual information for users, description and access?

Management of description:

How are archivists describing now?

What are the prevalent attitudes about the role of description as an archival function?

What are the management implications of archival descriptions: costs and benefits?

By collaborating with others who share our interest in improving upon the techniques and methodologies of archival description (such as creating an acceptable pool of standardised data elements, using *RAD, APPM, ACPM,* and *ISAD(G)),* the re-invention of existing wheels will be avoided, duplication of effort reduced, and most important, by not dictating structures, archivists will be able to choose their own brand of bicycle based on their specific cycling requirements.

Endnotes

[1] We are indebted to the Bentley Fellowship Program for Study of Modern Archives for the opportunity to participate with our American colleagues in a research fellowship in July 1996, some of the results of which are reflected in this essay. Steve Hensen recognised the need for such a meeting and Francis X. Blouin, William K. Wallach and the staff of the Bentley Historical Library provided a very hospitable research environment in which to imagine the future and plan for it. This paper has benefited from useful comments by Lisa Weber and Hugo Stibbe and members of the Bentley team. The views expressed and conclusions drawn are those of the authors.

[2] Lou Burnard, 'Standardization and the TEI', *D-Lib Magazine*, November 1995, <http://www-tei.uic.edu/orgs/tei/info/teij31.html>.

[3] The research group comprised Wendy Duff, Michael Fox, Kent Haworth, Steven Hensen, Kris Kiesling, and Kathleen Roe, with Steve Toub providing timely administrative and resource support.

[4] The Library of Congress, in presenting the background for its *Discussion Paper No. 99*, January 1997, notes that the term is 'increasingly used in various communities interested in information on the Internet to mean data about information resources being made available'.

[5] See <http://sunsite. berkeley.edu/FindingAids/EAD/history.html#1995>.

[6] *Toward Descriptive Standards, Report and Recommendations of the Canadian Working Group on Archival Descriptive Standards,* Bureau of Canadian Archivists, Ottawa, December 1985, p. 42.

[7] See Kent M. Haworth, 'The Development of Descriptive Standards in Canada: A Progress Report', *Archivaria* 34, Summer 1992, p. 77. For an explanation of the concepts of data content and data structure standards, see Lisa B. Weber, 'Archival Description Standards: Concepts, Principles and Methodologies', *American Archivist*, Vol. 52, No. 4, Fall 1989, pp. 508-510.

[8] For an elaboration of the different approaches taken by Canada and the United States to develop descriptive standards, see Wendy M. Duff and Kent M. Haworth, 'The Reclamation of Archival Description: The Canadian Perspective', *Archivaria* 31, Winter 1990-91, pp. 26-35.

[9] See Richard Lytle, 'A National Information System for Archives and Manuscript Collections', *American Archivist*, Vol. 43, No.3, Summer 1980, pp. 423-426, and Richard H. Lytle, 'An Analysis of the Work of the National Information Systems Task Force', *American Archivist*, Vol. 47, No. 4, Fall 1984, pp. 357-365.

[10] Steven L. Hensen, 'Squaring the Circle: the Reformation of Archival Description in AACR2', *Library Trends*, Vol. 36, No. 3, Winter 1988, pp. 539-551; Sharon Gibbs Thibodeau, 'Archival Descriptive Standards in the United States', *Toward International Descriptive Standards for Archives,* K.G. Sauer, Paris, 1993, pp. 91-94.

[11] Steven L. Hensen, *Archives, Personal Papers and Manuscripts, A Cataloging Manual for Archival Repositories, Historical Societies and Manuscript Libraries,* 2nd ed., Chicago, 1989; Elizabeth Betz, *Graphic Materials: Rules for Describing Original Items and Historical Collections,* Washington, D.C., 1982; and Wendy White-Hensen, *Archival Moving Image Materials: a Cataloging Manual,* Washington, D.C., [1984].

[12] Frederic M. Miller, *Arranging and Describing Archives and Manuscripts,* Society of American Archivists, Chicago, 1990.

[13] Lisa Weber, 'Putting Archival Cooperation Into Focus', paper delivered to the joint session of the Society of American Archivists/Association of Canadian Archivists/Association des Archivistes du Quebec, Society of American Archivists Annual Meeting, Montreal, September 1992.

[14] Anne J. Gilliland-Swetland (author), Thomas A. LaPorte (editor), 'Encoded Archival Description, Document Type Definition (DTD), BETA EAD Application Guidelines, Technical Document No. 1', Final Draft, 20 December 1996, published by the Library of Congress and the Society of American Archivists.

[15] Chris Hurley, 'Data, Systems, Management and Standardisation', *Archives and Manuscripts,* Vol. 22, No. 2, p. 339. Australian archivists have taken a different approach to the development of descriptive standards. For example, Hurley proposes a model that includes separate descriptive entities linked in a myriad of ways to reflect their various relationships. The descriptive entities represent organisations, families, record-makers, persons, recordkeeping systems and series, etc., and the relationships include subordinate and superior bodies, owning or belonging associations, previous and subsequent entities. See also C. Hurley, 'The Australian (series) System: An Exposition' in *The Records Continuum: Ian Maclean and Australian Archives first fifty years,* Ancora Press, Clayton Victoria, 1994, pp. 150-172.

[16] *ISAD(G): General International Standard Archival Description,* The Secretariat of the ICA Ad Hoc Commission on Descriptive Standards, Ottawa, 1994; and *ISAAR(CPF): International Standard Archival Authority Record for Corporate Bodies, Persons and Families,* The Secretariat of the ICA Ad Hoc Commission on Descriptive Standards, Ottawa, 1996. Hugo L.P. Stibbe, 'Archival Descriptive Standards and the Archival Community: A Retrospective, 1996', *Archivaria* 41, Spring 1996, pp. 268-272 provides a detailed account of the genesis of these international standards.

[17] The Berkeley initiative followed on the heels of a planning conference sponsored by the University of California EAD implementation team. The goal of the conference was: 'To explore the possibilities of cooperative implementation of Encoded Archival Description (EAD) by the University of California Archives and special collections units and other interested California research libraries'.

[18] <http://sunsite.berkeley.edu /FindingAids/EAD/history.html#1995>.

[19] The *EAD Guidelines* define SGML as 'an object-oriented meta-language or grammar that allows for the definition, specification, and creation of digital documents that can be delivered, displayed, linked, and manipulated in a platform-independent manner'. (*Beta EAD Applications Guidelines*, final draft, 20 December 1996, p. 64.)

[20] *Ibid*

[21] A detailed account of the development of the EAD can be found at <http://sunsite.berkeley.edu/FindingAids/ EAD/history.html#1995>. A more detailed account of the Principles and Criteria can be found at <http://sunsite.berkeley.edu /FindingAids/ EAD/accords.html>.

[22] 'Beta Test Version of EAD Available', < http://lcweb.loc.gov/loc/standards/ead/eadcopy.html>.

[23] Lorcan Dempsey, 'The Warwick Metadata Workshop: A Framework for the Deployment of Resource Description', *D-Lib Magazine*, July/August 1996 (ISSN 1082-9873), http://www.dlib.org/dlib/july96/07weibel.html, p. 2 of 14.

[24] The original 13 (*title, author or creator, subject and keywords, publisher, other contributors, date, resource type, format, resource identifier, relation, source-object, language and coverage*) were subsequently expanded by two additional elements: *description (content)* and *rights management*. See 'Dublin Core Metadata Element Set: Reference Description', 15 January 1997, at <http://purl.oclc/metadata/ dublin_core_ elements>.

[25] A self-described network object is a document that contains data elements that help identify and retrieve it.

[26] Carl Lagoze, 'The Warwick Framework, A Container Architecture for Diverse Sets of Metadata', *D-Lib Magazine*, July/August 1996, <http://www.dlib.org/dlib/july96/lagoze/07lagoze.html>.

[27] Steven J. DeRose, 'Structured Information: Navigation, Access, and Control', paper presented at Berkeley Finding Aid Conference, 4-6 April 1995, <http://sunsite.berkeley.edu/FindingAids/EAD/ derose.html>, p.5.

[28] Carl Lagoze, *op.cit.*

[29] Stuart Weibel and Eric Miller, 'Image Description on the Internet: A Summary of the CNI/OCLC Image Metadata Workshop , September 24-25, 1996, Dublin, Ohio', *D-Lib Magazine*, January 1997, p. 5, <http://www.dlib.org/dlib/january97/oclc/01weibel.html>.

[30] *Toward Descriptive Standards, op.cit.*, p. 42.

[31] Chris Hurley, 'Data, Systems, Management and Standardisation', *op. cit.*, p. 356. Hurley notes that in developing rules for data elements it is not possible to be neutral and notes that *ACPM* 'is firmly based on the series system technique'. The model advanced by the Bentley research group endeavours to separate, as much as possible, rules for creating data elements from rules for structuring and communicating them.

[32] *RAD*, rule 1.7D.

[33] Not all rules for capturing and presenting data elements, or standards in general, operate at the international or national level. To implement new standards, individual repositories will need to document internal policies and procedures for standardising an organization's descriptive practices. These policies and procedures will need to be monitored and updated as the organisation's environment and the technology it uses changes. Institutional procedure manuals and rule interpretations help ensure consistent application of the rules. Institutions can work together and share their manuals but each archives will have to adapt the procedures to meet the needs of their users and ensure they suit their organisational culture.

[34] One of the more pressing, practical reasons for the Bentley meeting stemmed from a recognition that *APPM* was nearing the end of a five-year cycle for revision and that its next revision should take into account the work of Canadian archivists in developing *RAD* (which was just completed) and the *ISAD(G).*

[35] Michael Cook and Margaret Procter, *A Manual of Archival Description,* 2nd ed., Gower, Brookfield Vermont, 1989.

[36] Resolution passed at the Budapest Joint Seminar on Descriptive Standards for Sound Archives, 23-24 August 1996. Representatives from ICA, IFLA, IASA, UNESCO and the Open Society Archives, Budapest, Hungary attended this meeting.

[37] Planning Committee on Descriptive Standards, Subject Indexing Working Group, *Subject Indexing for Archives: Report of the Subject Indexing Working Group,* Bureau of Canadian Archivists, Ottawa, 1992, p. 5.