



Archiving Metadata Forum: Report from the Recordkeeping Metadata Working Meeting, June 2000*

DAVID A. WALLACE

*School of Information, University of Michigan, 304 West Hall 1092, Ann Arbor, MI, USA.
E-mail: davwal@umich.edu*

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Introduction

Between June 5–8, 2000, the Netherlands Institute for Archival Education and Research hosted and “Archiving Metadata Forum” Working Meeting. Nineteen information professionals from seven countries were invited by the Institute to discuss and analyze the concept on “recordkeeping metadata.” These professionals were drawn from the fields of archives and records management, including eight graduate archival educators, computer science, and librarianship (see Appendix). Over the days of the Working Meeting the participants conducted seven working sessions examining: the meaning and value of recordkeeping metadata; how to export these messages in a manner that resonates with other metadata communities; and, how to enter existing funding streams that do not normally support recordkeeping research efforts.

Monday, June 5, 2000

First working session

- Introduction to the Working Meeting
- Discussion on objectives, perspectives and expectations
- Resource Persons: Hans Hofman, Peter Horsman

* The following narrative has been written to capture the flavor and nature of the Working Meeting’s discussions. Attributions are generally not made to individual participants, except for individual session “resource persons” responsible for initiating and framing particular discussions, or when a graphic/illustration was offered for consideration. The author takes sole responsibility for any mis-renderings of the Working Meeting discussions. A more detailed account of this Working Meeting’s proceedings is available at: www.archiefschool.nl/amf/.

Peter Horsman opened the proceedings. He acknowledged the support of the Netherlands Institute for Archival Education and Research in hosting this international meeting on recordkeeping metadata. This was followed by general introductions from each participant. Hans Hofman then introduced the expectations and objectives for the Working Meeting. These were developed initially by Hofman and then added to by participants in advance of the Working Meeting.

The **expectations** included examinations of:

- Metadata versus archival description. Or, what are we describing with metadata?
- The interrelationship between different disciplines dealing with metadata.
- The scope of recordkeeping metadata.
- How to assess the existing metadata standards or initiatives.
- Interoperability of metadata schema.
- Implementation of metadata standards or schema.

The **objectives** for the conference included determining how to:

- Position recordkeeping metadata initiatives with other disciplines and communities.
- Identify metadata issues and concepts that the recordkeeping community shares with other communities.
- Articulate common research questions to come up with a research agenda to investigate the applicability specific recordkeeping standards, such as the Australian Recordkeeping Metadata Schema.
- Identify metadata requirements in context of business processes, recordkeeping, and culture.
- Explore possibility of developing a common infrastructure of research.

Participants shared their perspectives as to what encompasses “recordkeeping metadata,” how it relates to and is distinct from understandings of “metadata” in general and understandings of “metadata” in other communities. Does metadata represent a new term or a new concept to the recordkeeping community? Is it something beyond traditional archival description? It was recognized that the metadata concept extends well beyond recordkeeping needs and that other communities employ the term for their own purposes. It was suggested that there was a need to more clearly and systematically examine how other communities use the term and how the concept of recordkeeping metadata could be made meaningful to them. How do archivists and records managers translate their meaning(s) of metadata for other communities and also operate within their evolving referential frameworks?

As the session developed, it became clear that there was confusion between the participants as to the relationship between “recordkeeping

metadata” and “archival description,” and even regarding how archivists applied the term “metadata” There were differences between the participants over what they included within “recordkeeping metadata” and “archival description.” Despite these differences, there remained a strong sense that there was no immediate need to arrive at a consensus position on these terms. What was more important during this opening working session was to use the concepts of metadata and recordkeeping metadata as a platform for communication. What was agreed upon was that there was a difference in metadata’s meaning both between professional communities and within the recordkeeping community.

It was recognized that the concept of recordkeeping metadata could be fruitfully examined on many levels. Metadata will be required for records creation and use, for archival control, and for preservation. It will be important to parse the metadata accruing to records across their existence – e.g., to be able to distinguish metadata associated with the original transaction that created the record from metadata associated with long-term archival control. Not doing so opens up the risk of diluting or losing attributes of authenticity, such as when the record becomes fixed as evidence of a particular transaction.

Under current practices, much of the metadata that was implicit in the active environment is made explicit via post accessioning archival description – such as provenance and scope and content. It was suggested that some of this formerly implicit data needed to be made more explicit during the active stage in a world of distributed networks. It was the sense of the participants that properly managed metadata can help solve some of the challenges presented by electronic recordkeeping.

Second working session

- Recordkeeping metadata within a broader metadata framework
- What makes recordkeeping metadata different
- Objectives of recordkeeping metadata
- Resource person: Barbara Reed

During this session, participants developed a mutually-agreed upon *definition for “recordkeeping metadata”*:

Structured or semi-structured* information which enables the creation, management, and use of records through time and within and across domains in which they are created. Recordkeeping metadata can be used to identify, authenticate, and contextualize records; and the people, processes and systems that create, manage, and maintain and use them.

[*Structured information, such as the Dublin Core, provides a fixed scheme for organization. Semi-structured information, on the other hand, does not require a specific fixed structure.]

This definition was derived from a reworking of the definition for recordkeeping metadata created by State Records, New South Wales, Australia.¹ While developing and dissecting the definition, participants generally agreed that it needed to be robust enough to encompass the active recordkeeping and archival environments, as well as both organizational and personal records. It also needed to recognize particular types of value-added containers such as records classification schemes and archival finding aids as forms of recordkeeping metadata. A question remained though. Could this definition be used to define, relate, and distinguish the recordkeeping domain from other disciplinary views on metadata? How do emphases on context, time, process, and inheritance distinguish recordkeeping metadata from other forms of metadata? One non-archivist participant noted that by considering attributes of context and change across time and domains, archivists were “light years” ahead of other communities’ metadata orientations, which tend to be deficient in this regard. There was concern, though, over how this definition did/did not fit into non-recordkeeping perspectives on metadata and how it might be translated to other information management professions. One computer scientist participant suggested that other communities are likely to be unclear over what exactly is meant by “records” and recordkeeping “processes.” The issue of cross-disciplinary communication was identified as an area in need of additional effort.

As a means of sharpening discussion, the participants examined one current recordkeeping metadata standard – the draft international standard standard for records management² – to obtain a sense of how well it accommodated the definition for recordkeeping metadata developed during this session. Participants, in general, found the draft lacking in two respects. First, it focused exclusively on organizational records to the detriment of personal records. Second, the draft was seen as providing limited value for establishing requirements to manage records across time and across domains when records are used beyond their creating context and for purposes other than which they were created. The purpose of this exercise was not to deny the value of the draft standard. Rather, it was to highlight that it provided one piece of the

¹ “Information which facilitates the management, accessibility and meaning of records through time by identifying, authenticating and contextualising records and the people, processes and systems that create and keep them.” See: <http://www.records.nsw.gov.au/publicsector/erk/metadata/metadata-std/Body1.htm>. Accessed March 15, 2001.

² International Organization for Standardization, *Records Management (ISO/TC 46/SC 11)*. Draft dated November 10, 1999.

requirements defined by the participants for recordkeeping metadata. Understanding extant recordkeeping metadata schemes in this manner provides a means for locating and understanding them within the total scope of recordkeeping metadata defined above.

The participants also realized that many current systems are generally deficient in capturing and managing necessary recordkeeping metadata. In this absence, might these systems create or hold “forensic” metadata which could be exploited by the recordkeeping community to contextualize or lend attributes of “recordness” to information that was not originally viewed or managed that way? Participants recognized that over time, the recordkeeping profession would likely need to develop methods and strategies for mining and exploiting forensic metadata.

Third working session

- Recordkeeping metadata, a functional perspective
- Recordkeeping metadata and recordkeeping functions
- Resource person: Anne Gilliland-Swetland

During this session, participants broke up into two groups. One examined metadata issues in the “continuum” model of recordkeeping. The other looked at metadata through the lens of the “lifecycle” model.

The continuum model recently emerged from Australia as an “integrated regime of management processes for the whole of the records existence.”³ Here records are not appraised and described retrospectively by archivists. Rather, both appraisal and description begins at or even before records are created and descriptive data is continually generated throughout the record’s existence. The lifecycle model concept emerged in the United States in the 1940s. In contrast to the continuum model, it prescribes a stricter delineation of roles for records managers and archivists. Within it, appraisal and description are viewed solely as the realms of the archivist. Here, records are described only after the archives have accessioned them. The main distinction between the continuum and the lifecycle lies in the area of roles and responsibilities – for the creator, records manager, and archivist. The continuum sees involvement by all three entities during a record’s primary existence within its creating organization. The lifecycle, on the other hand, holds the creator and records manager responsible for the record up to the point when it crosses the archival “threshold.” At that point, responsibility for preserving and documenting records shifts to the archivist.

³ Sue McKemmish, Glenda Acland, Nigel Ward and Barbara Reed, “Describing Records in Context in the Continuum: the Australian Recordkeeping Metadata Schema,” *Archivaria* 48 (Fall 1999): 3–43. See: <http://www.sims.monash.edu.au/rcrg/publications/archiv01.htm>. Accessed March 15, 2001.

The continuum group based its examinations of recordkeeping metadata within Monash University's SPIRT (Strategic Partnership with Industry – Research and Training) project. SPIRT used the continuum as a frame of reference for its research efforts in developing an Australian Recordkeeping Metadata Schema (RKMS).⁴ SPIRT's conceptual framework concerns itself with four main classes of entities: business, agents (people), records, and business recordkeeping. At a broader societal level, the RKMS seeks to identify the socio-legal requirements, expectations, and opportunities for recordkeeping.

Based on an examination of the SPIRT work, the continuum group identified criteria for framing a discussion on recordkeeping metadata:

- **Appraisal**
 - identifying recordkeeping requirements
 - determining what should be created
 - providing for disposal and retention
- **Control**
 - creation and registration
 - classification
 - arrangement
 - description
 - authentication
 - metadata management
- **Preservation**
 - migration
 - refreshing
 - storage
- **Retrieval**
 - rendering
 - presentation
 - representation
- **Access**
 - terms
 - conditions for use
 - permissions
- **Use**
 - users
 - use history
- **Export/Transfer/Disposal**

⁴ Ibid.

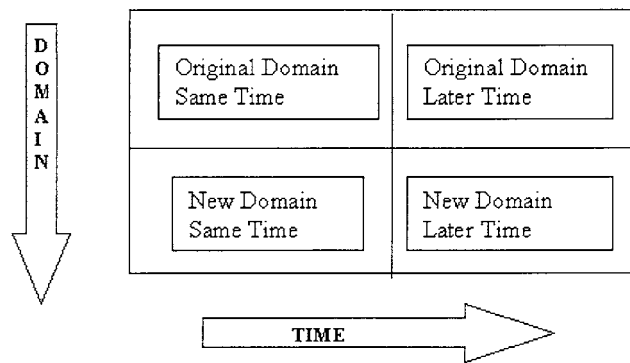


Figure 1. Domain and time matrix.

Recordkeeping metadata would be created by and about each of these functions and activities as they occurred. Some of this metadata would be generated automatically by the host system, some created by the records creator(s) and user(s), and some by recordkeeping professionals. However, in regards to creator- and user-created metadata, it was recognized that what was not automatically generated by the system would need to be “thin” enough from a user input perspective so as to become a barrier to capture. The continuum group proposed that follow-up activity on the above-identified criteria should seek to determine how and by whom this recordkeeping metadata would be captured.

The lifecycle group focused on the components of an “archival framework” and how records move across time and domains. Within the “archival framework,” records are created, maintained, and preserved within the active environment by their creating bodies. Archival control during the active phase would include: creating a classification scheme; developing retention schedules; and, defining access principles. At some point the records would become inactive and cross the “archival threshold” where they are then arranged, described, and made accessible to different populations of users.

As a means of articulating and graphically representing this process, the lifecycle group developed the following illustration.

The general impression of the lifecycle group was that the recordkeeping profession has spent considerable thought and effort on the Original Domain/Same Time quadrant (vis-à-vis records management) and the New Domain/Later Time quadrant (vis-à-vis archives). The other two quadrants remain less well understood by the recordkeeping profession and that effort could be well-spent understanding processes, relationships, and recordkeeping metadata across all of these quadrants.

Interestingly, the lifecycle group came to the conclusion that, contrary to much of the debate in the professions between the lifecycle and the continuum, there was no significant incompatibilities between these two approaches. This represented an erosion of the view that sees strict distinctions between the lifecycle and continuum. Instead of focusing on how to draw distinctions between these two outlooks, participants thought that the recordkeeping profession should instead concentrate on understanding the four quadrants and how responsibility for recordkeeping shifts across them between time and domains.

Tuesday, June 6, 2000

Fourth working session

- Emerging standards
- Need of standards
- Resource person: Wendy Duff

Resource person Wendy Duff opened the Working Meeting's second morning by re-visiting points that arose several times over the preceding day: How can recordkeeping professionals exploit existing metadata standards outside of the profession and how can we represent our metadata approaches to other domains? How and when can metadata crosswalks – the mapping of data elements across different metadata standards – be exploited? Since there is not always a one-to-one relationship between standards, what levels of integration and granularity can be accommodated/tolerated in these crosswalks? Are there alternatives to mapping and crosswalks that can provide assistance? How can the profession take advantage of the classification schemes used in specific domain when they ingest records? How can the profession “inherit” the classification schemes already in place and used within organizations instead of trying to redevelop aspects of them later for archival descriptive purposes?

Linking to other disciplines own metadata standards was seen as essential. It was recognized that there was a pressing need to examine and use taxonomies and classifications from other domains and professions.⁵ Such tools, however, tend to be very domain specific and recordkeeping professionals need to be aware of the relevant standards and classifications

⁵ Taxonomies and classifications such as the “Nursing Intervention System,” which provides a classification system of 336 interventions further sub-divided into 6 domains and 26 classes, each comprised of a label, a definition, a set of activities, and background readings. See: Geoffrey C. Bowker and Susan Leigh Star, *Sorting Things Out: Classification and its Consequences* (Cambridge, Massachusetts: The MIT Press, 1999).

from those domains whose records they oversee. As all participants agreed taxonomy and classification systems from other domains were relevant to the recordkeeping endeavor, Duff pressed the group to address more specifically what actions the recordkeeping profession should take to exploit this possible advantage.

One participant cautioned against relying too much on the creator, as the archivist provides a unique perspective on why the records were created and how they were used. The creator is not necessarily interested in this perspective. Another participant noted that what was needed was a model/framework to import information from other communities and their taxonomies into a system that helped the profession satisfy recordkeeping concerns. The kind of metadata that archivists will need to/be able to create will be contingent upon the metadata captured by organizations for their own records. Following this thread, one participant highlighted that many communities are using XML (Extended Markup Language) to create and develop document type definitions (DTDs) to exchange information in standard ways. This presents one concrete avenue for exploiting standards and metadata from other domains.

Discussion up to this point fell along three fronts:

- Do other domains use metadata models that archivists can also exploit?
- Do other domains have vocabulary metadata schemas that archivists might also use?
- How can metadata be shared across domains?

The above discussions helped the participants give shape to their commentaries. Could an archives become a repository of metadata schemas that simultaneously serve archival and creating organization purposes? What are the types of recordkeeping metadata needed by recordkeeping professionals that is not created elsewhere by others? If we want the creator to capture certain types of metadata, what are the incentives for getting them to do so? Just how useful is the metadata developed by traditional archival descriptive practice? Do users really want metadata created by archivists and do they use it?

It was pointed out that archival systems manage and add value to records systems that have been physically removed from their point of origin. As such, archivists are required to take custody of systems as they exist and then work to supplement them with archivally-generated metadata to make them accessible to users. One participant likened this movement of records and information about them from the creator through the archivist to the user as a “knowledge transfer” process. Archivists are in essence intermediaries between the creators and the users whose role it is to transfer knowledge between the two. Such knowledge transfer requires that the profession

conduct more systematic studies on users of archives as well as strive to make some of the tacit aspects of this process more explicit.

In regards to incentives for getting records creators to add archivally relevant metadata, it was the impression of the participants that creators and users will not add/provide metadata unless they see a clear purpose for it. As a general rule, archivists cannot expect creators and user to add archivally relevant metadata for future purposes. It was pointed out that the degree to which metadata capture could be mandated relied in part on the degree of control possible in different communities. Some domains are more rule-based and enforcement-oriented than others. Within these there is a greater opportunity to require and establish metadata capture routines. Less rule-based domains are likely to require more automatic metadata capture as users have lower incentives for adding metadata. It remained unclear how well metadata could be captured from these relatively uncontrolled communities.

One participant offered that given the volume of electronic records currently being created by most organizations, machine tools such as data mining, metadata extraction, artificial intelligence, text summarization, and the like are the profession's only hope. The notion that humans can manage organizational information systems via use of standards mandating particular metadata creation just will not scale. It was believed by this participant that standards will not be a large part of the solution sought by the recordkeeping profession.

The remainder of this working session's time was focused on the following issues: What metadata do recordkeeping professionals need that no one else is creating? What is the purpose of recordkeeping metadata? To clarify these issues the group re-examined the definition for "recordkeeping metadata" it developed the preceding day:

Structured or semi-structured information which enables the creation, management, and use of records through time and within and across domains in which they are created. Recordkeeping metadata can be used to identify, authenticate, and contextualize records; and the people, processes and systems that create, manage, and maintain and use them.

One computer scientist participant pointed out that this definition provides an emphasis on processes and events and that some other metadata communities and projects are modeling processes and events. For example, the INDECS (Interoperability of Data in E-Commerce Systems) project is an international collaborative effort that is developing a metadata framework to support electronic commerce over computer networks. Tracking transactions and events over time and ensuring authenticity of resources are two

features of the project.⁶ The Harmony project is examining the relationships (including temporal, spatial, structural and semantic) between resources composed of text, image, audio and video objects. A basic tenet of the project is that descriptions of these objects requires an accounting of these relationships.⁷

A participant in the Harmony project present at the Working Meeting underscored that crosswalk metadata mapping for interoperability between metadata sets is very difficult to perform. Interoperability between sets requires clarification and cognizance of the level of metadata being matched across standards (vocabulary, process, field labels, etc.). It was underscored that recordkeeping professionals need to appreciate these complexities and subtleties in any effort to map metadata between domains.

Fifth working session

- Connections between the themes
- The themes revisited
- Adequacy and applicability
- Discovering white spots
- Resource person: Sue McKemmish

Resource person Sue McKemmish opened the session by revisiting the some of the fundamental themes raised over the two preceding days:

- Positioning recordkeeping metadata initiatives within the context and needs of other disciplines. (What does the recordkeeping metadata community have to share/offer other communities?)
- Applicability of existing recordkeeping metadata standards, such as SPIRT, to other localities.
- Understanding metadata requirements within the context of business processes and cultures.
- Establishing a common research agenda on recordkeeping metadata.
- Developing a common infrastructure and understanding for research on recordkeeping metadata.

Related to these are issues associated with: determining which metadata that is exclusive to recordkeeping; the role of archivists as intermediaries in a knowledge transfer process; the potential controllability of particular domains in respect to their recordkeeping practices; what roles can prescribed and

⁶ See: <http://www.indecs.org/>. Accessed March 15, 2001. See also: Godfrey Rust, "Metadata: The Right Approach – An Integrated Model for Descriptive and Rights Metadata in E-commerce," *D-Lib Magazine* (July/August 1998). <<http://www.dlib.org/dlib/july98/rust/07rust.html>>. Accessed March 15, 2001.

⁷ See: <http://www.ilrt.bris.ac.uk/discovery/harmony/>. Accessed March 15, 2001.

forensic metadata play; how to trace events within a metadata model; and, assessing the role played by time and its passage.

The main issue that drove discussion forward from this point was the challenge of managing changes to metadata over time.

The issue of managing change to metadata over time was seen as a very complex problem that provided few existing models to draw on. The record-keeping profession is generally more time aware than are other professions. Perhaps it is this focus on time and change over time that provides it with a framework for establishing a distinct role for itself in relation to other communities.

Looping back to the issue of roles and responsibilities, one participant pointed out that if long term access becomes an important enough problem for enough different communities then they will work together to resolve it. However, if it is of interest only to archivists, then archivists should expect little cooperation or help from others. One computer scientist participant pointed out though, that many other communities have enumerated metadata challenges very similar to the posed by this forum – challenges associate with longevity, authenticity, persistence, fixity, etc. . . . The struggle facing the recordkeeping metadata community is positioning itself in relation to other communities and making connections with them. Options offered by participants included working on digital signature, public key infrastructure, and e-government initiatives.

At this point, participants focused their efforts on identifying parallel metadata communities and how recordkeeping metadata can speak to them. The recordkeeping community will need to make its presence known by lobbying and making evident the value of its metadata perspective. The Dublin Core⁸ may be one forum, though there is tension even within that community over the need to extend the core beyond its 15 elements. One participant agreed to look into conducting a joint Working Meeting with the Dublin Core community.

There was a sense amongst the participants that the recordkeeping metadata community needed to start picking its best targets for influence. Candidates identified included the: revision of ISO9000 for quality systems; digital preservation; digital libraries; museums; public key infrastructure; resource discovery; e-commerce; e-government; e-culture; multimedia; entertainment, rights management; information systems auditing; workflow and business process; IEEE (Institute of Electrical and Electronics Engineers) metadata community; Text Encoding Initiative, Consortium for the Interchange of Museum Information; software companies, etc. It was well recognized that there exist many relevant related communities.

⁸ See: <http://dublincore.org/>. Accessed March 15, 2001.

Wednesday, June 7, 2000*Sixth working session*

- Research Agenda
- What, how, by whom
- Cooperation
- Towards a network of excellence
- Infrastructure for research.
- Resource person: Margaret Hedstrom

The resource person for this session, Margaret Hedstrom initiated discussion by re-visiting the National Historical Publications and Records Commission's (NHPRC) 1990 research agenda for electronic records to see how well they resonate a decade after they were issued.⁹

So what has changed over the past decade? Most significantly for record-keeping is the explosion of networked computing via the Internet and World Wide Web. A decade ago the focus was on applications. Today there is greater emphasis on recordkeeping systems. Another change specific to the recordkeeping profession is the increased number of academics working on electronic records issues. Ten years ago there were comparatively fewer full-time recordkeeping academics, and those that did exist tended not to be interested in/well informed about electronic records issues. The recordkeeping profession has also become more sophisticated in regards to research: how to do it; relationships to between theory and practice; and, collaboration. It is clear that resolving electronic recordkeeping challenges will require sustained research by many projects over many years. One or two research projects cannot be expected to develop the "magic bullet" for others.

It was proposed that there were three big questions facing the participants in regards to research:

- What research?
- By whom?
- How?

One participant noted that the recordkeeping profession is relatively small and that one strategy should be to look outside of the profession for collaboration, especially when recordkeeping metadata questions are questions that other potential collaborators are interested in. It was further underscored that recordkeeping metadata research efforts were best directed towards developing *fundable* research questions, e.g., questions that reflect the priorities and agendas of funders not accustomed to supporting recordkeeping research.

⁹ U.S. National Historical Publications and Records Commission, *Research Issues in Electronic Records* (St. Paul, Minnesota: Minnesota Historical Society, 1991). <http://www.nara.gov/nhprc/erreport.html#research>. Accessed March 15, 2001.

Hedstrom then offered the following framework for research:

- Social, Cultural, and Policy domain
- Use domain
- Aspects related to Time dimensions
- Technical issues (Architecture, Schemas, Mapping, Interoperability, etc.)
- Context, Evidence, Documentation

What is the profession not addressing in this framework? Identifying these “white spots” can help refine research priorities.

One participant noted that the Working Meeting could emphasize any one of three possible positive outcomes:

- Move to obtain small funding for a white paper of research issues
- Increase collaboration between participants
- Development of major new research proposals

Participants then moved on to a discussion of how to make the recordkeeping endeavor resonate with non-archivists and how to leverage that interest into grants and collaborative research. If it is the values associated with context and the crossing of time and organizational/domain boundaries, then how does the profession raise these and make them relevant to other research domains? What are the convincing arguments to potential funders and collaborators that developing, capturing, and using recordkeeping metadata to move objects across time and domains is an interesting problem? Can the profession attach itself to existing metadata communities and leverage collaboration to build its own infrastructure for research and implementation?

It was argued that the recordkeeping profession needs to tell interesting and compelling stories about current recordkeeping problems and values. Is re-purposing contextual metadata for reasons other than for which it was collected one area of interest to other communities? How should the profession draw on high profile recordkeeping cases (such as the Nazi Gold scandal, the Khmer Rouge archives, the tobacco wars in the U.S., among others) to underscore that similar powerful social lessons from more current cases may not be possible given the fragility of electronic records and the non-capture of critical contextual metadata.

Computer scientist participants suggested that the recordkeeping profession advocate recordkeeping metadata to system designers and that they labor to convince computer scientists that recordkeeping is an interesting research problem and one that may challenge some of the strategies they have developed for computer-stored information. One direction would be to begin linking to and collaborating with computer scientists who are interested in crossing boundaries and who see recordkeeping metadata issues as interesting research questions. The San Diego Super Computer Center (SDSC) was

offered as an example. It has been collaborating with the InterPARES project and the U.S. National Archives to address issues of longevity and ingesting large volumes of electronic documents into a digital archival repository.¹⁰

Computer Supported Collaborative Work (CSCW) and digital library research were highlighted as other important communities that the profession should speak to about recordkeeping metadata issues such as authenticity, version control, and longevity. As pointed out by one computer scientist participant, the problems raised by the participants during the Working Meeting appear no different than many of the problems facing digital library researchers, and in fact, digital library researchers often work with archival materials in their projects.

Turning to possible funding streams, the following entities were suggested as possible sources: joint U.S. National Science Foundation (NSF)/European Union digital library initiatives (such as with the U.K. Joint Information Systems Committee (JISC)) International Digital Libraries Initiative; the Long Now and Sloan foundations; and the pharmaceutical and entertainment industries. The more general domains of e-commerce and knowledge management were also seen as a possible entry points.

It was underscored that the recordkeeping metadata community not amputate itself from the larger metadata research community working with computerized information and actively work to develop strategies to enter these communities. It was recognized that there was a need to focus both internally within the profession and externally on other communities and to develop linkages between the two.

Seventh working session

- Research Agenda continued
- Follow-up
- Adjournment
- Resource person: Peter Horsman

Resource person, Peter Horsman, offered the following focus for the Working Meeting's last session:

- Solidifying the research agenda (white paper, compelling stories . . .).
- Determining what pieces of the research agenda have been addressed by the recordkeeping metadata community, what pieces have been addressed by other metadata communities, and what pieces have yet to be examined.

¹⁰ See: <http://www.sdsc.edu/NARA/>. Accessed March 15, 2001.

- Development of a framework for a common understanding of record-keeping metadata and its value, both within and external to the record-keeping metadata community.
- Identification of the communities to carry out the agenda, communities both internal to and external to the recordkeeping metadata community.

One idea that resonated with participants was for members of the record-keeping metadata community to branch to other metadata communities to collect information about their metadata initiatives (and also to bring the recordkeeping metadata message to them). Participants would then report back to the recordkeeping metadata community to provide it with a broader and more sophisticated understanding of other metadata work being conducted across the world and across domains. Participants were encouraged to consider how best to “infiltrate” other metadata communities.

Two specific avenues advanced as mechanisms for developing these linkages included joining existing funding streams, such as the NSF’s Digital Library Initiative, and presenting recordkeeping metadata research to other communities professional conferences. The Victoria Electronic Records Strategy’s presentation to the ACM digital library community was highlighted as an example of this second mechanism. Initial efforts in this direction will provide a means for making recordkeeping metadata concerns both vital and overt. And efforts directed to other disciplines can be fed back into and advocated within the recordkeeping community as well.

To provide a focus and identity to the Working Meeting’s participants, it was decided to name the group the **Archiving Metadata Forum**

In regards to next steps to push the **Archiving Metadata Forum**’s agenda forward, the following were suggested:

- Establish a web presence for the Forum.¹¹
- Explore using web-based CSCW tools and establishing a listserv to share information on research and to enable collaboratively authored documents pertinent to the Forum’s mission.
- Drafting a companion piece to the proceedings to announce the formation, mission, and objective of the Forum.
- Meet again.

At this point, the hosts thanked the assembled for providing three days of stimulating discussion and for establishing the **Archiving Metadata Forum**. Participants closed the Working Meeting by asserting their commitment to continue the working within the Forum to promote recordkeeping metadata concerns.

¹¹ This has been done. See: <http://www.archiefschool.nl/amf/>. Accessed March 15, 2001.

Appendix

Participants

Adrian Cunningham, Director, Recordkeeping and Descriptive Standards, National Archives of Australia

Gabriel David, Auxiliary Professor, Department of Electrical and Computer Engineering, Faculty of Engineering, Porto University, Portugal

Wendy Duff, Assistant Professor, Faculty of Information Studies, University of Toronto, Canada

Anne Gilliland-Swetland, Assistant Professor, Graduate School of Education and Information Studies, University of California, Los Angeles, USA

Margaret Hedstrom, Associate Professor, School of Information, University of Michigan, USA

Peter Hirtle, Co-Director, Cornell Institute for Digital Collections, Cornell University, USA

Hans Hofman, Senior Consultant, Ministry of the Interior, The Netherlands

Peter Horsman, Senior Consultant, Archiefschool – The Netherlands Institute for Archival Education and Research

Ingmar Koch, Student, Archiefschool – The Netherlands Institute for Archival Education and Research

Carl Lagoze, Digital Library Scientist, University Library and Department of Computer Science, Cornell University, USA

Heather MacNeil, Assistant Professor, School of Library, Archival and Information Studies, University of British Columbia, Canada

Sue McKemmish, Associate Professor, School of Information Management and Systems, Monash University, Australia

Angelika Menne-Haritz, Director, Archivschule, University of Marburg, Germany

Barbara Reed, Principal Consultant and Director, Recordkeeping Systems Pty. Ltd.

Fernanda Ribeiro, Auxiliary Professor, Department of Electrical Engineering and Computing, Faculty of Engineering, Porto University, Portugal

Meg Sweet, PRO Catalogue Manager and A2A Programme Manager, Public Record Office, United Kingdom

Titia van der Werf, Senior Project Manager, Library Research Department, National Library of The Netherlands

David A. Wallace, Assistant Professor, School of Information, University of Michigan, USA

Nigel Ward, Senior Research Scientist, Distributed Systems Technology Centre, Australia

