

di Maria Guercio

L'assetto definitivo del gruppo di ricerca

La presentazione pubblica della ricerca è avvenuta in occasione del seminario internazionale di Cagliari il 31 ottobre 1998, i cui atti sono in corso di pubblicazione; sono seguiti tre incontri (Budapest, marzo 1999; Washington, giugno 1999; Roma, ottobre 1999).

Dopo una fase di avvio della ricerca, che ha richiesto la definizione di aspetti procedurali, di analisi dettagliata delle attività e dei tempi, la definizione dei gruppi di lavoro interni al team internazionale e delle loro specifiche responsabilità, nel corso dell'incontro di Washington si sono finalmente affrontati alcuni dei temi centrali del lavoro di indagine: la struttura informativa necessaria all'analisi delle tipologie documentarie in ambiente digitale e la metodologia per identificare e analizzare gli studi di caso ritenuti strumento indispensabile di conoscenza dei sistemi elettronici oggi utilizzati nelle organizzazioni pubbliche e private (sistemi documentali, database, GIS, imaging systems, pagine web, ecc.) e capaci di produrre documenti d'archivio.

Il gruppo internazionale ha assunto la forma definita di un "consorzio" di 7 *team* di ricerca (nazionali, multinazionali e di settore). Ciascun gruppo è guidato da uno studioso di archivistica, ma comprende anche specialisti di altre aree di indagine, con particolare riferimento, naturalmente agli specialisti nel campo delle tecnologie dell'informazione e della comunicazione:

- Gruppo nazionale canadese (responsabile Terry Eastwood)
- Gruppo nazionale italiano (responsabile Maria Guercio)
- Gruppo nazionale australiano (responsabile; Sue McKemmish)
- Gruppo nazionale statunitense (responsabile: Philip Eppard)
- Gruppo intereuropeo, cui partecipa anche il gruppo italiano (responsabile: Seamus Ross)
- Gruppo asiatico (responsabile: Wai-Kwok Wan)
- Gruppo di imprese multinazionali, guidate dal gruppo industriale CENSA (Collaborative Electronic Notebooks System Association) (responsabile: Rich Lysakowski)

Partecipano, inoltre, alla ricerca con la funzione essenziale di enti di monitoraggio e verifica i rappresentanti delle amministrazioni archivistiche di tutti i Paesi coinvolti:

- gli archivi nazionali canadesi
- gli archivi nazionali degli Stati Uniti
- l'amministrazione archivistica italiana (Ufficio centrale beni archivistici e Archivio centrale dello Stato)
- gli archivi nazionali svedesi
- gli archivi nazionali olandesi
- gli archivi nazionali irlandesi
- gli archivi nazionali cinesi
- gli archivi nazionali giapponesi
- il Public Record Office di Londra
- il Public Record Office di Honk Kong

I responsabili scientifici dei gruppi nazionali e multinazionali e i rappresentanti delle amministrazioni archivistiche costituiscono il gruppo responsabile del progetto, che definisce gli obiettivi, attribuisce i compiti e le responsabilità a specifiche task force cui si affidano compiti particolari e temporanei di indagine, assume le decisioni conclusive sulle modalità di conduzione della ricerca e sui risultati scientifici.

I contenuti specifici della ricerca

Confermando la struttura originaria del progetto di indagine, l'attività di ricerca è stata organizzata in quattro principali campi di indagine, che tuttavia sono destinati a una continua interrelazione, sui temi e sugli obiettivi essenziali del lavoro:

1. I requisiti funzionali per garantire l'autenticità dei documenti elettronici conservati
2. I criteri e i metodi di selezione dei documenti elettronici
3. I metodi e le responsabilità per la conservazione permanente di documenti elettronici
4. La struttura per la formulazione di direttive, standard e strategie per la conservazione di documenti elettronici autentici

Per quanto riguarda i primi tre settori di ricerca, il cui approfondimento richiederà tempi diversi, si è ritenuto opportuno costituire task force con specifiche responsabilità, mentre si è stabilito che il quarto campo di indagine debba essere il frutto di un lavoro comune di tutti i ricercatori coinvolti e sarà attivato solo alla conclusione del lavoro dei diversi sottogruppi.

Per quanto riguarda il primo settore, il problema della definizione dei requisiti funzionali che garantiscano l'autenticità dei documenti elettronici è affidata alla Authenticity Task Force (responsabile Heather McNeil) che ha il compito di identificare tali requisiti mediante una preliminare rilevazione sul campo delle tipologie documentarie prodotte da sistemi elettronici diversi e fornire la loro descrizione e analisi sulla base dei principi e dei concetti della diplomazia, della disciplina cioè che tradizionalmente valuta l'autenticità dei documenti.

Il problema della selezione in ambiente digitale è stata affidata alla Appraisal Task Force, guidata da Terry Eastwood, e ha il compito di condurre una valutazione delle concrete esperienze di selezione in ambiente digitale sia dal punto di vista delle regole e delle procedure definite che per quanto riguarda i problemi fisici determinati dalla obsolescenza tecnologica e dagli interventi di migrazione.

Il terzo campo di indagine, infine, è stato definito nei suoi obiettivi concreti solo in occasione dell'incontro di Washington: affidata alla guida di uno specialista di IT canadese, Babak Hamidzadeh, la Preservation Task Force ha l'obiettivo specifico di implementare nelle concrete procedure di conservazione i requisiti concettuali che garantiscono l'autenticità dei documenti elettronici e di valutare le pratiche esistenti in materia di protezione fisica e intellettuale dei documenti e di garanzia dell'accessibilità nel tempo. Il gruppo di lavoro sarà affiancato dalla Authenticity Task Force per quanto riguarda la definizione dei metodi di descrizione archivistica che si riterranno indispensabile strumento di garanzia di conservazione dei documenti nelle fasi di migrazione.

Come si è già ricordato, la metodologia approvata comprende innanzi tutto un lavoro di censimento delle esperienze esistenti, anche se include in tutti i campi di indagine anche l'analisi della letteratura esistente, la valutazione dei programmi in uso, lo studio delle normative e delle procedure proposte o approvate nei diversi Paesi

Tra i risultati attesi, oltre allo sviluppo di una comune terminologia, la ricerca prevede di definire i requisiti funzionali per la migrazione dei documenti elettronici e le procedure necessarie ai fini di una corretta conservazione nel tempo degli archivi digitali



APPENDICE I

IL PROGETTO DI RICERCA INTERPARES

Si è ritenuto opportuno fornire una informazione dettagliata sullo stato della ricerca [InterPARES](#) cui l'[Anai](#) partecipa in collaborazione con l'amministrazione archivistica. Il modo più concreto e, allo stesso tempo, più semplice per presentare il lavoro finora svolto è quello di pubblicare i principali documenti a tutt'oggi elaborati. Si tratta naturalmente di materiali non definitivi, che tuttavia possono costituire un primo strumento di riflessione, utili anche perché di non facile reperimento in questa fase ancora iniziale del lavoro di indagine, per chi intenda affrontare il tema specifico della ricerca, che costituisce anche uno dei temi principali del seminario di Cagliari), quello della conservazione permanente di documenti autentici. In accordo con il direttore del gruppo internazionale, si è deciso di rendere disponibili alcuni documenti di natura generale, recentemente aggiornati in occasione dell'incontro del gruppo a Washington (giugno 1999):

1. L'organizzazione della ricerca e il piano di lavoro (1. *Organizational Structure and Research Plan*)
2. La definizione della metodologia di ricerca della Authenticity Task Force (2. *Research methodology Statement*)
3. L'esame critico della letteratura anglosassone in materia di selezione dei documenti elettronici, condotta dalla Task Force on Appraisal (3. *Appraisal of Electronic Records: a Review of the Literature in English*, a cura di Terry Eastwood, Shadrack Katuu, Jacque Killawee, Jeff Whyte)
4. Lo schema del questionario utilizzato per condurre uno studio di casi sui documenti formati da sistemi elettronici diversi, In questo caso, si è ritenuto preferibile pubblicare la versione del questionario predisposta dal gruppo italiano, costituita da una prima parte elaborata e utilizzata esclusivamente in ambito nazionale riferita all'analisi dei sistemi di gestione degli enti oggetto dell'indagine e al censimento dei sistemi in grado di produrre documenti elettronici (4. *Scheda per il censimento dei documenti in ambiente elettronico*). La seconda parte, condivisa dal gruppo internazionale, riguarda in modo specifico la valutazione per ciascuna tipologia censita dell'esistenza e delle modalità di trattamento degli elementi costitutivi del documento elettronico. L'obiettivo di questa analisi è quello di identificare gli elementi che devono essere conservati al fine di garantire nel tempo l'autenticità dei documenti prodotti e mantenuti in ambiente digitale (5. *Questionario per uno studio di casi sulle diverse tipologie di documenti elettronici*).

1. Organizational Structure and Research Plan

Since the preliminary planning meeting held in Cagliari in October 1998, the InterPARES organizational structure and research plan has undergone some minor revisions. These changes are reflected in the brief summary below. The most recent version of this document is available on the InterPARES Project website at:

<http://www.interpares.org/organization.htm>

Organizational Structure



The overall direction of the InterPARES research is determined by the International Team which acts as a steering

committee for the project. The International Team guides the task force workplans, reviews task force findings, and synthesizes task force findings into new knowledge. It also acts as a forum to resolve administrative and organizational matters.

The International Team is led by the Project Director, Luciana Duranti, who is responsible for ensuring that the International Team and its members are working effectively to meet the project goal. The Project Director manages the administration of the project from the University of British Columbia with the assistance of the Project Coordinator, Peter Van Garderen.

The InterPARES International Team

Luciana Duranti, Project Director

Terry Eastwood, (Chair) Canadian Research Team

Heather MacNeil, Canadian Research Team

Babak Hamidzadeh, Canadian Research Team

John McDonald, Canadian Research Team

Anne Gilliland-Swetland, (Co-Chair) American Research Team

Phillip Eppard, (Co-Chair) American Research Team

Ken Thibodeau, U.S. National Archives and Records Administration

Marila Guercio, (Chair) Italian Research Team

Paola Carucci, Italian Research Team

Seamus Ross, (Chair) European Research Team

Hans Hofman, European Research Team

Ken Hannigan, European Research Team

Ian Macfarlane, European Research Team

Torbjorn Hornfeldt, European Research Team

Sue McKemmish, (Chair) Australian Research Team

Rich Lysakowski, (Chair) CENSA Research Team

Bill Rhind, CENSA Research Team

Wai-kwok WAN (Chair) Asian Research Team

Du Mei, Asian Research Team

Led by the International Team, the InterPARES Project is composed of several national and multi-national research teams. These research teams are responsible for coordinating researchers, research partners, and InterPARES-related research activities within their jurisdiction. The research teams are also responsible for contextualizing InterPARES findings within their represented jurisdiction and for attracting support from the appropriate national and multi-national funding agencies.

The InterPARES Research Teams and their corresponding members are:

Canadian Research Team

(Chair) Terry Eastwood, University of British Columbia

Heather Macneil, University of British Columbia

Babak Hamidzadeh, University of British Columbia

Barbara Craig, University of Toronto

John McDonald, National Archives of Canada

Bruce Walton, National Archives of Canada

Jason Baron, U.S. Department of Justice (Lecturer, University of British Columbia)

American Research Team

(Co-Chair) Philip Eppard, State University of New York at Albany

(Co-Chair) Anne Gilliland-Swetland, University of California at Los Angeles

Michele Cloonan, University of California at Los Angeles

Bill Underwood, Georgia Tech Research Institute

P.C. Hariharan, The Johns Hopkins University

Fynnette Eaton, Smithsonian Institution Archives

Leon Stout, Penn State University

Su-Shing Chen, University of Missouri-Columbia

Italian Research Team

(Chair) Maria Guercio, University of Urbino

Elisabetta Bidischini, Union for the Chambers of Commerce

Giorgetta Bonfiglio Dosio, Association of Italian Archivists (ANAI)

Oddo Bucci, University of Macerata

Sergio Cardarelli, Bank of Italy

Barbara Cartocci, Chamber of Deputies

Paola Carucci, Central State Archives of Italy

Bruna Colarossi, Archival Agency of Rome

Fernando Ferri, Research National Council

Vincenzo Festinese, Bank of Italy

Gigliola Fioravanti, Central State Archives of Italy

Lucilla Garofalo, Central State Archives of Italy

Linda Giuva, Central State Archives of Italy

Patrizia Grifoni, Research National Council

Caterina Isabella, Municipal Environment Agency of Rome

Alexandra Kolega, Archival Agency of Rome

Mirella Mombelli, Special School for Archivists and Librarians

Antonella Mulè, Central State Archives of Italy

Stefano Pigliapoco, University of Macerata

Gianni Paoloni, Special School for Archivists and Librarians

Marina Raffaeli, Special School for Archivists and Librarians

Enrico Rendina, Rome Research Consortium

Claudia Salmini, Association of Italian Archivists (ANAI)

Maurizio Savoja, Association of Italian Archivists (ANAI)

Eriilde Terenzoni, Ministry for Cultural Heritage

Mario Terranova, Authority for Public Administration Information Technology (AIPA)

Adriana Valente, Research National Council

Juniores Researchers

Flora Anastassiou

Cristina Cannizzo

Vincenzo De Meo

Monica Grossi

Giovanni Michetti

Susanna Oreffice

Elena Polidori

Rosa Sepe

Silvia Trani

European Research Team

(Chair) Seamus Ross, University of Glasgow

Hans Hofman, National Archives of the Netherlands

Richard Blake, Public Records Office of the United Kingdom

Ian Macfarlane, Public Records Office of the United Kingdom

Ken Hannigan, National Archives of Ireland

Tom Quinlan, National Archives of Ireland

Torbjorn Hornfeldt, National Archives of Sweden

Peter Horsman, Archives School, University of Amsterdam

Australian Research Team

(Chair) Sue McKemmish, Monash University

Livia Iacovino, Monash University

Ross Harvey, Curtin University of Technology

Asian Research Team

(Chair) Wai-kwok WAN, Public Records Office of Hong Kong

Du Mei, State Archives Administration of China

Collaborative Electronic Notebook Systems Association (CENSA) Research Team

(Chair) Rich Lysakowski, CENSA

Bill Rhind, Monsanto Life Sciences

To address the complex variety of issues that affect the permanent preservation of authentic electronic records, the project research plan (see further below) has been divided into four interrelated domains of investigation. The International Team has drafted research questions appropriate to each domain. The research questions for each domain will be addressed by a dedicated task force. As well, *ad hoc* task forces may be created to address specific organizational or research issues as they arise. The task forces are composed of members of the International Team and the various Research Teams based on the skills and expertise required to accomplish the assigned tasks.

The InterPARES Task Forces and their corresponding members are:

Authenticity Task Force

(Chair) Heather MacNeil, Canadian Research Team

Luciana Duranti, Project Director

Babak Hamidzadeh, Canadian Research Team

Anne Gilliland-Swetland, American Research Team

Maria Guercio, Italian Research Team

Seamus Ross, European Research Team

Wai-kwok WAN, Asian Research Team

Appraisal Task Force

(Chair) Terry Eastwood, Canadian Research Team

Ken Thibodeau, U.S. National Archives and Records Administration

Hans Hofman, European Research Team

Peter Horsman, European Research Team

Philip Eppard, American Research Team

Barbara Craig, Canadian Research Team

Gigliola Fioravanti, Italian Research Team

Bill Underwood, American Research Team

Preservation Task Force

(Chair) Babak Hamidzadeh, Canadian Research Team

Ken Thibodeau, U.S. National Archives and Records Administration

Bob Chadduck, U.S. National Archives and Records Administration

Hans Hofman, European Research Team

Richard Blake, European Research Team

Rich Lysakowski, CENSA Research Team

Michele Cloonan, American Research Team

P.C. Hariharan, American Research Team

Bruce Walton, Canadian Research Team

Ross Harvey, Australian Research Team



Research Plan

As mentioned above, the project research plan has been divided into four interrelated domains of investigation. The International Team has drafted research questions appropriate to each domain. The research questions for each domain will be addressed by a dedicated task force. The task forces may revise or elaborate on the research questions as they carry out their investigations.

The findings of each task force will be analyzed by the International Team. The International Team is currently

scheduled to meet three times yearly until December 2001. It will also carry out much of its work through a web-based discussion forum.

Although concrete findings from each domain are expected by December, 2001, there will likely be a need to continue work beyond this date given the depth of the problem domains as well as the ongoing, iterative process of designing, testing, and analyzing the various requirements and methodologies.

Domain I: Conceptual Requirements for Preserving Authentic Electronic Records

The goal of the research in this domain is to identify the elements of electronic records which are necessary to maintain the authenticity of those records over time. Using diplomatic principles, it will include an analysis of the elements of physical and intellectual form which may affect the authenticity and nature of an electronic record.

The research questions for Domain I are:

1. What are the elements that all electronic records share?
2. What are the elements that allow us to differentiate between different types of electronic records?
3. Which of those elements will permit us to verify their authenticity over time?
4. Are these elements for verifying authenticity over time the same as those that permit us to verify their authenticity in time (i.e. at the point at which they are originally used)?
5. Can those elements be removed from where they are currently found to a place where they can more easily be preserved and still maintain the same validity?

The Domain I research questions will be addressed by the Authenticity Task Force.

Domain II: Appraisal Criteria and Methodology for Authentic Electronic Records

The goal of the research in this domain is to determine whether the evaluation of electronic records for permanent preservation should be based on theoretical criteria different from those applied to traditional records. It will also investigate how digital technologies have affected the methodology of appraisal.

The research questions for Domain II are:

1. What is the influence of digital technology on appraisal criteria?
2. In what ways does appraisal differ depending on the type of systems prevalent in each phase of computing?
3. How do the media and physical form of the records influence appraisal?
4. How do retrievability, intelligibility, functionality, and research needs influence appraisal?
5. Should restraints be imposed on the modification of systems at the time of appraisal?
6. Does the life cycle of electronic records differ from that for traditional records?
7. When in the course of their existence should electronic records be appraised?
8. Should electronic records be appraised more than once in the course of their existence and, if so, when?
9. How are electronic records scheduled?
10. Who should be responsible for appraising electronic records?
11. What are the appraisal criteria and methods for authentic electronic records?

The Domain II research questions will be addressed by the Appraisal Task Force. Please note that the questions as they are stated above are under review by the Appraisal Task Force and will likely be revised at a later date.

Domain III: Methodologies for Preserving Authentic Electronic Records

The goal of the research in this domain is to identify and develop the procedures and resources required for the implementation of the conceptual requirements and the criteria identified in the first two domains.

The research questions for Domain III are:

1. What methods, procedures and rules of long-term preservation are in use or being developed?
 - A. Which of these meet the conceptual requirements for authenticity identified in Domain I?
 - B. Which methods of long-term preservation need to be developed?

- C. Which of these methods are required or subject to standards, regulations and guidelines in specific industry or institutional settings?
2. What are the procedural methods of authentication for preserved electronic records?
 - A. In what way can archival description be a method of authentication for electronic records?
 - B. In what way can appraisal and acquisition/accession reports be constructed to allow for the authentication of electronic records?
 - C. What are the procedures for certifying electronic records when they cross technical boundaries (e.g., refreshing, copying, migrating) to preserve their authenticity?
3. What are the technical methods of authentication for preserved electronic records?
4. What are the principles and criteria for media and storage management that are required for the preservation of authentic electronic records?
5. What are the responsibilities for the long-term preservation of authentic electronic records?

The Domain III research questions will be addressed by the Preservation Task Force. At International Team Research Workshop #2, the Preservation Task Force revised the Domain III research questions from those originally drafted in the project proposal. The Task Force recognizes that the scope of questions #2 & #3 is more detailed than the other research questions. It is expected that, at a later stage, the scope of the other questions will also be expanded.

Domain IV: A Framework for Developing Policies, Strategies and Standards

The goal of the research in this domain is to formulate principles that will guide the development of international, national, and organizational strategies, policies and standards for the long-term preservation of authentic electronic records. The distinction between international, national, and organizational policies, strategies and standards derives from the recognition that each cultural, juridical and organizational environment has its own needs which must be articulated in separate documents. The important thing is to ensure that the policies, strategies and standards are consistent with one another and this is only possible when they are inspired by the same principles.

The research questions for Domain IV are:

1. What principles should guide the formulation of policies, strategies and standards related to the long-term preservation of authentic electronic records?
2. What should be the criteria for developing national policies, strategies and standards?
3. What should be the criteria for developing organizational policies, strategies and standards?

Methodology

Depending on the research questions being addressed, the task forces are expected to use a wide variety of research methodologies including diplomatic analysis, structured interviews, literature reviews, and systems analysis and design. The common methodology which will guide all research activity, however, will be modeling.

As the task forces present their findings, they will be represented in templates or models with the aid of a knowledge engineering expert. Modeling methodology generally consists of two parts. The first is to graphically represent the entities involved. An entity can be abstract or concrete (ie. a concept, a software component, a person, a magnetic tape). What is modeled is the entity's attributes or characteristics and its relationship to other entities. The second component of modeling is identifying the activities in which the entities are involved. To support the modeling process, every entity, attribute, relationship, and activity named in the models must be consistently and rigorously defined in an interdisciplinary, international glossary.

The use of modeling serves several purposes. When many experts from different countries, disciplines and perspectives are working together, it is normal that much confusion arises from the use of similar expressions to mean different things and from the many assumptions, purposes, and interests that each one brings to the table. Modeling requires a rigorous and systematic determination of the meaning and implication of every term, concept or statement that is introduced.

The requirements for preserving authentic electronic records, as defined in the first two research domains, will be translated into models. These models will then be used to develop the methodologies and technologies required by the Institutional Investigators working at the various national archival institutions. These teams will test the models and

present the results back to the International Team. These results will then be used, in turn, to refine the models. This iterative process is expected to reveal certain basic principles upon which strategies, policies, and standards for the preservation of authentic electronic records can be drafted. In addition to facilitating the communication and workflow within the InterPARES project, modeling is also expected to aid in communicating research progress and findings to other interested parties.

