

Is InterPARES relevant to the global periphery?



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Preamble

In an article published 2001, Verne Harris observed that "in South Africa, despite process[es] of transformation, we agonize over the continued dominance in archival discourse of white voices and Western modes of knowledge construction" (Harris 2001: 10)

Introduction

What does the City of Vancouver's GIS system in Canada have in common with the electronic filing system in the Supreme Court of Singapore? Or what does the Revenue Online System of Ireland have in common with the motor vehicle licensing and registration system of New York in the US? These, together with others form part of more than 20 real life case studies that are at the heart of an international multi-disciplinary research commonly known as InterPARES 2. This is the second phase of a research project that began at the University of British Columbia in 1999 with an ambitious proposal to develop the "theoretical and methodological knowledge essential to the long-term preservation of authentic records and/or maintained in digital form." (InterPARES 1. 2002d). In order to answer this question, it would be important to outline the activities of both InterPARES 1 and InterPARES 2 in order to better understand the research objectives as well their successes.

InterPARES 1 and the authenticity of records created and/or maintained in databases and document management systems

Between 1999 and 2001, InterPARES 1 developed as a research project focusing on the issue of long term preservation of the authenticity of records created and/or maintained in databases and document management systems. In order to do this, the researchers primarily relied upon theoretical and methodological framework based on archival science, diplomatics and records management. Less significant subject areas consulted were computer science and engineering, jurisprudence, and research methods.

Unlike other disciplines of inquiry used in InterPARES 1, diplomatics would be the most foreign to many records and archives professionals. In a recent publication, Heather MacNeil traces the birth of diplomatics to the 17th century diplomatic wars waged within the Catholic Church by Bollandists and Dominicans. It is these that "gave birth to a range of modern technical disciplines aimed at determining the trustworthiness of historical documents, among them palaeography, sigillography, and diplomatics." (MacNeil 2000: 20) A monk who was compiling the lives of Benedictine saints, Jean Mabillon, is credited with publishing a seminal work on the science of diplomatics. As a method of assessing the trustworthiness, diplomatics has over the centuries been used in establishing archival records "across legal systems and over time." (MacNeil 2000: 20) InterPARES defines diplomatics as "the study of the genesis, inner constitution and transmission of archival documents, and of their relationship with the facts represented in them and with their creator" (InterPARES 1. 2002c).

During the course of InterPARES 1, both the funding and research participation has been concentrated in the Global North. Major funding for the project came from Canada's Social Sciences and Humanities Research Council of Canada, the University of British Columbia, and National Archives of Canada as well as the US' National Historical Publications and Records Commission and National Archives and Records Administration. In addition, more than 60 researchers from 13 countries spread over 4 continents participated in InterPARES 1. These were either practicing professionals or academics, at a ratio of 80% to 20%. (InterPARES 1. 1999) These researchers looked at characteristics of e-records and concept of authenticity as well as the activities of appraisal and preservation from the preserver's point of view.

The methodology used for this study included:

- Theory and methods of diplomatics, archival science and law for the definition of concepts and development of requirements and methods.
- Grounded theory in order to select case studies
- Comparative analysis for the study of appraisal and preservation reports.
- Chemistry for the study of storage media and computer engineering for the study of digital preservation technology and technological methods of authentication

- IDEF (0) modelling for the representation and definition of the activities involved in appraisal and preservation. IDEF is the acronym for Integrated Definition. InterPARES 1 specifically used IDEF (0) to describe processes or functions involved in preserving electronic records. In IDEF (0), "A function model is a structured representation of the functions, activities or processes within the modelled system or subject area." (InterPARES 1. 2005b)

Out of this process resulted clearer definition of concepts (e.g. record, document, data, reliability, authenticity, identity and integrity) and principles (e.g. trusted custodian), and a series of analytical instruments (e.g. an electronic record template of analysis) for studying new types of digital documents and developing new requirements and method as needed.

Additionally, the InterPARES 1 generated:

- Authenticity requirements for those who generate and keep records and for those who preserve them for example metadata for identity and integrity, access privileges. (InterPARES 1. 2002e.)
- Selection and preservation methods and procedures including models representing activities and responsibilities. (InterPARES 1. 2002b.)
- A framework for the development of policies, strategies and standards related to the proper creation, maintenance and preservation of digital records that can be proven authentic over time. (Duranti (ed.) 2005)

According to the InterPARES project Director, Dr Luciana Duranti, the most important finding is that, for a digital object to be considered an electronic record, it must have:

- Fixed form and unchangeable content;
- Identifiable administrative and documentary contexts, and explicit linkages to other records within or outside the digital system; and
- Five identifiable persons involved in its creation; and it
- Must participate in or support an action either procedurally or as part of the decision making process (Duranti 2005).

Additionally, she adds that:

"most systems that should contain records do not, because the entities in them lack fixed form and stable content. The systems that do contain bad records, primarily because of lack of identifiable contexts and relationships. Inactive records that are no longer kept in active systems often cannot be preserved because

either they were not created and/or maintained in preservable formats or they are obsolete." (Duranti 2005)

The findings of InterPARES 1 have been published online in the InterPARES website <http://www.interpares.org/book/index.html>.

As any study would go, InterPARES 1 learnt several lessons. First, the solutions to the preservation problem are inherently dynamic due to technological change and the increasing complexity of its products. Secondly, technology cannot determine the solution to the long-term preservation of electronic records. And thirdly, archival needs define the problem and archival principles must establish the correctness and adequacy of each technical solution. (Duranti 2005) While these observations may be considered self-evident by some scholars and thinkers in the field, it is none the less significant that they have been reiterated through the result of rigorous research.

So, one would ask, how did InterPARES 2 come about? Based on the limited scope of this first phase of the research, it was felt that a new phase of the research should examine, not just textual and database generated records, but all other kinds of digital entities in complex systems. In order to do this it would go beyond the limited scope of inactive records, and concern itself with the entire life-cycle of the record. This expansion of scope would then assist in the development of a chain of preservation model capable of guaranteeing authenticity. Additionally the new phase of the research would investigate, using concepts and methodologies developed in InterPARES 1, digital entities created in the course of scientific, artistic as well as government endeavours.

InterPARES 2 and records produced in complex digital environments in the course of artistic, scientific and e-government activities

InterPARES 2 was initiated in 2002 and is expected to be completed at the end of 2006. While its researchers have focused on the issues of authenticity and long term preservation, they have also examined reliability and accuracy from the perspective of the entire life-cycle of records, that is, from creation to either disposition or permanent preservation. In order to do this, the researchers have focused on records produced in complex digital environments in the course of artistic, scientific and e-government activities.

In the course of InterPARES 2, its researchers have relied upon various subject areas including archival science, diplomatics and records management; music theory, composition, performance; film theory, production, description; dance and theatre theory; social sciences; jurisprudence; computer science and engineering.

Each focus is divided into three domains of inquiry, each addressing a specific set of research questions. Domain 1 is investigating the nature of the records of the pertinent activity and the process of their creation. Domain 2 is studying the concepts of reliability, accuracy and authenticity, as they are understood in the context of the disciplines

	FOCUS 1 Artistic activities	FOCUS 2 Scientific activities	FOCUS 3 Governmental activities
DOMAIN 1 Records creation & maintenance	Working Group 1.1	Working Group 1.2	Working Group 1.3
DOMAIN 2 Authenticity, accuracy & reliability	Working Group 2.1	Working Group 2.2	Working Group 2.3
DOMAIN 3 Methods of appraisal & preservation	Working Group 3.1	Working Group 3.2	Working Group 3.3
Terminology			
Policy			
Description			
Modeling			

Figure 1: InterPARES 2 organizational matrix

Just like its predecessor, InterPARES 2 has had both major funding and active participation from the Global North. Its major funding has come from Canada’s Social Sciences and Humanities Research Council of Canada, and the University of British Columbia as well as the US’ National Historical Publications and Records Commission and National Sciences Foundation. However, UNESCO has also contributed funding that began midway in 2003. In this phase, 21 countries were involved from 5 continents with over 100 researchers participating from both the public and private sectors with the ratio of academics to professionals being 80% to 20%. (InterPARES 2. 2002b)

In order to do this, InterPARES 2 has used a multi-method design of surveys, case studies, modelling, prototyping, diplomatic and archival analysis, as well as text analysis in order to deal with domain and cross-domain research questions.

InterPARES 2 has been structured into several intersecting areas of inquiry. The research team responsible for each area is composed of investigators from a variety of disciplines and cultural backgrounds. (Figure 1)

The matrix structure has cross cutting focus groups and domains with four cross-domain groups. (InterPARES 2. 2002d)

There are three focus areas of inquiry, each addressing records created in the course of one type of activity. Focus 1 is studying records of artistic activities; focus 2 is studying records of scientific activities; and focus 3 is studying records of e-government activities.

encompassed by the specific focus. Domain 3 is testing existing and proposed appraisal and preservation methods on specific instances of the records in question, and develops new methods where needed.

There are four cross-domains that deal with research questions common to all areas of inquiry:

- The Terminology Cross-domain has been controlling the use of terms and related definitions in all areas of the research, to ensure consistency among research units;
- The Policy Cross-domain has been analysing existing policies, strategies and guidelines for the creation, maintenance and preservation of digital records and develops new ones as needed; The Description Cross-domain has been examining existing descriptive schemas in each discipline involved in the project, and develops new ones capable of supporting the creation, maintenance and long-term preservation of accurate, reliable and authentic digital records;
- The Modelling Cross-domain has been examining the functions, information and resources involved in the creation, maintenance and preservation of accurate, reliable and authentic digital records. Additionally the Modelling Cross-domain supports the representation and analysis of the case studies results.

By the beginning of 2006, several achievements had been made:

- 15 of the 23 case studies had been completed and represented in activity and entity models

and analyzed according to diplomatic and archival principles (InterPARES 2. 2006)

- Surveys of governments websites, of digital photographers, composers, and film makers, of the practice of preservation of interactive music, of file formats and encoding languages used for non-textual materials, and the analysis of a prototype for a persistent archives based on data grids
- Annotated bibliographies and literature reviews, conceptual analyses of the findings of the reviews, and bibliographic databases for the management of references.

The Description cross-domain has made significant progress with a Metadata Schema Registry. This is a centralized repository of schemas that will aid to identify metadata sets, or the combinations of elements from several sets which are appropriate to serve various record keeping needs; identification of the relationship between metadata and archival description; collaborations with modelling and policy cross-domains.

The Policy cross domain has been working on identifying barriers to preservation which currently exist in laws, regulations, policies and standards concerning copyright and intellectual rights, privacy and freedom of information, authenticity and authentication, open standards and open source, and records and archival management.

The Terminology cross-domain has made significant progress with a terminology database that has four lexicographic instruments, a Register, a Dictionary, a Glossary and a Thesaurus.

Lastly, the modelling cross-domain has just completed the MCP (Manage the Chain of Preservation) model depicting all the activities involved in the management of electronic records throughout their lifecycle, from creation to permanent preservation.

Back to the beginning, is InterPARES relevant?

During several seminars held in Namibia between May and July of 2006 on recent global developments in electronic records management, presentations on various aspects of InterPARES achievements were made. One of the seminar participants asked "What

relevance is InterPARES to the challenges of managing electronic records in the developing world?" The discussions that followed highlighted the fact that InterPARES may be a 'phenomenon' with immediate relevance to 'first world' problems. However, with the current speed of change and with effects of globalisation, these 'first world' problems would, within a few years, become global problems.

However, this is not to say that InterPARES approaches offer universal solutions and should be accepted without challenge. At the core of every research project is the quest to identify fundamental problems as well as refine ideas. At the core of these processes is continuous debate and contestation. In 2004, a Peer Review Committee that was mandated by InterPARES' funding agencies recommended that the InterPARES 2 research team, among other things, "engage in the immediate and extensive dissemination of the project's findings." (InterPARES 2. 2004) This article is an attempt to contribute to 'immediate and extensive' dissemination processes undertaken by InterPARES in a quest to share experiences and enlarge spaces for contestation.

As to whether InterPARES is relevant to the global periphery, that determination can only be made by individual institutions within the global periphery based on their needs. Already some institutions have used some of the products from the research projects (InterPARES 1 and 2) in order to inform their policy and guidelines formulation processes. However, it is critical to actively engage with the numerous products from both InterPARES 1 and 2 before being able to sift what will be relevant. Sadly, in my experience, many in the global periphery have often dismissed InterPARES before even engaging at any level.

Epilogue

To use the metaphor of the different experiences one could have while engaging with a bridgeless river during the rainy season, one could see the banks of the river from a far, be at the banks of the river, be in the middle of the river and or have crossed the river. Each of these levels of engagement offer their own unique experiences. Active engagement, in my opinion is not just looking at the banks, but rather wading in and through its waters.

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