InterPARES 2 Project
International Research on Permanent Authentic Records in Electronic Systems

Domain 2:
The Concepts of Reliability, Accuracy, and Authenticity

Report to SSHRC Midterm Review Committee

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Overview of research goals

1. Explain the concepts of reliability, accuracy, and authenticity in each focus area –

    - the creative and performing arts

    - science

    - e-government

    – by examining the literature and

    by analyzing InterPARES case studies.

Overview of research goals

2. Devise a theory of ideal record-making and record-keeping processes in the context of each activity.

3. Test the theory, for example:

- study record-making and record-keeping *in situ*;

- observe the effects of hardware and software evolution on records;

- establish a set of records on which to test guidelines for creation, maintenance and use.

Overview of research goals

4. Develop high-level activity models that reflect commonalities and variations in record-making and keeping processes across disciplines.

5. Draft, test, and issue guidelines for records creators.

How the work gets done

Research assistants and supervisors within each discipline. Many in arts.

Coordination at workshops: set deadlines, standards for bibliographic research.

Discussion of issues (e.g. my presentation).

Analysis of concepts collaboratively by team members.

The Domain is represented at each case-study analysis and modeling session.

Sample results (Focus 1)

Meanings of "authenticity" in traditional artistic media

<u>Art theory</u>

• visual art: the nature of the link between an object and its creator

• music: the faithfulness with which a performance realizes the score

• photography: verisimilitude

<u>Diplomatics</u>

• "authenticity"

• "accuracy"

• "reliability"

Sample results (Focus 1)

Annotated bibliographies

- music

- visual art

- photography

- sound and film preservation

- dance

- e-literature

- space science

- geography

- computer science

- health sciences

- laboratory management

Sample results (Focus 1)

Analysis of the meanings of "authenticity"

Different conceptions arise from the differences between the arts,

and even within each art, according to how the nature of the artwork is conceived.

How you preserve depends upon what you think you are preserving. (For example, preserving a recording is not necessarily preserving a musical work.)

Sample results (Focus 1)

Much new digital art is like music:

It is notated (represented in a "digital" symbol system for a performing means) to be presented on demand.

The user's role in interactive systems is similar to situation with performer's role: user as co-author.

To determine identity of the work and to develop appropriate notation, compare performances that the creator deems authentic.

Sample results (Focus 2)

What are conceptions of authenticity, reliability, and accuracy in science?

Most scientists don't talk about authenticity per se, but they do think about identity and integrity of data.

Scientists are concerned with identity of raw data: what phenomena they measure, and how, when, and where the measurements were obtained.

Data integrity means that the data have not been altered; provenance is crucial to integrity.

Sample results (Focus 2)

What are conceptions of authenticity, reliability, and accuracy in science?

Reliable data are collected by a competent scientist using procedures and instruments that are reliable. Reliability is a matter of degree.

Accuracy of data refers to its error and precision, that is, how closely it represents the true values (geographers' "ground truth") that were measured.

Procedures are reliable if they can be replicated. Replicating an experiment is like a performance.

Sample results (Focus 3)

E-government

Covered to some extent by InterPARES 1 research.

Concern for authenticity, but often confused with authentication.

Accuracy assumed, not often addressed.

Reliability often used to apply to delivery of services, not to the records themselves.

Outputs

Literature review of the concepts of authenticity, accuracy and reliability in the arts.

Annotated bibliography of the concepts of authenticity, accuracy and reliability in the arts.

Discussion of literature review, and analysis of case studies at international conferences and in journals.

Underway: literature review for science, and for e-government.