

DEFINING AUTHENTICITY IN THE DIGITAL ENVIRONMENT

What is an authentic digital object? In January, 2000 the Council on Library and Information Resources (CLIR) convened a group of experts representing different domains of the information resources community to answer this question. CLIR asked 5 of the participants to explore this question by writing position papers that identify the attributes that define authentic digital data over time. The primary goal of this project is to create a common understanding of key concepts and the terms various communities use to articulate them.

The concept of authenticity in recorded information connotes precise, yet disparate, things in different contexts and communities. It can mean being original but also being faithful to an original; it can mean uncorrupted but also of clear and known provenance, "corrupt" or not. The term has specific meaning to an archivist and equally specific but somewhat different meaning to a rare book librarian, just as there are different criteria for assessing authenticity for published and unpublished materials. In each context, however, the concept of authenticity has profound implications for the task of cataloging and the description of an item, and equally profound ramifications for preservation by setting the parameters of what is preserved and, consequently, by what technique or series of techniques.

Behind any definition of authenticity lie assumptions about the meaning and significance of content, fixity, consistency of reference, provenance, and context. The complexities of these concepts and the consequences for digital objects were explored in the 1996 paper *Preserving Digital Information : Report of the Task Force on Archiving of Digital Information*. Because there is no universal mandate about what must be preserved and for what purpose (for example, an archivist's emphasis on records that bear evidence vs. a librarian's emphasis on content that could serve multiple purposes over time), there may be many ways to describe the item being preserved and what aspects of the item must be documented to ensure its authenticity and its ability to serve its purpose over time. The issue of authenticity must also be resolved before humanists and scientists can feel confident in creating and relying upon digital information.

Creating common understanding about the multiple meanings and significance of authenticity is critical in the digital environment, in which information resources exist in many formats yet are interactive. From peer-reviewed journal articles to unpublished e-mail correspondence, these resources are integrated and can interact and be modified in a networked environment. Can the distinctions that have proved to be helpful heuristic devices in the analog world, such as edition or version, document or record, help us define a discrete piece of digital information? How can we define the distinct attributes of an information resource that would set the parameters for preservation and mandate specific metadata elements, among other important criteria?

The essential question to be addressed in each position paper was: What is an authentic digital object and what are the core attributes that, if missing, would render the object something other than what it purports to be?

In considering this central issue, other questions arose, such as:

- If all information – textual, numeric, audio, and visual – exists as a bitstream, what does that imply for the concept of format and its role as an attribute essential to the object?
- Does the concept of an original have meaning in the digital environment?
- What role does provenance play in establishing the authenticity of a digital object?
- What implications for authenticity, if any, are there in the fact that digital objects are contingent on software, hardware, network, and other dependencies?

These are some, but by no means all, of the issues that were addressed at the workshop.

CLIR sought expertise from the major stakeholders in these issues: librarians, archivists, document historians, technologists, humanists, and social scientists. Because so many concepts of authenticity derive directly from experience with analog information, we also called upon experts in the traditional technologies, such as printing, to elucidate key concepts and techniques for defining and securing authenticity of information bound to a physical medium.

CLIR will soon publish a report of the work accomplished at the meeting. By doing so, we hope to clarify terminology, to give guidance to those developing specifications for description and preservation of electronic documents, and to enlighten various constituencies generally about multiple aspects of integrity and authenticity.