Archival Quality in Digital Preservation Repositories: Constructing a New Approach to Metrics

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Abstract: Preservation in the digital world places both the physical and intellectual integrity of the digital archival object at the center of a complex equation of theoretical and practical import. The relationships among trust, archival quality, and user expectations for usefulness increase in complexity with the scale of digital archives. For an institution and its community of users to trust that individual digital objects are accurate, complete, and intact and to know that deposited objects have the capacity to meet a variety of uses envisioned for them by different stakeholders, repositories must validate the quality and fitness for specific purposes of individual objects they preserve. This presentation highlights the results of a planning project, generously supported by the Andrew W. Mellon Foundation. The organizational context for the research on is The HathiTrust digital preservation repository, which presently contains over 6 million objects, serves as the organizational context for the research. The methodological issues that underpin and enable the research are of central relevance to the assessment of quality in an archival context. The presentation defines a theory of archival quality in the context of digital preservation, and then reconceptualizes quality as the absence of error relative to prospective uses. The presentation presents and describes an explicit testing and evaluation methodology whose longer term goals are automated quality control and the branding the trustworthiness of some significant subset of deposited content for particular uses. The presentation concludes with the findings of a first test of the new quality measures with a sample of digitized volumes from the Google Books project at the University of Michigan.

About the author:

Paul Conway is associate professor in the School of Information at the University of Michigan. His research encompasses digitization of cultural heritage resources, particularly photographic archives, the use of digitized resources by experts in a variety of humanities contexts, and the measurement of image and text quality in large-scale digitization programs. His work is supported by the National Science Foundation, the Andrew W. Mellon Foundation, and the Institute for Museum and Library Services. Conway has extensive administrative experience in archives and preservation fields and has made major contributions over the past 30 years to the literature on archival users and use, preservation management, and digital imaging technologies. He has held positions at the National Archives and Records Administration, the Society of American Archivists, Yale University, and Duke University. He is a Fellow of the Society of American Archivists and serves on the Editorial Board of American Archivist.