Test Database for Digital Visual Resources in Art History

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Last spring, the Cornell Institute for Digital Collections (CIDC), under the direction of Peter B. Hirtle and Anne R. Kenney, convened a group of researchers, technologists, archivists, librarians, scholars, and funders to discuss productive ways to develop and use digitized text and images in support of teaching and research. (1) The group came up with several recommendations that CLIR will be pursuing over the next year.

Of immediate interest is the group’s strong recommendation to build a rich test database of digital visual resources in art history. Unlike the Academic Image Cooperative, which is developing a collection of curriculum-based digital images to be used for teaching, the database is intended to serve as a testbed for the development and evaluation of technical applications for creating, managing, and exploiting digital image content. It would be constructed to support experiments by the educational, cultural, commercial, and research communities that would yield statistically valid results in several areas. For instance, such a database might support experimentation and evaluations in quality assessment, image processing, content-based image retrieval, image registration, authentication, performance metrics, migration, and descriptive searching. The database could provide a powerful unifying force for comparative analyses that cover a range of disciplines, technological approaches, and longitudinal studies. Such test databases exist in other domains—full text, fingerprints, handwriting, photography, and face recognition—and their availability has driven the development of new processes and products.

The corpus of images selected for this initiative would have to provide sufficient breadth, depth, and variety to constitute a statistically valid database for the field. It would need to be promoted as a community resource that would provide a common benchmark against which to measure and compare processes and approaches. Although initially focusing on art history resources, the database would be developed in such a way that it could serve the humanities computing culture in general and accommodate new lines of research as they arise.

CLIR is supporting the work of a small planning group, chaired by Clifford Lynch, executive director of the Coalition for Networked Information, to develop a formal proposal for the test database that can be submitted to funding organizations in 2001. The planning group will consider scope, methodology, one-time and ongoing costs, requirements for an institutional home, and appropriate uses of the database. As part of its charge, the group will examine comparable databases and gauge user demand for a testbed for digital visual resources. It is anticipated that a Request for Proposals for both creating and maintaining the database will be developed as a result of the planning group’s efforts. By supporting this initiative, CLIR is serving as a catalyst for the development of an important resource tool that can serve both the visual resources and the digital library communities over the next decade and beyond.

1. CIDC’s mission is to explore the use of emerging technologies for expanding access to cultural and scientific collections. It develops digital resources and supports their effective use for research, teaching, and scholarship. CIDC also conducts applied research to test and evaluate the utility of such resources for the Cornell community as well as diverse global audiences. See http://cidc.library.cornell.edu/.