Cooperative Imaging: Scans Well with Others

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Digital imaging technology can assist libraries, archives, and museums in achieving a level of cooperation never before possible. Institutions traditionally have cooperated in filling voids within local collections --microfilming archives and offering them for sale, supplying missing journal issues, and, most obviously, participating in interlibrary loan. However, digital imaging offers the ability to create virtual collections from items held at a number of geographically disparate institutions. It also enables a single network interface, allowing researchers access to materials without concern for their physical location. Cooperative projects using digital imaging also can link primary source materials together with secondary resources to provide users with a strong collection capable of satisfying the requirements of all but the deepest research.

What is Cooperative Digital Imaging?
Cooperative imaging can take a number of forms. At its most basic, cooperative projects have consisted of institutions pooling resources to purchase an imaging workstation(s) for use by all participants, or to use their aggregate buying power to secure lower per-image conversion costs from service bureaus. Another possibility is for institutions to scan and network images independently but provide a single access point for all collections (a large-scale example is the Association of Research Libraries [ARL] Digital Image Database [http://www.arl.org/did/]).

The type of cooperation most often associated with digital imaging creates the virtual collections described above. Examples include Research Libraries Group's Studies in Scarlet project (http://www.rlg.org/scarlet/sis.html) and the Library of Congress' American Memory project (http://memory.loc.gov/ammem/). In both cases, lead organizations provided the leadership and guidelines (and even partial funding), and contribution of collections was opened to libraries and archives across the country. Although these examples represent the efforts of the large research libraries, the activity is open to libraries, museums, and historical societies with all sizes and types of collections. In fact, the advantages of cooperation for small institutions may be greater than for larger research libraries.

Why Cooperate?
The main and obvious reason for cooperation is to provide users with enhanced access to collections. But there are additional reasons that benefit the institutions themselves. Cooperation offers opportunities to:

- Share expertise
- Save costs on conversion
- Increase opportunities for funding
- Heighten visibility for the collections by linking with similar collections and to other institutions.

Perhaps the biggest selling point for smaller institutions is the ability to share expertise. Several institutions can work together to solve problems of converting paper- and film-based collections to
a digital format and networking these collections, along with the attendant problems of cataloging and creating metadata.

**How Does Cooperation on Digital Imaging Differ from Cooperative Microfilming Projects?**

The biggest difference between microfilming and digital imaging projects is complexity. In addition, there are established procedures and standards for microfilming, whereas we are still learning about optimal digitizing methods (hence this publication). Preservation microfilming, while requiring the participation of selectors and catalogers, is largely an undertaking of preservation reformatting staff. Selector and cataloger expertise and involvement is certainly necessary, but such folks are not asked to do anything out of the ordinary. Digital imaging requires an altogether wider level of participation from every institution, involving more involvement from a variety of staff, especially the inclusion of systems personnel.

In addition, digitization projects are not as fixed as microfilming, where the end product is essentially just cataloged and shelved. Imaging projects are not completed with the creation of digital images and their associated metadata (a complex issue in and of itself). The technical and administrative issues of networking and providing access are legion, and they must be considered and resolved before the first page hits the platen.

- Will the images be available via the Internet?
- How will rights be managed?
- Will computer-searchable text be provided along with the images of textual items?
- Who is responsible for maintaining access to the images?
- Who owns the aggregate collection of digital images?

But digital imaging can result in a more useful end product than microfilming -- one that allows simultaneous access to collections by multiple users. In addition to the benefits discussed above, cooperative projects increase the chances of obtaining outside funding, as many grant agencies have demonstrated a preference for coordinated, multi-institution projects. Cooperative projects may actually prove less expensive (*i.e.*, more cost effective) on a per-image basis, as many of the costs relating to imaging are not so dependent on the number of images or participants and, if outsourcing, the conversion cost per image can be less.

From the standpoint of the user, cooperative projects are more likely to produce a desirable end product, both in terms of content (using the most relevant items from several collections) and form (benefiting from shared expertise, database design, intellectual access, web interface, and so forth). This is especially true for smaller institutions, where by pulling together or working with larger institutions their collections can become more useful to the researcher.

**Concluding Thoughts -- or How NOT to Cooperate**

There are many examples of successful cooperative imaging projects: Studies in Scarlet, American Memory, the Colorado Digitization Project ([http://coloradodigital.coalliance.org/](http://coloradodigital.coalliance.org/)), and the various implementations of Making of America (see, for example, [http://moa.cit.cornell.edu/_MOA/moa-mission.html](http://moa.cit.cornell.edu/_MOA/moa-mission.html) and [http://sunsite.berkeley.edu/moa2/](http://sunsite.berkeley.edu/moa2/)). Much can be learned from these examples, but it is also worth considering those projects that fail to get off the ground -- or to move from planning to implementation.
The most common causes of such failure include the reluctance to commit resources (especially staff, and especially staff with the technical expertise), the desire to wait for industry standards to appear before moving forward, and the failure to define project objectives. Digital imaging is a resource-intensive activity and cannot be undertaken without the commitment of staff. Waiting for standards to appear is no reason to hesitate. Although there are few standards relating to digitization, it must be recognized that best practices and other guidelines are appearing.

Particularly difficult with cooperative projects is the last point: developing firm project objectives. Many institutions are interested in undertaking imaging because it is a hot activity. They are only able to state a project's purpose in vague and unmeasurable terms related to improved access. For a project to be successful, it must have firm, quantifiable objectives.

On a broader level, cooperative imaging projects fail because planners have yet to establish independently what role imaging will play within their own institution. Institutions need to confront the complexities of and the myriad issues raised by digital imaging -- networking, metadata applications, database creation and maintenance, rights, reference services for networked users -- before a project is planned. Although it is unlikely that such issues can be resolved before a project can begin, they must be understood by all parties before moving forward.

When all is said and done, a cooperative project may seem on the surface to complicate an already complicated activity. But cooperation offers the considerable advantage of bringing together a larger number of experts with greater and more varied knowledge and experience than a single institution could ever field, thus increasing the chances of success.

One final reminder: Although the examples cited above involve some of the largest libraries in the country, cooperative imaging is open to institutions of any size. In fact, smaller institutions have much to gain from cooperation and much to offer. In brittle books microfilming, the best or only copy of an item is often located outside of the participating research libraries. The same is true with digital projects. Small and medium-sized libraries, as well as specialized libraries such as museum or medical libraries, have much to contribute when it comes to archives, manuscripts, photographs, serials, and other desirable materials. Whether participation is decided by geographic proximity, library type, or simply by joining with other institutions with similar or sympathetic holdings, all institutions can take part in an activity that brings collections together to a degree never before possible.

Summary of Key Points

- Define scope of project, including appropriate collections and level of indexing.
- Define roles of participating institutions.
- Define areas of responsibility for each institution.
- Establish measurable objectives to evaluate success of project upon completion.
- Agree on long-term maintenance of digital images and associated metadata.