The Library of Congress/Ameritech
FINAL REPORT
National Digital Library Competition

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Project Title
AMERICAN INDIANS OF THE PACIFIC NORTHWEST

Consortium Members
Cheney Cowles Museum/Eastern Washington State Historical Society, Spokane
Museum of History and Industry, Seattle
University of Washington Libraries, Seattle

Year of Award
1997/98

Report Type
Final report
Section 1: Summary of Performance

Using your project description and the plan of work approved by the LC/Ameritech NDL Competition as a point of departure:

1. Provide a description of the major activities that occurred during the award period.

A. SELECTION OF MATERIALS TO BE SCANNED

Our project created a digital collection of approximately 2,300 photographs and other images and over 7,600 pages of scanned text. The collection is complemented by ten commissioned essays.

This virtual collection was created from images and text drawn from three different repositories and many separate collections within those institutions. Thus a major project activity was the selection of the text and images to be included in the digital collection. For scanning and indexing purposes, a list of Indian Commissioner Reports pages and a list of Pacific Northwest Quarterly articles to be included in the project had to be created. "About The Collection" on the site home page provides details about the criteria used in selecting materials included in the project.

B. RIGHTS MANAGEMENT

Although there were not rights management issues for most of the images and text, it was necessary to secure permission to include some materials in the site. For example, many of the Pacific Northwest Quarterly (PNQ) articles had photographs reproduced in the articles that were from repositories other than the three partner institutions. Since photographs are usually issued for one-time use, we decided to seek permission to include digital versions of the published images in the project. This decision is in line with the current thinking in the archival community.

Twenty-one institutions granted permission to include PNQ articles that included images from their collections. Only two institutions did not grant permission. The PNQ articles with the latter images were not included in the project. Permission was requested and granted from five institutions or publishers to include supplementary material selected by study topic authors.

C. WORK WITH AUTHORS AND EDUCATORS

A third activity was identifying and contracting with the authors for the eleven essays commissioned for the project. The authors included anthropologists, educators, and historians, all of whom have close ties to Indian communities. The authors functioned as an informal panel that provided advice on the project and made decisions on the format and level of the essays and the study questions. They also advised on the selection of some of the materials included in the project. The authors, e.g. made the final selection of PNQ articles. Some additional text and images were included at the suggestion of the authors. We attempted to schedule a meeting with the study topic authors and the two local American Memory Fellows, but were not successful due to the latter's teaching schedules and other commitments.
D. SCANNING

Several scanning methods were used. Photographs were scanned in-house using a Microtek 9600XL flatbed scanner. As indicated in the grant interim report some additional equipment was purchased with Libraries and University Intel grant money. University students with art and/or architectural backgrounds were hired as scanning technicians. Whenever possible original images were used for the scanning of the University of Washington (UW) and Museum of History and Industry (MOHAI) images. Photograph scanning was supervised and quality control done by the Photographs and Graphics Specialist in the Manuscripts, Special Collections, University Archives Division and done in that Division.

Slides were produced of the Cheney Cowles Museum/Eastern Washington State Historical Society (EWSHS) images by a contract vendor in Spokane. The slides were scanned by a Library Specialist in the Libraries Monographic Services Division and one of the scanning technicians using a Nikon LS-2000 slide scanner. UW's Classroom Support Services (CSS) created color negatives of 21 images in bound UW rare books and scanned the negatives using an Agfa Duo Scan flatbed scanner.

The student scanning technicians scanned the text in bound volumes using a PSI Minolta 3000 scanner under the supervision of the Project Director. We were able to find unbound copies of most of the PNQ issues with articles that had photographs. These were scanned on a flatbed scanner which enabled us to get better resolution of the photographs than we would have gotten using the Minolta scanner. Because the students scanners graduated before completion of the scanning of the PNQ articles, the remaining articles were scanned in CSS. The UW Publications in Anthropology were microfilmed and the microfilm digitized by Preservation Resources. Microfilming targets were prepared by the Libraries Preservation Office.

Additional information regarding digitizing the collection is found on the project's home page.

E. INDEXING AND CATALOGING

PNQ articles and scanned text in the Indian Commissioner Reports were indexed by the Special Collections Indexer/Finding Aids Specialist using InMagic software. Metadata conversion and verification of subject headings and name authorities for the UW and EWSHS photographs were done in the UW Libraries Monographic Services Division. Metadata for the Indian treaties and UW Publications in Anthropology were converted from the MARC records at UW by the Head, Special Materials Cataloging Section. Metadata for the MOHAI photographs was created from MARC records by the Museum cataloger.

F. SYSTEMS MANAGEMENT

Systems management was done by the NT/Content Administrator for the UW Libraries Digital Initiatives Program. This included setting up the databases, file naming, space management, backup, html work, etc. Other activities included combining the cataloging metadata from MS Excel, MS Access, and InMagic databases and using Excel macros to form two Content databases.
For this project, a prototype page-turning mechanism for handling multipage documents was developed by CISO (Center for Information Systems Optimization at the University of Washington). Each document required the creation of an XML object defining the structure of the multipage document. The XML creation process was largely accomplished through the use of MS Excel macros.

G. GIS Maps

Two GIS maps showing contemporary locations of Indian reservations and settlements in the Pacific Northwest and in Southeast Alaska were created for the project by the UW Libraries Geographic Information Systems Librarian.

H. REVIEW PANEL

Our project proposal called for review of the images selected by Native American panels. The Cheney Cowles Museum/Eastern Washington State Historical Society has an American Indian Advisory Committee which has worked closely with the Museum since 1992. The Committee delegated responsibility for the review to Lynn Pankonin, Curator, American Indian Collections at the Museum.

In the proposal, we envisioned establishing a review panel for the UW/MOHAI images. After consultation with the Curator of Native American Ethnology and Curator of Native American Art at the Burke Museum of Natural History and Culture, we decided to use an existing advisory board at the Burke Museum located on the University of Washington campus. We also deferred review until the end of the project when image metadata would be available. We hope to set up a review meeting in March. Part of the review may be done "electronically" using the web site.

2. Compare the accomplishments of the project in quantitative and qualitative terms with the objectives proposed in the application.

The objective of our proposal was to broaden access to new constituencies by enabling K-12 teachers and students and other researchers to have direct access to important source material on the Northwest Coast and Plateau Indian cultures. We believe the project achieved that objective.

In our revised grant proposal we envisioned a digital collection of 2,350 photographic images and over 6,000 pages of text drawn from the collections of the three partner institutions. The text page total included 132 pages of essays commissioned for the project. Slightly fewer photographs (2,295) but substantially more text (7,610 pages) plus the study topic essays were included in the collection. The number of images included from MOHAI was 130 versus 50 in the proposal.

The proposal called for ten study topic essays and an overview essay. The final collection includes nine study topic essays and the overview essay plus supplementary home page material. One of the study topic authors we contracted with did not deliver his essay although he had months to do so and was enthusiastic about the project. This essay was to be on Euro-American representation of native culture as reflected in illustrations in explorer journals and photographic images.
We are very pleased with the quality of the essays and generally the quality of the scanned images and text. The major difficulty was scanning bound volumes of the *Indian Commissioner Reports*. Some of the quality problems for the latter text related to the quality of the original text, but the limitations of one-bit scans produced by the scanner we were using was the major problem. We had some difficulty in getting the file size of the scanned text down to a manageable size.

3. Indicate the reasons for omissions and changes in project activities whenever a planned activity did not occur, the scope of an activity was curtailed or expanded, or a new activity was added to the project;

As indicated above, more text and slightly fewer images were included than originally planned. More detailed examination of the *Indian Commissioner Reports* and *Pacific Northwest Quarterly* produced more relevant text than was reflected in our original count. In selecting images we attempted to eliminate near duplicates or repetitive images thus reducing slightly the total number. For example, the UW collection includes many images of the same totem poles. A representative selection of images showing the poles from different angles and time periods was included.

Our proposal called for using a library school student to input records. We decided it was more practical for the Monographic Services Library Specialist to do as part of her editing work. Our proposal called for using graduate students with experience in scanning and/or photography to do scanning. Three students were hired, all with scanning experience, but two were undergraduates. We selected students with art and architecture backgrounds as "visual literacy" proved to be a useful skill in scanning.

As indicated above in I.H. there were also changes in the Indian review of the images included in the project.

4. If project performance was affected by changes in key project personnel, explain why the changes were made and how performance was affected;

Our Photographs and Graphics Librarian resigned early in the project which meant we did not have the benefit of his knowledge of the collection developed during 15 years in his position. The Special Collections Cataloger, with experience in image cataloging, resigned before the project began and the position was not filled during the project. This meant that we utilized staff experienced in cataloging, but not specifically in image cataloging.

5. When project goals were not achieved, indicate what plans there are to continue the project after the award period, how project activities will be funded, and when they are likely to be completed; indicate if there are any plans to continue the project after the award period because of the success of the program and the interest it has generated;

Project goals were achieved, although as indicated above, review of the UW/MOHAI images by the American Indian Advisory Board is pending.
Currently there are no plans to continue the project after the award period, however additional text and images could be added. Images from other institutions that would complement the collection would be especially welcome. For example, although there is extensive text on Oregon Indians there are very few photographs of Oregon Indians in the digital collection, reflecting the lack of such images in the collections of the three partners. There has been recent discussion on the UW campus regarding a possible collaborative project to digitize additional American Indian materials. Although not a continuation of the LC/Ameritech project per se, the latter project does serve as a model for such a collaboration.

6. Describe any lessons learned in the process of implementing the project. For instance, were particular aspects of digitization and project management more difficult or easier than initially anticipated? Did you discover more efficient or effective ways to accomplish particular tasks? Please note, unless notified otherwise, the Library of Congress may make this section available (in whole or in part) for access by others undertaking digitization projects.

This was our first major digital library project and was in many respects, a complex project. We learned by doing and employed the skills of many different people. (See "Acknowledgements" on the site's homepage.) Our experience gained in this project will be invaluable in future projects.

A. SELECTION AND RIGHTS MANAGEMENT:

Selection of images and text to include in the collection was time consuming as we were selecting specific text pages and images instead of scanning entire collections or volumes. When we drafted our grant proposal, we had not determined that it would be necessary to gain permission for the digital reuse of images published in Pacific Northwest Quarterly articles (see I. B.). This added another time consuming task.

B. WORK WITH AUTHORS AND EDUCATORS:

Although it took some time to identify the essay authors, these individuals formed an informal panel that provided invaluable advice on the project. They were enthusiastic participants in the project.

C. SCANNING:

We had experience in previous projects in image scanning and this was done with relatively few problems. However, this was our first project that involved extensive text scanning. The major difficulty was scanning from bound volumes. Quality control required more time than anticipated and many more rescans were required than there were for the image scans. The scanning technicians worked from lists, but sometimes missed pages since we were only doing selected pages. Checking for completion was thus essential. Utilizing art and architecture students as scanners proved to be especially effective.
The Minolta PS 3000 scanner put substantially less stress on the bound volumes than a flatbed scanner but the Minolta 3000 limited us to 1 bit scans that varied in quality. Although the "face-up" Minolta scanner was more gentle on the bindings of the Indian Commissioner Reports than a flatbed scanner, volumes were damaged during scanning since the binding structure of the volumes was fragile and, in some cases, the paper quality poor.

In retrospect, we would have used a slightly different file naming for some of the text files. For example, re-scanned pages, pages with Roman numerals, and pages without numbers were not planned for. Adding zeros before page numbers under one hundred, e.g. "001" instead of "1" would have allowed consecutive sorting and made identification and checking for missing scans easier.

We found that the color negatives of illustrations from bound rare books picked up paper foxing. When the negatives were scanned the foxing was emphasized. We were able to eliminate most of this using Photoshop. Color correction was more difficult when for example, we had a negative with blue sky and green foliage.

We created lists of scanned text, but not of images. In retrospect, an image list would have been useful in checking on the status of scanning.

On a positive note, we determined that it was possible (and seemed to work well) to set up scanning guidelines that keyed off of a "worst case scenario" for image size/detail, so that the scanning technicians would not need to be re-set the scanner settings for each image.

D. SYSTEMS MANAGEMENT:

As indicated in our Interim Report, there was a delay in hiring the computer specialist for the UW Libraries Digital Initiatives Program. However, we were fortunate in hiring a skilled systems manager whose technical expertise was essential for the success of the project.

E. REVIEW PANEL:

As indicated above, in retrospect it made more sense to utilize an existing Indian advisory board at a campus museum than to identify and appoint members to a board created for the project. In our initial work plan the review was to be done early in the project. However, doing the review at the end of the project when the collection was scanned and cataloged made more sense.

Overall "American Indians of the Pacific Northwest" was an interesting, but challenging project. Our experience gained in this project will be invaluable in future projects. The collections of the three institutions complemented each other enabling the creation of a virtual collection that will be useful to a broad range of users throughout the world.