

Quilt Index National Leadership Project: A Proposal to the Institute of Museum and Library Services for Museum/Library Collaboration

1. National Impact

The Michigan State University Museum, collaborating with MSU's digital library research center, MATRIX; The Alliance for American Quilts (Primary National Partner); the University of Nebraska-Lincoln Libraries; the University of Texas, Winedale, Center for American History; the Tennessee State Library and Archives; the Museum of American Quilter's Society; the Rocky Mountain Quilt Museum; and the Daughters of the American Revolution Museum proposes to lead the Quilt Index National Leadership Project. Building on a successful pilot phase funded by the National Endowment for the Humanities, this collaboration will develop the Quilt Index as an innovative national model for distributed online management and presentation of thematic collections for museums and libraries.

The Quilt Index was conceived by the board of the Alliance for American Quilts, a non-profit organization comprised of a broad range of key scholars, curators, librarians, and quilt artists in the US dedicated to the study and preservation of American quilts. The Alliance partnered with MATRIX: Center for Humane Arts Letters and Social Sciences Online and Michigan State University Museum to develop and pilot the Quilt Index concept with four quilt collections with support from the National Endowment for the Humanities. This highly successful project is now poised to develop expansion capacity and implement multi-institution collaborations with a variety of museum, library and third-part partners holding quilt related collections across the country. The methods, protocols and tools developed will serve as a model for thematic and object-type specific online presentation of cultural and scientific artifacts.

Museums and libraries of all sizes often find themselves storing and archiving collections of items that, while important, the organization does not exhibit or make available to users. The reasons for this underutilization of collections range from a mismatch between institutional mission and the materials, a scarcity of significant holdings, or simply a shortage of space and resources to make the collections more accessible. Yet these underutilized objects themselves may in fact be very significant, particularly if combined with other like objects and made accessible to an interested scholarly and general public. This project proposes to expand a model for making these types of collections more accessible while at the same time linking them with similar off-site objects, thus creating an extraordinary resource and stimulating increased use of collections museums and libraries.

Quilts may be a perfect example of this situation and the ideal type of object for such a model. Quilting has become the quintessential American art, its form and history coming to represent the very formation of American identity. Originally produced at home by women using patchwork piecing saved through thrift and necessity, quilting has become a multi-billion dollar industry occupying more than 21 million people producing quilts that in many cases challenge the traditional high forms of art collected in museums throughout the US and the world (NFO Research 2003; Kimmelman 2002).

Scholars increasingly focus on quilts to gain evidence and information that can increase understanding of many historical and contemporary aspects of American life; and the tremendous public draw of quilt exhibits has boosted museum attendance across the country (Barnes 2002). There is now a strong scholarly and public interest in quilting, evidenced by the extraordinary set of published quilt scholarship, the enormous success of such recent blockbuster exhibits as the Gee's Bend exhibit at major museums, and scores of grassroots quilt documentation projects conducted in every state in the US that have documented tens of thousands of quilts in personal and community contexts, described their physical appearance, and captured the history of their production, ownership, and use. There are an increasing number of museums with significant quilt and textile collections as well as a small, strong group of quilt specific museums that focus on this art form for presentation. Yet many quilts and most of the images and information gathered about American quilts remain scattered in museums, libraries, and historical societies through out the country, largely inaccessible to the public and not linked to other relevant materials.

The National Leadership Collaboration project of the Quilt Index has three main goals, determined through needs assessment conducted over the course of the pilot project development and through user/audience surveys of the pilot project fully online since October 2003. The three national leadership goals are

- 1) Critical Mass (to index a critical mass of over 15,000 quilt objects and associated metadata from collections identified in the grant);
- 2) Virtual Repository Tools (to lead and serve U.S. quilt and quilt information collections in museums, libraries and archives with content management and interoperability, a) as a management system for digital collections, b) as a published distribution system for larger or more established groups who already have internal or even online databases, and c) with true interoperability/cross querying of large collections already online);
- 3) And Holding Enhancements (to enhance the value, usefulness and relevance of the Index's thematic presentation with targeted inclusion of publications, special collections, and ephemera).

The critical mass of quilt materials never before linked together will provide expansive opportunities for new scholarship, public exhibition, virtual exhibition, and education in both directed and undirected ways at school and in public life-long learning situations. The model for distributed collections development around a theme can be applied to many different cultural heritage and natural resource areas, from fossil types to historic toy objects. The various levels of online digital object management and interoperable linking tailored to the needs of different collections and exhibit conditions will serve a wide variety of circumstances. Finally, the selection process for determining relevant new materials as well as the actual use of those special collections will help guide similar projects.

2. Adaptability

For any institution with quilt-related materials, the Quilt Index's national leadership project will provide specific protocols, tools, and standards for presenting their quilt

objects to a national and international audience in the value-added context of related quilt materials.

This project will also provide a blueprint for collecting institutions to create similar collaborative projects in cultural heritage. The Quilt Index offers a model for creating an online preservation, management and presentation system that can be implemented for other object types. MATRIX has advanced multiple-project repository development through the research and development of its digital repository, called REPOS(itory). REPOS is a database-driven, online digital repository that allows institutions to ingest, manage, and deliver digital objects and their corresponding metadata. Modeled after the METS schema, the database table structure of the MATRIX repository is highly flexible. MATRIX participated in the creation of METS (Metadata Encoding & Transmission Standard) - a metadata standard specifically created for describing all facets of a digital object. These steps have moved us toward the ultimate goal of creating a centralized, interoperable set of metadata that can be utilized across projects and institutions that are digitizing their content. REPOS is unique in that it can utilize any metadata scheme without altering its table structure or design, allowing multiple projects with vastly different collections and metadata to use the same architecture to create their own digital library. Because the same infrastructure is used for all projects, MATRIX can build dynamic ingestion and delivery applications that work for any project utilizing the system. This modular approach allows for the creation of new digital collections in minutes and vastly reduces the cost of creating and delivering online projects. Because all projects are housed within the same database and table structure, cross-collection searching and resource building is made much easier. The net effect is that REPOS (open source and easily transferable to other servers) has provided institutions with a cost-effective digital library/archive system that fully utilizes best practices within the discipline.

Because the repository stores information about the kind of metadata being used by each project, MATRIX has developed a PHP based online utility that utilizes this information to generate dynamically metadata ingestion/administration forms for each of the partners. Projects can begin their participation in the repository by selecting from existing metadata schemes (Dublin Core, MARC, EAD, Quilt Index Comprehensive Fields, etc.) which they can then modify with any project-specific metadata necessary to describe the objects they will store in the repository. This information is then stored in the database and instantly used to generate online forms to begin entering metadata. The tools developed also facilitate the dynamic generation of galleries and aid in the searching for files by format.

This flexibility is essential to working with regional quilt documentation projects. Each project selects the Quilt Index Comprehensive Fields Schema in the Repository, then selects, from that schema, the relevant fields or information that their documentation project collected. Another important part of this design is the use of controlled vocabulary from existing sources, in this case the AAT modified with results from state documentation project findings. Quilt-related terms drawn from this comprehensive field set are now part of the metadata standard, and would be used to form the lists of legal values for certain vocabulary-controlled fields. As extensions to the available

vocabularies are needed, they will be contributed back to those vocabularies. Finally, the specification must adapt to the fact that different subsets of data have been (and will be) collected by different organizations. Thus the Quilt Index balances central standardization with respect for local variation. The system uses web-based entry forms designed for easy and virtually error-free database updates without any knowledge of database software. This system will be enhanced with “crosswalk” tools that match fields.

3. Design

No comprehensive and accessible resource currently exists anywhere in the country to unify access to quilts and quilt materials for scholars, teachers, students, and the general public. Clearly a virtual repository provides the most realistic solution to meeting the need for national information coordination that complements and strengthens many diverse local efforts. An informal survey of the Quilt Index conducted in March 2004, along with statements of support gathered from archivists, curators, researchers and scholars identified the specific needs of four target audiences for this project. First and foremost, museum and archival collections managers will be able to use the Quilt Index standards for digitization, preservation, and access as a tool for reorganizing and managing existing offline databases and quilt collections, and then contributing these to the Index itself. Second, the resource is invaluable to the growing number of quilt specialists and historians across the country. These scholars have already indicated the fundamental value of the Index within a field bereft of sound primary and secondary resources; this value will grow exponentially as the Index gathers more content. Third, the Index has vast potential for teachers and scholars with interdisciplinary interests. Survey feedback, along with discussion logs in H-Quilts, indicates that educational uses for the Index cross history, anthropology, geography, literary studies, history of art, and even mathematics. The study of material culture informs each of these disciplines, as research and analyses become increasingly inter-textual in nature. Last, as a national resource, the Index will work to provide the most comprehensive and historically thorough representation of our nation’s quilting heritage to a general public increasingly interested in this aspect of our cultural heritage.

Quilt Index National Leadership Project Goals and Objectives

1) Critical Mass: The project will establish a critical mass of quilt records in the Index (REPOS), in order to fulfill its cross-project research and presentation potential. The project will add 15,000 quilts to the Index, representing a range of holding conditions, a variety of large quilt datasets and detailed museum collections, and a sampling of collection themes. The project will complete the whole pilot documentation project datasets. In particular, MSU Museum will complete its digitization of the 5,000 quilts documented by the Michigan Quilt Project and housed at MSU Museum and 600 quilts from the permanent collection. University of Nebraska-Lincoln, the public repository for the 5,000 Nebraska Quilt Documentation will finish project slides and dataset compiled from survey forms. The University of Texas, Winedale, Center for American History, will draw from a permanent collection of 100 nineteenth century quilts and its repository for the Texas Quilt Documentation project. The Tennessee State Library and Archives which will complete data entry only for 1200 quilts remaining from the pilot project.

Museum of the American Quilter's Society, which holds perhaps the most significant and representative collection of contemporary quilter's art work, will reformat extant high quality digital images and contribute extensive descriptive data on each of its 250 quilts. Rocky Mountain Quilt Museum, a small regional museum with a local historical quilt collection and a small set of newly acquired contemporary quilts, will conduct digital photography and contribute detailed descriptive information. And Daughters of the American Revolution Museum will contribute images and detailed catalog information for its national quilt collection.

- 2) Virtual Repository Tools: The collaboration will also develop other services and applications for partners and other outside organizations. These include
- Harvesting and live query protocols using recognized standards and protocols such as OAI harvesting, Zing-SRW, and web services capacity for the Quilt Index;
 - Crosswalk Tools for mapping data from other databases into Quilt Index;
 - A database template of Quilt Index Comprehensive Fields in commonly used consumer software for distribution to other groups wanting to start digitizing data. This will facilitate future ingestion from new projects, reduce programming time both for local sites trying to develop system and for Index staff;
 - Universal training tools for Quilt Index entry;
 - Final Quilt Index Core Fields as "Dublin Core" for Quilts.

Thus the project will create a flexible system allowing for varying levels of participation and yet maximize access for target audiences. As a management system, The Quilt Index can serve as the only manifestation of the data, offering both preservation and access for a collection of any size. The Tennessee State Library and Archives and the University of Louisville Archives and Records Center both used the Index in this way. Neither institution has a strong emphasis in the quilt records which they hold, so the records were entered directly into the Quilt Index Repository as the only content management system online for the contributed materials.

As a published distribution system, the Index can serve as a non-exclusive online access point for sets of quilt materials that continue to be managed by the contributing institution, which will clean and prepare their data, then export it for ingestion and online publishing in the Quilt Index. To establish and codify this process, partners will collaborate to create "crosswalk" tools for metadata mapping (modeled after the Colorado Digitization Project's Cross Walk documents). In some cases after ingestion and online publishing, the Quilt Index will become the management system for the collection data, in other cases systems and workflows will need to be developed for regular maintenance. The Quilt Index's deployment of cross-querying capacity will also create searching and sorting mechanisms for real querying of other existing online databases. The sample project to be used to pilot this technology is the Library of Congress' American Memory Quilts and Quilt Makers.

- 3.) Holdings Enhancements: Through strategic expansion and cross-linking with other quilt research information and resources, collection managers can create richer online

multimedia galleries and give users search returns that add object depth and context. To do so, the collaboration will focus on

- 1) Developing metadata and keyword set for quilt research journals and oral histories;
- 2) Digitizing and including in Index searching, sorting and querying a sample of a key quilt research journal;
- 3) Identifying oral history projects focused on or containing significant documentation of quilting or quilters and create online reference listings;
- 4) And developing metadata to facilitate later inclusion of Oral Histories.

While there are many types of interesting quilt ephemera that could be used to pilot this phase of the project, rare journals containing edited and reviewed articles of quilt research are of special value. The project will digitize the full text of a quilt research journal in searchable form and make it accessible through the Index along with metadata developed in step one. *Quilt Journal: An International Review*, Shelly Zegart, ed. Louisville, KY 1992-95 is a relatively short run (100 pages total), which contains edited and some ground-breaking quilt research, yet is out of print and unavailable. The Kentucky Quilt Project has granted online distribution permission, for MSU Museum to digitize and upload the full text journals.

The project will collect and post an index of oral history collections that include quilters and quilt information on the Quilt Index website, per the need identified at the February 2004 Quilt Museums meeting held by The Alliance. A plan for expanding the Quilt Index to include oral histories can then be developed.

4. Management Plan

The design of the Quilt Index reflects the decentralization of both the quilting world and the Internet. Its structure adapts a central resource to local needs, necessitating careful and rigorous management and operating protocols. The MSU Museum is the lead organization and fiscal manager of the project. Administrative responsibility for planning and implementation rests at MSU with PIs Kornbluh, MacDowell and Richardson. The Museum, MATRIX and MSU's Contracts and Grants Administration (CGA) office have extensive experience with coordinating large scale, multiple partner projects. All subcontracts must comply with CGA's rigorous administrative requirements. At the outset, detailed work plans and budgets will be formalized between project PI's, CGA, and each Partner; and separate agreements will be made and signed with each Partner.

MSU Museum also beta-tests new project activities and will co-author National Leadership documents resulting from the partnership. MATRIX coordinates the technical work, is primary liaison to site partners and advisory bodies, and maintains internal project communications for all partners and the evaluator. The Alliance, as the Primary National Partner, is the national liaison to the quilt community and assists the evaluation program and with disseminating publicity. MSU Museum, MATRIX and The Alliance maintain close communication with each other. All three organizations have dedicated significant staff, facilities, and financial resources to the Quilt Index. (For detail, please see Partnership Statement.)

The major enhancement of the Quilt Index will accelerate its migration from a pilot project to a permanent resource. Therefore, the Alliance Quilt Index Task Force, which includes all key project staff and Alliance board members, and has served as the primary advisory body to the pilot, will evolve into a National Quilt Index Editorial and Curatorial Board. Comprising representatives of the new national leadership partners as well as existing members, the NQIECB will continue the responsibilities of the Task Force (such as reviewing controlled vocabulary), but will identify and admit new members, monitor the quality and development of combined educational and exhibit resources created from Index objects, and oversee the selection of value-added materials (including publications, commentaries, and contextual materials, such as oral histories and images). Acting in the capacity of a professional peer-review board, the NQIECB will lend scholarly authority to the new material created from the combined resources of the partner institutions. The Task Force and three lead institutions will oversee this transition.

5. Budget

The full budget request from IMLS for this National Leadership project is \$500,000, which will be apportioned between MSU Museum, MATRIX, The Alliance for American Quilts, and each partner, in accordance with the workplan. The majority of the funding to partners will take place in year one, for data cleaning and digitizing. The Alliance's the budget for year one is higher so that formative feedback from the quilt community can be exploited. Budgets for MSU Museum and MATRIX are slightly higher in year two, when most automated ingestion will occur, National Leadership documents will be written, and evaluation efforts will be concentrated.

6. Contributions

MSU Museum and MATRIX are providing considerable cost share to this project, primarily through dedicated salary and fringe benefits for professional staff. With a two-year request of \$214,819 for salary and fringes, MSU Museum and MATRIX combined are cost sharing \$316,489, far more than the 1 to 1 matching requirement. All partners are also contributing significant resources ranging from project oversight through director staff time, to volunteer labor and equipment costs. Please note that the costshare commitments by partners as reflected in the signed partner statements are not indicated in the budget because of MSU's significantly higher costshare. This provides a buffer for adapting costshare to the individual workplans of the partners so that the project can remain on-budget. For detail on Partner contributions, please see Budget Justification.

7. Personnel

Principal Investigators: Mark Lawrence Kornbluh, Director of MATRIX and Associate Professor of History at MSU, is a historian of 20th Century U.S. social and political history and an expert in delivering online humanities materials. Kornbluh sits on several national standards boards including the Best Practices in Humanities Digitization Advisory Board for the National Initiative for a Networked Cultural Heritage (NINCH) and the National Research Council committee advising the National Archives on long-term digital preservation. He and his staff at MATRIX will follow national standards in

developing this project. Kornbluh directs several large humanities preservation and presentation initiatives, including the NEH-supported Quilt Index and three NSF-supported projects to digitize, preserve and make widely available spoken word and textual resources in multiple languages. Kornbluh will link online presentation and development standards with the development of humanities content.

Marsha MacDowell is Curator of Folk Arts at the MSU Museum and Professor, Department of Art and Art History, MSU. MacDowell has published extensively on American material culture (with an emphasis on Michigan, Native American, and African-American quilting traditions); curated numerous regional and national exhibitions; and served as principal investigator on over 200 grants, including IMLS. A founding member of the Alliance for American Quilts advisory board and a board member of the American Quilt Study Group, she is originating editor of H-QUILTS. MacDowell directs the activities of the Great Lakes Quilt Center, Michigan State University Museum.

Justine Richardson is an Educational Media Specialist at MATRIX. Richardson has a background in Art History, American Studies, and Humanities Computing. Ms. Richardson serves as project director and manager for the Quilt Index and Quilt Treasures. She has written and presented on the Quilt Index, on gender and technology issues and on the development and coordination of distributed and collaborative online arts and humanities projects. Richardson will serve as project manager and MATRIX point person for the Quilt Index National Leadership Project.

MSU Museum Staff: At MSU Museum, Mary Worrall, MSU Museum textile and quilt collection assistant, will serve as primary MSU Museum staff liaison for beta testing of all forms of the Index development. Additional MSUM staff, whose work will be part of their staff duties include: Lynne Swanson, Collections Manager, Cultural Collections; Rebecca Clark, Folk Arts Archivist; Elizabeth Donaldson, Quilt Collections Assistant; and Pearl Wong, Collections Coordinator, Folk Arts.

MATRIX Staff: Amy Tracy Wells, Digital Initiatives Coordinator at MATRIX and assists in developing federally-funded digital research projects including documenting metadata standards and managing internal production. Her work is contributed as cost-sharing to this project. Michael Fegan is Chief Information Officer at MATRIX and has developed some of Matrix's most successful online projects; he is one of the key architects of the MATRIX online digital repository and will coordinate construction of the Index expansion and manage the technical integration of existing Partner databases into the Quilt Index. Dean Rehberger (Operations Manager) and Dennis Boone (Systems Administrator) will also contribute to the project through their staff duties.

Project Coordinators at Partner Institutions and Units:

The Alliance for American Quilts: Given the magnitude of the undertaking, Robert Shaw, Executive Director, will oversee this project for The Alliance, spending approximately 20% of his time over two years on evaluation and dissemination through the quilt field, and communicating and disseminating project reports, publicity, and

results as they develop. This is an essential role for making sure the National Leadership project fulfills the needs of the quilt community and the public. University of Nebraska-Lincoln Libraries: Patricia Crews, Director of the International Quilt Study Center, Department of Textiles, Clothing and Design in the College of Education and Human Sciences; and Katherine Walter, Chair, Digital Initiatives and Special Collections, will co-manage the project at UNL as part of their staff duties. University of Texas, Winedale, Center for American History: Denise E. Mayorga, Assistant Director, Winedale, will manage the project and oversee digitization staff and volunteers as part of her staff duties. Tennessee State Library and Archives: Assistant State Archivist Wayne Moore and Quilts of Tennessee Director, Marikay Waldvogel will co-manage the project. Daughters of the American Revolution Museum: Anne D. Ruta, Collections Manager, will be the DAR Museum staff person responsible for administering the DAR Museum participation in the Quilt Index project and making sure that money is spent according to grant requirements. Museum of American Quilter's Society: Susan Talbot-Stanaway, Executive Director of the Museum of the American Quilter's Society, will direct the project at MAQS. Rocky Mountain Quilt Museum: Janet Finley, Museum Director, will serve as project manager at RMQM.

Advisory Pilot Partners: Two staff members from the pilot project, Caroline Daniels, Archivist for Automated Systems at University of Louisville Libraries' University Archives and Records Center and Janice Tauer Wass, Curator of Decorative Arts, Illinois State Museum will serve in a professional advisory capacity to the Quilt Index National Leadership project.

The Quilt Index Task Force composition: The Alliance Quilt Index Task Force includes Shelly Zegart, co-founder and president of The Alliance board, as well as founding and Executive Director of The Kentucky Quilt Project and editor of *The Quilt Journal: An International Review*; Doug DeNatale, an independent consultant who specializes in ethnographic documentation and database development for cultural organizations; Marcie Ferris, Alliance executive board co-chair and Visiting Professor of American Studies at University of North Carolina at Chapel Hill; Alan Jabbour, Alliance Executive board co-chair and former Director of the American Folklife Center at the Library of Congress; Patricia Keller, Collections Manager at the Paley Design Center, Philadelphia College of Textiles and Science; Katherine Burger Johnson, Archivist at University of Louisville Archives and Records Center; as well as Waldvogel, Kornbluh, Richardson, Crews, and Wass.

8. Project Evaluation

An outcomes based evaluation is ideal for this project. A successful pilot is in place and has moved beyond evaluability assessment (Wholey, 1977), where a determination is made if a pilot is going according to plan and a true outcomes approach is appropriate.

Several key outcomes are evident in the program plan (Cronbach, 1980). Some are clear and quantifiable, such as raising the quilt index from approximately 1,000 to 15,000. Others require more subtle measurement, such as learning from owners of small collections of quilts if this program offers an improved opportunity to leverage their

collections. The evaluation will establish benchmarks at the outset of the project and provide formative, quantitative, and protocol analyses for evaluations. These outcomes and measures will cover the potential benefits as set out in the project proposal (Trochim, 1989). It is possible that unexpected benefits, or challenges, could result as a function of meetings, conversations, and other communications and experiences. The PI's will be asked to write a paragraph biweekly on their most positive and negative achievements regarding the Index project, and an additional expectation, observation or insight. These will be reviewed on a monthly basis and considered with respect to project goals. See the sample evaluation rubric in the attachments.

9. Dissemination

The Quilt Index already enjoys a wide following in response to the pilot version. H-QUILTS, a new international network created to develop online resources in research and education about quilts, is part of H-Net: Humanities & Social Sciences Online, which is headquartered at MATRIX. Over 400 scholars, folk artists, and educators use this moderated list, which is visible via the web and linked to H-Net's 140 international, interdisciplinary networks, including many in related fields of material culture, museums and popular culture. Dozens of experts used the list to inform the Quilt Index developers about fields for its databases, user issues, and potential problems as the Index emerged.

Information about the Index will continue to be available through each partner's publications and through presentations at scholarly conferences including the annual meetings of the American Historical Association, American Association of Museums, Museums and the Web, American Studies Association, American Quilt Study Group, and the American Association of State and Local History. Press releases about the Index are distributed to a variety of related publications. And a variety of webbed educational resources can be based on the Quilt Index; the Mary Shafer Exhibit is one example (<http://www.quiltindex.org/mary.php>). The expansion and cross-querying of partner collections will significantly amplify the impact of these educational resources by combining materials from diverse locales, cultures, and makers.

10. Sustainability

The Quilt Index pilot has demonstrated that it can bring significant change in the way quilt information is accessed and shared by museums and libraries across the country. The enlarged version will accelerate this transformation because of the greater variety of value-added documentation and the critical mass of new materials ingested into the system. As a model for such object based collaboration, it also has the potential to assist organizations that focus on other object-type specific materials. The Index's multiple access points enable partners to sustain existing collections through a process of technological transformation: their collections are preserved, their staff skills are improved, and their institutional horizons expanded because they are sharing their resources safely with a vast audience through a permanent archive. The Quilt Index is incorporated into an innovative, standards-based, and field-leading digital library at MATRIX, funded through a major National Digital Libraries II grant. The repository and this Index will be migrated to XML through MATRIX's long-term preservation and

access plan for its digital libraries. Michigan State University is therefore committed to maintaining the Index and repository in perpetuity.