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The Quilt Index: From Preservation and Access to Co-Creation of Knowledge

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Abstract: Quilts are resources for inquiry and instruction for many disciplines, foci for the development of private and public collections, and, increasingly, a visual expressive media that has meaning for makers, owners, and users. The rise of the Internet and the development of cyber-infrastructures have created the capacity to build and use digital quilt resources and to foster networks among quilt makers, owners, and users. This article describes the development of The Quilt Index (www.quiltindex.org), a digital repository of quilt and quilt-related resources, and situates the Index in the landscape of new directions for material culture study, a landscape in which knowledge and resources are now being co-created by those who find meaning in quilts as data. It suggests that making data more accessible, providing diverse tools for use of that data, co-creating knowledge, and providing structured portals for contributed knowledge is reflecting changes in how traditional culture is documented, understood, and used.

The Object of Study—The Production and Meaning of Quilts in Human Experience

Quilts, perhaps one of America's most treasured and symbolic art forms, are also produced in communities around the world. An estimated twenty-seven million individuals are involved in some aspect of quiltmaking and use in the United States alone as are many more thousands, if not millions, around the world (Creative Crafts Group 2010). The purposes and meanings of making and using quilts are as varied as the individuals who make them and the communities or contexts within which they are made. They can be made for warmth, decoration, gift giving,

fundraising, income, pleasure, healing, advocacy, education, or expression of personal ideas. They sometimes push boundaries of a commonly used definition of a quilt as a rectangular, bed-sized textile with three layers (top, filler, and backing).

Further, quilts have long been valued objects in personal and family collections, often associated with stories about the maker, the materials or pattern used to make them, or the reason they were made. Many times quilts were given or received within families as gifts on special occasions and passed down from generation to generation.

An increasing twentieth century interest in researching quilts drove the development of public and private collections of quilts. It would probably be hard to find a historical society in the United States that does not own at least one quilt. As the historical and aesthetic value of quilts rose in public perception, so did the market value, and individuals and corporations began developing collections of quilts for investment and enjoyment just as they would any art form.

The point here is that there is an enormous body of material culture production that exists for study. Scholars in various disciplines—from folklore and material culture studies to labor history, popular culture, and even ethnomathematics, medicine and social work—now use quilts in their scholarship and in their teaching. Within higher education contexts, entire courses focused on quilt history and meaning are now taught in several universities and, significantly, an entire quilt studies graduate program has been established at the University of Nebraska, Lincoln.

A Brief History of the Study of Quilt Production and Meaning

Given the long history of quilt production and the numbers of individuals engaged in quiltmaking, quilts surprisingly have been a relatively under-tapped resource in scholarly inquiry. At the turn of the twentieth century, national interest in American colonial history and the arts of the "pioneer period" prompted the development of publicly-held collections of quilts and some of the first serious quilt history research. But it wasn't until the rise of the feminist art movement in the 1960s and the heightened national interest in American history, spawned by the nation's bicentennial celebration in 1976, that there was a burst of interest in historical and contemporary American craft traditions in general and quiltmaking in particular.

The simultaneous growth of ethnic studies, women's studies, material culture studies, folklore, and an expanding interest in interdisciplinary pursuits meant that scholars began to integrate quilt studies more fully into a broad range of humanities fields. As scholars turned their attention to "new voices" and increasingly incorporated gender, ethnicity, and class into their work, they found that quilts provided important material for research and information about families, labor, and communities that did not exist through oral, written, or more traditional archival records.²

Research on quiltmaking took a significant leap forward in the 1970s and 1980s with the establishment of associations like the American Quilt Study Group, a

society of individuals devoted to supporting and disseminating quilt-related studies through an annual seminar and its companion journal *Uncoverings*. Community-engaged, quilt-specific documentation efforts began to emerge in the 1970s with the National Quilt Registry, a bicentennial attempt at mail-in documentation, and the North Carolina Regional Folklife Project's quilt documentation in select areas of that state.

In 1982, The Kentucky Quilt Project, Inc. (KQP) launched the first statewide quilt documentation project. The documentation strategy was based on project leaders encouraging quiltmakers and quilt owners to bring in their quilts into central community locations (museums, libraries, senior centers, etc.) where volunteer documenters measured and photographed the quilts, described their physical appearance and condition, and collected information about the quiltmaker and historical and contextual information about the quilt, including its production, ownership, and use.³ The collected information was recorded on standardized survey or inventory forms and sometimes the stories about the quilts and their makers were audiotaped or videotaped.

The KQP strategy became the model subsequently utilized by groups in most states in the United States and regions of New Zealand, Australia, and Great Britain; it is currently being implemented in South Africa. Shelly Zegart, one of the founders of the KQP, observes that these projects collectively form "the largest grassroots movement in the decorative arts in the last half of the twentieth [and early twenty-first] century. More than 200,000 quilts have been documented at more than 2,000

'Quilt Days,' and additional projects are starting every year" (Zegart 2008). These surveys have resulted in publications, exhibitions, and, of course, thousands of documentation records. These documentation efforts have also played a vital role in the awareness, recognition, and preservation of the history of American quiltmaking; however, their potential for use could not be fully realized because the records were geographically scattered and frequently inaccessible physically, and most were not available in a computerized format.

The History and Vision of the Quilt Index, a Digital Repository

The growing interest in using quilt information for research and teaching spawned a vision for a central access point for quilt data, including that collected through the documentation projects. In 1992, the KQP planned and organized "Louisville Celebrates the American Quilt," a series of exhibitions, lectures, gatherings and conferences, through which "[i]ssues of concern to all interested in quilts and quilt scholarship were addressed and goals, priorities and methods were set by some of the brightest lights in the field for the coming decades of quilt study and appreciation".⁴

As part of this celebration, nearly 100 people from across the quilt world gathered at a "Bibliography" conference, held in February 1992, to discuss the potential media for publishing an extensive quilt "bibliography," and the basic idea for a quilt index began to take root.⁵ Then, following the conference, KQP leaders Jonathan Holstein, Eleanor Bingham Miller, Eunice Ray, and Shelly Zegart developed

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a proposal for a site that could hold "a complex and ambitious variety of information, from individual quilt objects to oral histories in multimedia to descriptions of quiltmakers to full texts of selected books and periodicals to digitized ephemera of inaccessible quilt-related research materials". One of the priority goals identified by many quilt researchers was to make accessible the records of the tens of thousands of quilts documented through the efforts of hundreds of researchers involved in state and regional quilt documentation projects and this became the focus for discussions about an online resource.

By 1998, The Alliance for American Quilts",⁷ the Michigan State University (MSU) Museum, and MSU's MATRIX: Center for Humane Arts, Letters, and Social Sciences Online joined forces to plan and implement a strategy to create what was by then called simply "The Quilt Index." MSU Museum and MATRIX brought to the project a team of individuals who brought skills, expertise, and interests in curation, collection management, quilt history, digital humanities, computer science, higher education, library science, digital learning environments, American Studies, art history, folklore, and quiltmaking. The Alliance offered a board of individuals who spanned the interests of the quilt world and a group began planning, budgeting, and administering surveys for the potential Quilt Index.

Design and Implementation of the Quilt Index

In 1999, the National Endowment for the Humanities Preservation and Access Program awarded Michigan State University a grant to develop two key

elements necessary to create the Quilt Index: a metadata architecture and set of comprehensive fields that would allow for the input and searchability of data drawn from the different inventory forms used by the various quilt documentation projects.⁸ The original KQP form, for instance, had basically four questions, while Rhode Island's documentation form had six pages of questions and the Michigan Quilt Project used twelve-page forms at the outset and trimmed it to six, then to four pages. The completed forms were also in different stages of computerization and stored in different databases.

MATRIX staff had already had great success using relational databases to create on-line content for discrete projects. However, the creation and maintenance of each project was an isolated, stand-alone endeavor. For the Quilt Index, MATRIX had to build a centralized repository that could integrate the various metadata from the different projects into a unified architecture (Richardson et. al 2004). After developing and testing several iterations for the Quilt Index, MATRIX created the architecture currently known as KORA, "an open source, database driven online digital repository application" that cultural and educational institutions can use to preserve, manage, and display digital materials online (Kornbluh and Rehberger 2010).9

In order to create the Quilt Index comprehensive fields, an inclusive set of descriptive fields that contain necessary information and controlled vocabularies specific to quilt research and study, project staff at the MSU Museum:

culled quilt documentation forms from nearly every state to find regional variations and cross-referenced twenty significant reference sources on art and textiles including the *Art and Architecture Thesaurus* (ATT) of the Getty Vocabulary Program (1999) and Barbara Brackman's *Encyclopedia of Pieced Quilt Patterns* (1979). When the Index staff discovered terms in the documentation data that were not included in the Getty ATT; they researched and then contributed these terms to the Index and also notified the Getty ATT staff [Richardson et. al 2004].

The team then beta-tested the comprehensive fields and digital repository with sample records of the Michigan Quilt Project, then tested them with samples from the Illinois Quilt Project, Kentucky Quilt Project, and the Tennessee Quilt Project. The result was a set of fields that encompasses the widest possible number of characteristics of quilt objects and information from the site projects.

In October 2003, after nearly five years of testing and piloting, the Quilt Index was officially launched on the Internet. For the first time, a portion of the records of quilts inventoried in the documentation projects in Michigan, Illinois, Kentucky, and Tennessee were accessible not only to those who owned the documented quilts or had been involved in the documentation projects, but also to anyone around the world who wanted to learn about the quilts, quiltmakers, and quiltmaking traditions of the states. Basic search functions for artist name, date made, location where made, and pattern and quilt name were introduced in the pilot phase. The search capabilities enabled scholars, artists, genealogists, and educators to easily call up information and compare and contrast data from one collection with data on quilts in other collections as well as examine information about artists. Those interested

in quilt history could alas access quilt documentation records in a centralized spot, offering new opportunities for research based on the four collections.

In particular, individuals could investigate questions related to regionality. For instance, using Michigan as an example, scholars interested in studying the folklife of a particular region or state could use quilts as data in the investigation of a myriad of research questions, such as: Is there such a thing as a distinctively Michigan quilt? Are there any fabrics, patterns, techniques unique to Michigan? If so, how do they reflect a Michigan community or culture? What is the early history of quilting in Michigan? How have commercial quilt patterns and regional/national distribution of patterns affected quilting traditions in Michigan? What do quilts tell us about women in Michigan? What do quilts tell us about Michigander's responses to local, state, national, and international events? How do quilts reflect the natural and industrial landscape of Michigan? How do quilts reflect social, cultural, ethnic, racial, and religious communities in Michigan?

Growth of the Quilt Index

With only four collections entered into the Index, the ability to answer questions like these was limited. In order to be truly useful to quilt scholarship, the Quilt Index needed to add as much data as possible. The first major expansion occurred between 2004-2008, when the Quilt Index was able to complete inputting all of the records of the original four documentation projects and the records of five more collection-holding organizations were added. The Quilt Index team¹¹ chose

these organizations because they gave the team an opportunity to test practices and policies of working with organizations of different scale, mission, and holding collections drawn from different geographic regions, time periods, and cultures.

Over 18,000 records of quilts were added by 2008. During this period, the leadership also documented the development of the entire project so that the Quilt Index might serve as a model for other thematic collections such as baskets or samplers. The team also initiated ongoing evaluation and long-term planning.

Based on feedback from the field as well as the observations of the Quilt Index's core staff, the next step taken was to create a critical mass¹⁴ of materials that would serve as a platform for active research and educational uses. By the end of 2009, the Quilt Index held over 50,000 quilt records contributed by twenty-four collection-holding entities, including quilt documentation projects, archives, museums, libraries, and private collections.¹⁵ An important early journal, *The Quilt Journal*, was digitized and also added.

By the end of 2011, hundreds of pieces of ephemera, quilt-related material including field notes, patterns, correspondence, clippings, and early publications, drawn from the MSU Museum collections, the collection of the University of Texas, and two private collections will be added. Through collaboration with the American Quilt Study Group (AQSG), work is underway to include in the Index digitized, fully searchable back issues of *Uncoverings*, a journal of peer-reviewed research papers published annually by AQSG since 1980.

The Quilt Index staff now regularly fields requests from organizations that want to add their collection data to the Index because they recognize that the Index provides a mechanism for them not only to make their collections accessible, but also to do so within the context of a structure that offers tools and resources that enhances the use of their collections. By the end of 2011, four new organizations that have secured their own funds to add their data to the Index will have made several thousand more quilts accessible. Discussions with art and history museums from the southern United States that hold significant textile collections are now underway; the inclusion of their collections in the Index would significantly increase the usefulness of the resource for researchers, students and teachers of the antebellum, Civil War, and reconstruction periods. Meanwhile, feedback from the quilt history world has prompted the Quilt Index team to map priorities for proactive collaboration, especially for unique and significant collections as well as those that strategically can expand quilt-related studies.

One of the most important characteristics about the development of the Quilt Index and quilt history studies is its collaborative nature—a trait that is now a hallmark of social media and the Web in which the Index is a part. In the last fifty years we have seen a remarkable rise in engagement in quilt history studies, studies that have been largely collaborative. The small circles of quilt history friends who in the twentieth century so enthusiastically shared quilt history discoveries only through mail correspondence, the layers of local, national, and regional of

individuals who have carried out quilt documentation and inventory projects, the growing ranks of quilt history listservs subscribers and blog site developers and followers—all are indicative of how individuals and organizations have joined together to document, inventory, develop exhibitions, write about, and then to build tools like the Index (Sikarskie 2011).

Evaluative studies have been critical to the development of the Index.

Studies have been conducted before, during, and after each step of the development and expansion of the Index. Thus, the Index has been responsive to and reflects the needs and concerns of its initial targeted audiences and newly identified audiences.

Quilt Index staff conduct periodic analysis of user statistics and have incorporated an annual survey of our core user constituencies. The project has incorporated ongoing communication with cultural heritage professional organizations and scholarly groups related to history, women's studies, and quilt and textile studies. This ongoing feedback mechanism has led to improvement of specific records and incorporation of site-wide tools, and has guided planning for future directions of the Quilt Index.¹⁷

Sustainability of the Index has been another ongoing concern and the Quilt Index team has worked diligently to develop materials, procedures, and protocol designed to build an infrastructure to manage the Index and to help it grow. To that end, the Quilt Index team created a suite of leadership documents and a set of procedures for adding new collections, set-up weekly management phone meetings, initiated an editorial board to provide counsel for difficult questions, created a

"Frequently Asked Questions" page on the Index, developed and tested prototype training modules for users and contributors, and set up mechanisms to receive monetary donations. The team also set in place a structure to work with museums and projects that wanted to self-fund the expenses of adding their collections to the Index; as of June 2011, the team is working with thirty-eight contributors who have sought out the Index as a means of making their collections more accessible.

Another important characteristic of the growth of the Quilt Index is that its management includes individuals deeply committed to using new technologies to build expanded access to knowledge and to support collaborative discovery and cocreation of new knowledge. It is no fluke that the Quilt Index is built on an open-access platform or that Quilt Index leadership team strives to keep current with new technologies and best practices in the digital world and, in particular, the connections of new digital technologies for research and education.

The original vision of a Quilt Index was one of creating a *passive* repository of all things quilt. As actual construction of the Index began, it became clear that the Index management had to play an *active* role in assisting collection contributors in planning and adding their collections to the Index, in developing tools so that the Index itself could be easily used and then, further, in facilitating active engagement in contributing quilt-related knowledge to the Index. This reflects what Angelina Russo and Jerry Watkins describe as the proactive role of the cultural institutions to co-create new knowledge, "By drawing communities into the consumption and

creation of digital content, cultural institutions can take a proactive role in developing new literacy by enabling direct experience of content production and creating environments for community engagement" (2007, 151).

Internationalization of the Quilt Index

Although the Quilt Index was originally intended as a resource for American quilts, both user statistics and survey responses indicate a potentially path breaking opportunity for internationalization of the Quilt Index. Quilt collections, scholars and organizations engaged in quilt studies, and active quiltmakers exist in many countries, with particularly strong collections and interests found in Canada, the United Kingdom, Australia, Germany, Italy and Japan, as well as collections in many other countries, including South Africa and New Zealand. As of fall 2010, the International Quilt Study Center joined the Quilt Index team along with an international group of advisors to map out strategies to make the Index not just a national but also a global source of quilt information. 18

Development of Tools to Foster Awareness and Engagement of Using the Index

In response to evaluation data, it became clear that it was not enough to build a repository of information, it was also necessary to build a suite of tools to enhance general usability as well as usability by specific user groups (i.e., students, teachers, quiltmakers, genealogists). Already the Quilt Index team has developed more advanced searching, viewing, and sorting tools and is now constantly adding or developing new tools and resources that will increase use of the Index. Under

construction are over seventy-five galleries, essays, and curriculum-based lesson plans that should facilitate expanded use of the Index by those familiar with quilts as well as attract use by those who have not yet incorporated quilts into their teaching and research by providing examples of how quilt studies can be incorporated into the work of a variety of disciplines. Project staff now also regularly work with quilt record contributors to repurpose existing materials from past exhibitions and publications and provide online access as well as to create new resources that the centralized access and mass of data offered by the Index.

Since the Index pulls from collections that were created at different times, with different technologies, scopes and purposes, and by individuals with varying degrees of quilt knowledge conditioned by their own experience and/or quilt scholarship at the time of data creation, the content of the Index reflects those variables. Currently under construction is a Search Tutorial that will assist researchers in learning about those variables and, consequently, in understanding how to better use the Index.

Transitioning the Quilt Index to a Catalyst for Co-Creation of Knowledge

Two projects—the Mary Gasperik Quilts in 2008, and the Signature Quilt

Project in 2009—broke new ground in allowing independent researchers to use the

Quilt Index to develop and present specific research projects in which quilt-related

data was being collected. Collections previously added to the Index were ones that

were already formed and even completed and the Index simply served as a means to

preserve and make accessible the respective collection data sets. In the case of the Gasperik and Signature Quilt Projects, the Index staff worked hand-in-glove with personnel from each project to plan the intellectual framework for including new research data in the Index and then to develop author galleries and essays and add other resources that enhanced the presentation and usability of the respective research projects. The Quilt Index thus became an integral tool for the initiation or enhancement of the respective research projects.

The Gasperik and Signature Quilt Projects expanded the Index in two important ways. The Gasperik Project was the first addition of a privately-held collection and allowed the QI team to test policies and procedures for working with an individual on the contribution to and interpretation of their collection in the Index. Second, and even more importantly, the Signature Quilt Project enabled the controlled testing of a mechanism for direct public submission of data into the Index. Thirty-eight participants, recruited through quilt listservs, learned how to enter their quilt data through a training module that used simultaneous phone conferencing and web-based instruction. The Quilt Index team anticipates the completion by the end of 2011 of a mechanism for anyone owning a quilt to be able to submit their quilt images and information directly into the Index.

With the addition in 2008 to the leadership team of an MSU doctoral student in American Studies who was interested in the use of social networking tools, the Quilt Index added new features: a Twitter account; a Facebook page; a blog; and a "Quilt Index" Wiki entry. Currently, we are also working to make the Quilt Index

main page more dynamic by embedding real-time social media content.²⁰ The presence of the Quilt Index on Twitter and Facebook support the expanded Quilt Index site and, after search engines, these social networking tools are the most common means of referring users to the Index. A "Quilt of the Day," selected especially for our social media audiences is posted each weekday. Facebook fans are often polled to devise theme weeks for the quilt of the day, effectively allowing us to engage in real-time curation with this online audience. The Quilt Index social media presence on Facebook has grown immensely in the past year, with nearly 2,000 fans as of June 2011 (Schonfeld 2009). Our weekly interactions with fans in the form of "wall posts" and "likes" went from an average of about eighteen per week in late 2009 to over 100 per week in June 2011.

Facebook Insights, an analytics application,²¹ indicates that this social media campaign reaches a highly international audience, with "fans" in countries from Ethiopia to Bangladesh. This includes over 500 fans outside the United States as of June 2011 (double our international following of around 250 in summer 2010), with strong followings in Argentina, Indonesia, Malaysia, Pakistan, South Africa, and Turkey, and a following of sixty "fans" in Italy alone. Our social media content on Facebook is now accessed in over twenty languages including Cherokee, Croatian and Catalan.

The Quilt Index Wiki is a public and scholarly resource on quilts built through participation of contributors, including museums and libraries that hold

quilts, quilt documentation records, and other quilt related materials in their collections (MacDowell 2009). With the development of the Quilt Index Wiki,

we hoped to harness the commitment, knowledge, and grassroots spirit of the quilt research community into a public listing and sharing space for groups conducting quilt documentation. We envisioned a wiki that would allow members of the community to define quilt-related terms, people, or issues over time, would have terms that would be approached from multiple perspectives, and would become a valuable resource to the larger quilt community (*Ibid.*).

The Wiki also includes a portal for H-Net scholarly discussion list members, resources for quilt historians on topics such as appraisers and quilt care, and a section called Quilts and Curriculum featuring educational games, K-12 lesson plans and content standards, university syllabi and recent dissertations in quilt studies, among other resources. Other portals on the Wiki, all of which are made possible in part by information submitted by the community of users, include quilt collections and documentation projects outside the U.S. and Quilt Barn Trails which has already become one of the most popular resources on the Wiki, with 600 unique views in its first two months on the site and positive feedback about the Quilt Barn resource from users via social media.²²

With the initiation of the addition of the Gasperik and Signature Quilt

Projects and the Web 2.0 projects, the Quilt Index was no longer simply a receptor

for existing data but was an active partner with individuals all over the world in

creating and adding content. This vision of a centralized freely accessible resource

on quilts offered to researchers, quiltmakers, educators, students and the general

public has grown through initial planning and implementation phases, formal

evaluation, informal user feedback gathering, and significant engagement by a professional community of quilt historians and museum and library staff in data expansion. By December 2009, the Quilt Index was being used by nearly 10,000 unique users per month,²³ with an average of 2.28 visits per visitor and 8.5 pages viewed per visit and the number continues to rise.²⁴

New Directions for Expanding Quilt Index Research and Educational Purposes

Over the years of the Quilt Index development, not a month, sometimes not a day, has gone by, without the Quilt Index team coming up with new ideas or receiving great suggestions from the field about new enhancements or expansions of the Index, encourage collaboration and co-creation of knowledge, and to strengthen the ways in which the Index can be used for research and education. Ideas have included adding photos and records from sales of quilts at auction house or by dealers, adding more private collections, creating the capacity for quiltmakers to add their own artist statements, adding the quilts from the Index of American Design, adding links to blogs, linking the Index directly to digital versions of the Barbara Brackman's (1993; 2009) encyclopedias, adding scanned fabric swatches to aid in dating, and linking the Index with genealogy records. The ideas are exciting and the possibilities are many.

Using new technology to create awareness of the Index, expanding educational capacity, developing serious games, inspiring new documentation projects to use the Quilt Index Comprehensive Fields, and fostering co-created

documentation and inventory projects are some of the many new paths for the Quilt Index. In keeping up with ever-changing technologies, the Quilt Index team worked in 2010 with Jodie Davis of the site **Quilt Out Loud** to have the Index included in her program on quiltmaking in Second Life.²⁵ The team developed a first-generation application for the iPhone that allows users to flip through images of quilts held in the Index. Both initiatives demonstrate the goal of using new technologies to attract and better serve increasing audiences.

Data from evaluation studies conducted by the Quilt Index leadership team suggests that there are a number of innovative pedagogical activities already in use by teachers in middle school through university classrooms. Yet there is an important opportunity for growth and interpretation of materials, particularly for specific age groups, subject areas, and topics (MacDowell et. al 2012). Quilt Index staff members are seeking grant support for increased development of K-12 curricula based on both the data held in the Index and the tools used to search, mine, and present that data. In the meantime, the team has expanded a special section of the Quilt Index Wiki to include a lesson plan template and a collection of syllabi of university courses on quilt history and other resources that aim to assist educators in using the Index.²⁶

The rise in interest in educational gaming is huge and it is crucial that museums and libraries pursue the serious game medium in order to be relevant to the growing number of tech-savvy educators and users who find that games provide intrinsic motivation to learn, place learning in context, render content meaningful

and interesting for the player, and foster sociability. Two simple "Scavenger Hunt" games have already been developed by the Quilt Index team and posted on the Quilt Index Wiki.²⁷ The team has recently developed a proposal for a Quilt Index Serious Game project that would research and test new educational gaming theories and digital technologies to use museums, archives, and library collections in very innovative ways and thus advance broader engagement in humanistic inquiry.

Several new research and documentation projects initiated by individual or groups of scholars are using the Quilt Comprehensive Fields and a standard Quilt Index documentation form based on the Fields to guide the collection and management of their quilt data. One example is the Mennonite Relief Sale Quilt Project of Kansas-based scholars Marilyn Klaus and Sharon Sawatzky that involves research and analysis about the personal, social, theological, and political history of Mennonite Relief Sale quilts. Another example is the Oregon Quilt Project that recently began using documentation forms based on the Quilt Index models and fields. The inventory form is also being used by museums to inventory and add provenance information to their collections.²⁸ In all of these cases, the project leaders intend to eventually migrate their data into the Index.

Quilt Index leadership team members are working with others to co-create other Quilt Index-based research initiatives, including a South Africa Quilt History Project, a Workers' Culture Heritage Quilt Project, a Deep Michigan Quilt Index Project, and a Quilts and Health Project. The first project evolved from work in

South Africa by one of the directors of the Quilt Index with the enthusiastic participation in South Africa of curators at over twenty museums with textile collections, independent quiltmakers and textile historians, and members of the South African Quilt Guild.²⁹ Already the quilts of two museums have been inventoried, photographed, and inputted into the Index and more museums will be participating in this coming year.

The second initiative grows out of a long-time program called "Our Daily Work, Our Daily Lives" coordinated by the MSU Museum and the MSU Labor Education Program "to bring attention to the artistic traditions of workers and on workplaces as contexts for the expression of workers culture". Calls have already gone out to union offices to solicit contributions of information about quilts made by workers or about work and it is hoped that this effort will encourage new participation in documenting quilt history associated with occupations and workers culture.

Pending funding, the Deep Michigan project will be a statewide effort to inventory and add to the Index all of the quilts in public collections in the State of Michigan as well as information important to Michigan quilt history, including the Detroit News Quilt Club columns, state and country fair records, quilt guild newsletters, and catalogues and documentation of quilt exhibitions in the state. Partners with the Quilt Index in this "Deep Michigan" endeavor are the Michigan Humanities Council and the Michigan Museums Association.

A Quilts and Health Project initiative has been launched in collaboration with the MSU College of Human Medicine. Tens of thousands of quilts are being made around the world by individuals and members of affiliated health organizations around the world for purposes of health advocacy, health and well-being, health education, fundraising for health causes, and as memorials to those who have succumbed to illnesses. Planning is underway to provide a portal through the Quilt Index to document, inventory, and make accessible this growing phenomenon of engagement in quilt making and use.

In addition to the strategies to encourage co-creation of knowledge and to expand use of the Index that have already been discussed in this article, there are a number of initiatives already in place or in stages of discussion. For instance, the Quilt Index team is currently working with computer scientists and other humanists at Michigan State University, the University of Illinois Urbana-Champaign, the University of Sheffield to create tools to make visual (rather than text-based) searching in large data banks like the Index a reality by creating an algorithm that recognizes colors and patterns. This tool has the potential to identify authors of currently anonymous work and to begin answering such questions as pattern name variations across the country. Already this project has laid the groundwork for the development of a proposal for the development of a super-visualization project that will provide a cultural analytical tool for this body of traditional culture previously not even dreamed about.

Open Folklore, the new scholarly resource launched in September 2010 by the American Folklore Society and the Indiana University Bloomington Libraries. Open Folklore makes accessible an extraordinary number and variety of useful resources, both published and unpublished, for the field of folklore studies and the communities with which folklore scholars can partner.³² Establishing interconnectabilty between the Quilt Index and Open Folklore would substantially increase quilt content and search capacities across collections of digital objects and related digital texts.

Implications for Strengthening Research on Traditional Culture

The Quilt Index has certainly already become a solid resource for research and education. With continued expansions and enhancements made possible through use and adaptations of new technologies, development of new partnerships and collaborations, and the facilitation of increased user-generated knowledge, the Index will undoubtedly play a role in advancing knowledge about quiltmaking in ways we earlier could not even have dreamed possible.

The Index remains, however, only as good as the data that it carries. At present, there are many questions about quiltmaking on which the Index cannot facilitate investigations because the data has not yet been contributed to the Index or it is currently only partial data or, in some cases, data that is inaccurate. Our hope is that the Index will eventually hold the records of all museums and that all of

the records of both the historical and new documentation projects are fully entered. We dream that when the public submission feature of the Index is activated that thousands of quiltmakers and owners will submit their images, descriptions, and stories to the Index. And we look forward to the day when the ephemera and publications so closely associated with quiltmaking are accessible in the Index.

Once the Index is so richly infused with data, just think of the answers we will be able to get for such questions as: What similarities to Hmong-American textiles have with textiles currently made by Hmong in Thailand? What connections do mosaic hexagon quilts made in the Great Lakes, Great Britain, and South Africa have? Is there such a thing as a distinctively Michigan quilt? A Great Lakes quilt?

Some Final Thoughts about the Quilt Index and its Role in Facilitating New Ways of Understanding Traditional Culture

According to digital humanities specialists Angelina Russo and Jerry Watkins, the creation of sites such as the Quilt Index provides audiences with opportunities "to experience, first-hand, the remediated networks of cultural institutions and to interact with narratives [and objects], thus creating unique experiences. This interaction transforms the ways in which audiences access and navigate cultural information" (2007, 155). As a repository of digital objects and texts drawn from existing public and private cultural institutions and the contributed knowledge of individuals, the Quilt Index is indeed transforming the ways in which we can investigate the making and meaning of this form of material culture.

Technological advancements over the past ten years have greatly broadened the possibilities for wider dissemination and more effective and creative use of The Quilt Index. As a natural resource, the Index aims to provide the most comprehensive and historically thorough representation of quilting heritage to an academic and general public that is increasingly interested in this aspect of cultural heritage. The Quilt Index now serves a remarkable breadth and diversity of audiences but it has the potential to reach even more expanded audiences, including those with specific disciplinary as well as interdisciplinary interests.³³

The Quilt Index is now making it possible for everyone with access to a computer to be able to access, learn about, contribute knowledge to, understand, and thus honor one of our nation's most iconic, widespread, and widely-accepted forms of visual cultural expressions. In summary, through new technologies and tools like The Index, there is no doubt that these collaborations will become even more richly layered, the circles of engagement will grow wider, and the Index will grow in content and use. It is exciting to think of how this will advance our knowledge and understanding of an expressive art form that has meant so much to so many.

Marsha MacDowell is Curator of Folk Arts at the MSU Museum and Professor of Art and Art History. She has published extensively on American material culture (with an emphasis on Michigan, Native American, and African-American quiltmaking traditions) and curated numerous regional and national exhibitions. MacDowell directs the activities of the Great Lakes Quilt Center at MSU Museum; is a founding board member of the Alliance for American Quilts; co-editor of H-Quilts, an online quilt scholarship discussion list; and is the former president of American Quilt Study Group.

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Justine Richardson is an Educational Media Specialist at MATRIX. With a background in Art History, American Studies, and Humanities Computing, she has written on gender and technology issues, and on the development and coordination of distributed and collaborative online arts and humanities projects.

Notes

- ¹ Among the early publications were Marie Webster, *Quilts: Their Story and How to Make Them* (New York: Doubleday, Page & Company, 1915) and Ruth E. Finley, *Old Patchwork Quilts and the Women Who Made Them* (Newton Centre, Massachusetts: Charles T. Branford Company, 1929).
- ² Grant application to the National Endowment for the Humanities for The Quilt Index, submitted by the Michigan State University Museum, Alliance for American Quilts, and MATRIX: Center for Humane Arts, Letters, and Social Sciences Online, July, 2006. Scholars who have analyzed quilt scholarship have included Keller (1993); Mainardi (1978); and Weidlich (1994).
- ³ Neither the use of standardized inventory forms nor the use of community-based documentation days to engage citizens in projects to inventory material culture was new; the Kentucky Project was the first documentation project to combine these two strategies and to use those strategies for a statewide inventory.
- ⁴ "History," *The Quilt Index*, last modified October 2009, http://www.quiltindex.org/history.php. Document in the Quilt Index historical records held in the archives of the MSU Museum.
- ⁵ "In February 1992, Louisville Celebrates the American Quilt "Bibliography" Conference came together, in part to form the direction for an American Quilt Index.

Nearly 100 people gathered from across the quilt world to discuss in a multiple round table format, the potential media for publishing an extensive quilt "bibliography." Areas discussed were movies and photographs, television and video, quilt books, state projects, newspapers and periodicals, magazines, computers, patterns, oral material, exhibitions, museum collections, conservation, regional archives, and early records. A full list of participants and a complete summary of the work of each group can be found in Zegart and Holstein (1994). See http://www.quiltindex.org/history.php for more detailed information about the meetings, papers, and actions that helped identify the need for and then helped shaped the direction that an American quilt index project might go.

6 Ibid.

⁷ The Alliance for American Quilts was established in 1993 "to document, preserve, and share our American quilt heritage by collecting the rich stories that historic and contemporary quilts, and their makers, tell about our nation's diverse peoples and their communities." The Alliance for American Quilts website: http://www.allianceforamericanquilts.org/about. Accessed September 2, 2010.

⁸ This initial step was funded through a grant awarded to MSU by the National Endowment for the Humanities Preservation and Access Program. The proposal was collaboratively written by staff of The Alliance for American Quilts, MSU Museum and MSU's MATRIX: Center for Humane Arts, Letters, and Social Sciences Online.

9 For more information about KORA, go to http://kora.sourceforge.net.

¹⁰ These records are held respectively at the MSU Museum, the Illinois State Museum, the University of Kentucky Louisville, and the Tennessee State Library and Archives. This testing was funded by another grant awarded to MSU by the National Endowment for the Humanities, PA-23733-01. The original application and final report can be accessed at the Quilt Index at

http://www.quiltindex.org/about.php#grants.

¹¹ The core staff of the project has remained fairly consistent since 2006. A project director and manager are based both at the MSU Museum and at MATRIX, respectively for content and technical development. Additional staff at MATRIX and the MSU Museum support testing and implementation of all developmental phases of the Index as well as evaluation, grant writing, social media and other communication strategies to various audiences, and fiscal management. The director of the Alliance for American Quilts serves as a liaison to the project and assists in communications, especially to networks of quiltmakers. For specific names

of individuals who have contributed, go to http://www.quiltindex.org/contributors.php.

¹² The expansion was made possible by a grant to MSU by the Institute for Museum and Library Services, LG-30-04-0245-04 The original application and final report can be accessed at the Quilt Index at http://www.quiltindex.org/about.php#grants.

¹³ Evaluation was conducted using a variety of strategies, including surveys and questionnaires delivered through online tools like listservs and Survey Monkey and in person at conferences of targeted audiences (i.e. K-12 educators, museum educators and curators, quilt historians), Quilt Index web site monitoring by AWStats (http://awstats.sourceforge.net#DOC), analysis of AWStats data with respect to Quilt Index measures and goals, targeted questionnaires to specific groups and follow-up question and answer with selected participants, organized review of unsolicited feedback, analytical and reflective discussions at management weekly meetings, and viewer/audience feedback on presentations (posters, papers, workshops) at conferences.

 14 We define critical mass as at least partial participation of over 1/3 of the state quilt documentation projects.

¹⁵ The full list of the contributors can be seen at http://www.quiltindex.org/contributors.php.

¹⁶ The private collections are those of Merikay Waldvogel and Wilene Smith, both noted quilt historians. Materials drawn from the collections of the late pioneer quilt historians Mary Shafer and Cuesta Benberry, now owned by the MSU Museum will also be added.

¹⁷ Final Report to National Endowment for the Humanities, Grant #PA-52057-06, "The Quilt Index Phase III: National Expansion and Data Integration," 2009, pg. 5.

¹⁸ Funded by an Institute for Museum and Library Services grant.

¹⁹ Both projects were supported by the Salser Family Foundation with in-kind support from the MSU Museum and MSU's MATRIX: Center for Humane Arts, Letters, and Social Sciences Online.

²⁰ From 2007-2009, MSU's College of Arts and Letters provided support to the Index by assigning a half-time graduate assistantship to the project.

- ²¹ Collects data from Facebook Insights for the Quilt Index fan page. Facebook Insights is the built-in analytics software that Facebook provides to administrators of fan pages.
- ²² "Quilt Barn Trails began in Southeast Ohio and spread throughout Appalachia in the twentieth century to promote tourism and to celebrate community heritage. The 'quilts' are flat blocks of wood painted to look like quilts and affixed prominently typically to the side of a barn but also to other buildings of local significance. Quilt Barn Trails are now popping up throughout the United States thanks to the efforts of community groups, scholars, and local and regional government and agencies. The Quilt Barn Trails, when linked with other local and regional quilt resources (museum collections, galleries, studios, and fabric and equipment sources), are fostering greater awareness of the continued interest in quiltmaking and quilt history studies." The concept also now includes gardens planted in quilt block designs. "Quilt Barn Trails," *Quilt Index Wiki*. Accessed May 28, 2011.
- 23 The number = 9,833.
- ²⁴ Final Report to National Endowment for the Humanities Grant # PA-52057-06 "The Quilt Index Phase III: National Expansion and Data Integration" Project Leaders: Mark Kornbluh and Dean Rehberger (MATRIX), Marsha MacDowell (MSU Museum), Justine Richardson (MATRIX), Mary Worrall (MSU Museum), Michigan State University, December 31, 2009.
- ²⁵ Jodie Davis, *Quilt Out Loud: Learn How to Become Part of the Second Life Quilting World*, tutorial video, QNTV.com, January 2010. http://tinyurl.com/3bzpmjv.
- ²⁶ Quilt Index Lesson Plan Templates: http://tinyurl.com/3w2md6 and http://tinyurl.com/44zgb39. Both accessed December 5, 2010.
- ²⁷ Quilt Index Scavenger Hunt: http://tinyurl.com/4yywuuv. Accessed October 3, 2010. Michigan Quilt Scavenger Hunt. See also, http://tinyurl.com/3by8jz5. Accessed October 2, 2010.
- ²⁸ The Mathers Museum at Indiana University is one example.
- ²⁹ This effort is supported by the MSU Museum and MATRIX and data collected under a fellowship from the International Quilt Study Center, University of Nebraska, Lincoln. In addition, this effort is supported by the in-kind contributions of museums in South Africa.

- ³⁰ Established in 1992 and coordinated by the Michigan Traditional Arts Program (MSU Museum) and the Labor Education Program (LEP), this project explores and presents the richness and diversity of workers' experiences and workers culture through exhibits, lectures, and presentations; writing and research projects; reunions; and demonstrations and discussions. http://tinyurl.com/3rsu88p.
- ³¹ This research is supported by a *Digging Into Data* grant from the National Endowment for the Humanities and the National Science Foundation.
- ³² Already, as part of Open Folklore, the 57,000 volume "Folklore Collection at Indiana University became the inaugural "Collection of Distinction" to be digitized as part of an agreement between the Committee on Institutional Cooperation (CIC) and Google Books. Open Folklore is also a portal to the digitized collections of other institutions that have joined the Hathi Trust Digital Library (www.hathitrust.org). Put the word "quilt" into Hathi's search option and 248 titles appear. Most of these are currently only allow limited viewing, but eight titles, including the 1926 edition of Marie Webster's *Quilts: Their Stories and How to Make Them*, are available: http://www.openfolklore.org/books. Accessed October 14, 2010.
- ³³ NEH Collections and Reference Grant. *The African American Quilt History Resource Project* will preserve remarkable yet currently inaccessible primary "source" materials housed within the Benberry Collection. The project will also enhance the interpretive and contextual information associated with the Michigan African American Quilt Project Collection. A selection of these source materials will then be digitized and uploaded into the Quilt Index (www.quiltindex.org), a searchable digital repository of primary and secondary source materials related to quilts and quilt history. The data on African American quilt history will be delivered not only through the Index but also through a separate portal housing additional resources and tools specifically related to African American quilt study.

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