

eBlack Studies as Digital Community Archives: A Proof of Concept Study in Champaign-Urbana, Illinois

Author(s): Noah Lenstra and Abdul Alkalimat

Source: *Fire!!!*, Vol. 1, No. 2 (Summer/Winter 2012), pp. 151-184

Published by: [Association for the Study of African American Life and History, Inc.](#)

Stable URL: <http://www.jstor.org/stable/10.5323/fire.1.2.0151>

Accessed: 25-09-2015 15:30 UTC

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



Association for the Study of African American Life and History, Inc. is collaborating with JSTOR to digitize, preserve and extend access to *Fire!!!*.

<http://www.jstor.org>

eBlack Studies as Digital Community Archives: A Proof of Concept Study in Champaign-Urbana, Illinois¹

Noah Lenstra
University of Illinois

Abdul Alkalimat
University of Illinois

ABSTRACT

Digital technology facilitates networking together African American community cultural heritage information held by multiple institutions and individuals. This article presents a case study on how African American Studies can participate collaboratively in operationalizing this potentiality.

In Champaign-Urbana, Illinois, institutions such as churches, schools, businesses, libraries, museums, archives, and private homes all contain documentation and records of local experiences. Documentation includes everything from oral histories of local elders to master's theses on community evolution. Digital inequalities and the commercialization of cyberspace shape how new possibilities develop. Struggles to achieve digital literacy intersect with the political economy of information. This case study presents an intervention into this reality by using the eBlack Studies framework to demonstrate how campus and community can come together to develop digital community archives. In networking together local African American cultural heritage information, new connections are built both among diffused sources of information and among the social institutions holding this dispersed documentation. Theories and practices from community informatics and library and information science are used in the operationalization of the eBlack Studies paradigm in a local community context. Social capital theory is used to understand the successes and failures of this experimental proof of concept digital community archives. Findings illustrate a critical dialectic between bridging and bonding social capital in community digitization: local, historically underserved communities need bridging social capital to become aware of digital possibilities; they also need to invest bonding social capital into digital community archives to achieve collective, self-determined digital representation. Flows of global economic capital intersect with local forms of social capital to shape the resulting form and use of digital community archives.

Keywords

eBlackStudies, Community Archives, Community Informatics, Cultural Heritage, Social Capital, Library and Information Science, Political Economy of Information



Image 1. Photo from the community digitization project.

INTRODUCTION

Through digital technology, one can bring together physically dispersed information on African American community memory. Information aggregation occurred prior to the widespread diffusion of digital technologies.² However digital technologies make this aggregation easier to perform at greater speed and at lower cost. Multinational corporations have leveraged these new possibilities to create global networks of surveillance,³ leaving local communities struggling to create self-determined collective digital representations. From the lens of community memory these new digital forms make possible, but not inevitable, new relationships between local communities and their cultural heritage, defined as living expressions, traditions, and material manifestations of past and present cultures.⁴ The resulting community-information-technology nexus is referred to in this paper as *digital community archives*.⁵

Digital refers to not only digital technologies, but also the resulting sociopolitical networks formed by the global use of such technologies. Sociologist Manuel Castells's work on the theory of the Network Society orients discussion of this topic.⁶ According to Castells, networks of digitally mediated information shape contemporary globalization. At the same time, traditional sociopolitical, economic, and historical forces impact how, why, if, and to what ends digital networks are established and maintained. Individuals and groups that have unequal access to these resources are at a great disadvantage not only economically, but culturally as well.⁷ These networks continue to either bypass or unequally serve large areas of the world. These areas of exclusion characterize the "dual cities" occupied by both the technocratic elite and de-linked underclasses.

These developments are neither inevitable nor unchangeable. Castells later argued that this process of polarization could be reversed through what he calls “grassrooting the space of flows,” or delinked communities using digital networks for expressing identity and seizing power.⁸ Papacharissi calls this the “revolutionary potential” of digital technologies for locally based public spheres.⁹ Alkalimat and Williams refer to this process as the community acquisition of cyberpower.¹⁰ The term *digital community archives*, then, refers to networks of digitally mediated cultural heritage information shaped by traditional forces in the context of socioeconomic inequalities. We use the framework of eBlack Studies to intervene into these processes to suggest alternative ways forward. The eBlack Studies movement emerged out of years of community organizing within higher education and within African American communities. The framework posits that digital inequalities can be ended, and cyberpower created, by African American Studies uniting with local struggles, including struggles to hold onto cultural memory and heritage.¹¹

LITERATURE REVIEW

Digital Community Archives

In the United States, large-scale digital cultural heritage networks have emerged over the past twenty years through collaborative digitization projects, often under the direction of state libraries, archives, and historical societies. These state agencies have provided funding and support to local partners in public libraries, K-12 schools, museums, and institutions of higher education to enable them to digitize their cultural heritage information.¹² Region-based collaborative digitization projects have also emerged, such as at the Southeastern New York Library Resources Council.¹³ Programs have also emerged in other nations.¹⁴ Some of the principal findings from these projects center on how collaborative digitization can (a) uncover

hidden collections, making them more accessible and useful, and (b) enable sharing of expertise and resources between state agencies and local community institutions that seek to make their community cultural heritage information available online. The scholarly literature on collaborative digitization focuses primarily on questions of technical and logistical procedures, such as metadata and interoperability. More sociologically informed analysis includes Evan Robb's discussion of communities in rural Washington directly participating in collaborative digitization projects and Bromage's discussion of the Maine Memory Network working directly in K-12 schools around the state.¹⁵ Overall, collaborative digitization initiatives in the United States have been top-down, in the sense that grant funding moves from an external agency into local communities.

Nonetheless, these digitization initiatives have involved a number of African American communities and scholars. An early 1990s collaboration between Virginia Commonwealth University and HBCU Virginia Union University established a digital "Black History Archives," which represented one of the first digital community archives in the nation.¹⁶ Since then, African American communities have been involved in various capacities in such initiatives.¹⁷ With the recent theorization of "community archives" or "community-based archives," efforts by African-descendent communities in both the United States and Europe to maintain independent archives have brought heightened scholarly visibility to self-determined Black community archives.¹⁸ These discussions of African American community archives connect to questions on African American memory and media, both local and mass, such as work on mass culture, media, and African American cultural memory.¹⁹

Community Informatics

Recent work in the emerging discipline of community informatics sheds light on struggles to develop bottom-up cyberpower in the development of digital community archives. Community informatics studies the continuity of local communities in the context of transformations brought about by information technologies.²⁰ Lee et al. study a digital network of academic and non-academic Underground Railroad researchers collaborating in Pennsylvania.²¹ Vos and Ketelaar study an experimental program to circulate a digital oral history trunk among Amsterdam's ethnic communities.²² Sabiescu uses digital technologies to enable participatory production of traditional cultural expressions.²³ Casalegno studies how embedding digital technologies into the physical environment can augment community memory.²⁴ Srinivasan et al. survey experimental projects that use digital technologies to support bottom-up digital museums.²⁵ The topic of digital community cultural heritage has also been studied in the heritage studies literature, notably in the edited volume *New Heritage*, which features innovative case studies from Hong Kong, Brazil, the UK, and other nations.²⁶ All these case studies confront logistical problems of how to work in community settings around the participatory design of digital community archives. A recurring question is whether to build the digital infrastructure first, and then build local collaboration around that infrastructure, or to postpone construction until deep community ties have been built into the project team.²⁷ Participatory design needs balance between social and technical work. This balance has been characterized by some as "socio-technical systems."²⁸ The process of nurturing community collaboration in participatory digital interfaces focused on community cultural heritage is time-consuming and seemingly neverending. Yet without such labor, historical inequalities cannot be confronted or overcome.

Commercial Culture and Cyberspace

Work to develop digital community archives does not exist in isolation from the structural forces leading global society toward increased commercialization of information. The heritage industry, manifested by such entities as family history networks Ancestry.com and MyHeritage.com as well as social network services (SNS) such as Facebook, has developed market models that include cultural heritage information in a commoditized milieu.

Ancestry.com, with over one million members, requires a paid subscription to access its family history databases and social networking services; its free services, such as RootsWeb, evince an explicit corporate strategy of horizontal integration. As more and more individuals and groups gravitate to Facebook and other SNS for their information-sharing needs, these platforms become the trusted platforms for sharing and accessing cultural heritage information.²⁹ These global information networks stand in contrast to the locally based work done by community informatics researchers. Marxist geographer David Harvey asserts that oppositional movements frequently stall at the level of the city, unable to move beyond particular places to a capital-dominated global space.³⁰ More research and more experiments are needed to build sustainable digital community archives from the bottom up.

THEORY AND METHODS

To analyze in a single study both top-down trends in the heritage industry and bottom-up work in participatory design requires a theoretical framework that accommodates macro- and micro-level analysis. Such a synthesis can be found in work on social capital, which Williams and Durrance see emerging as a connective thread uniting disparate case studies in community informatics research.³¹ *Social capital* refers to resources embedded in social networks and groups. Nan Lin calls these structures *institutions* and *networks*; Robert Putnam and James S.

Coleman refer to groups formed from the relations among people.³² Social capital, according to Putnam, can be further divided into bonding or bridging, or resources accessible within groups and resources accessible across different groups. The division between bonding and bridging can be mapped to Lin's division between affective (preserving and maintaining resources) and instrumental (searching for and obtaining resources) outcomes of mobilizing social capital. Bonding social capital serves to sustain community; bridging social capital enables instrumental gains across communities. Finally, Bourdieu adds to this theory by looking at how social capital is rooted in the economic capital that shapes capitalist societies.³³ The theory of social capital offers tools to aid in the understanding of social dynamics in African American community processes.³⁴ In this paper we focus on how locally based social capital structures trust among groups, which enables access to and sharing of cultural heritage information. We also look at how local social capital interacts with economic capital circulating at the global level.

The **central research question** of this paper is: How does social capital influence reception, participation, and community ownership of digital community archives?

This study uses a mixed-methods approach to answer this question. Action research is characterized by iterative problem solving within a defined community. Involved observation goes beyond participant observation, placing the researcher as an active agent in the social hierarchy of the community.³⁵ Action research focused on the participatory design of a collaborative digitization website, with multiple local partners involved in this work. Involved observation occurred in events and spaces within the African American community, such as reunions, historic places, church anniversaries, and civic holidays. Involved observation was also carried out in emerging online spaces of remembering, found to exist on Facebook. Specific sources of information generated from action research and involved observation included

website analytics, semistructured interviews, minutes of public meetings, digital correspondence, and field notes.

The analysis of this project focuses on themes that emerged throughout the project. As an exploratory proof of concept, we use qualitative source material to assess the project as it developed. Quantitative methods are used to summarize the qualitative source material that resulted from this multi-year study. The methods used in this study are action research and involved observation. The themes that anchor the study emerged from an iterative sense-making process.³⁶ Conversations about the project in the community, on campus, and at conferences all played a role in the development of the themes that anchor this study. An inevitable limitation of qualitative case study research is a lack of generalizability. However, even without the ability to generalize findings to other communities, we can still argue for transferability, or the ability to find meaningful parallels among similar cases.³⁷ For example, findings from this study have been transferred to our research on digital representations of African American communities across the state of Illinois.³⁸

STUDY CONTEXT

Demographics

This article presents a case study of a digital community archives in the African American community of Champaign-Urbana, in east central Illinois.³⁹ According to the 2010 census, the combined population of the twin cities is 122,305, with nearly 19,405 African American residents, roughly 16 percent of the population. African-Americans have lived in the area since at least 1850. Although the African American population is spread throughout the twin cities, a number of census blocks in the northern half of the cities are more than 50 percent African American. The historical Black community, officially segregated from the late 1930s to

the mid-1960s, continues to be over 95 percent African American. It is in and around this historical community, known locally as the “North End,” that many African American churches and businesses function as anchors in the community. Recent issues that have mobilized portions of the community include protracted court battles around K-12 educational disparities, access to jobs and employment, and the killing of an unarmed African American fifteen-year-old by a White police officer.

Champaign-Urbana is also home to the University of Illinois, the largest employer in the county. Other large employers are hospitals, school districts, and a small number of light manufacturing firms. The economic recession has led to a sense of crisis in portions of the city, with increased policing following a perceived crime wave in the city of Urbana. In this context, the cities, the county, and the university have been administering \$162 million in federal economic stimulus grants. One of the federal grants is a \$30 million broadband infrastructure grant, known as UC2B. UC2B is constructing a state-of-the-art broadband infrastructure to connect underserved, predominantly low-income neighborhoods in the north of the cities. A goal of this digital community archives proof of concept case study is to demonstrate how local communities can use new technological infrastructures to advance their interests.

Social Networking and Memory

During field work, we found that even before UC2B was operational, large amounts of cultural heritage information were being placed online by community members, primarily through Facebook. Table 1 contains data on the online cultural heritage activity of one community member, based on the types of photo albums she uploaded to Facebook between the time she created her account in December 2009 and February 2011, roughly the same time period as the development of this case study. Although she made more cultural information

available online than others, her story is not qualitatively exceptional. A middle-aged woman in her late fifties, she independently latched onto Facebook as a vehicle to make digital content on the community and its history available online. She uploaded 8951 images to Facebook, including both documentation of present community events (including digitized programs, photographs, and newsletters) and historical photographs. Observation of comments on these albums illustrates the ways in which this activity played an important community function. One photo album contains a single photograph of an older individual with this description:

Mr. [XXXX] attends the [XXXX] Senior mtg. the 1st Mon. of each month. I told him I could put his picture on fb and send to his [son]. He thought that would be fun.

This quote illustrates some of the ways in which Facebook has been used in the community to navigate intergenerational divides around technology and memory. This type of activity, however, is not universally acclaimed. Some individuals expressed concern over the ways in which information from communal, collective pasts was being indiscriminately broadcast online by individuals, with little or no community control or oversight.

Type of Album	Number / % of Albums	Number / % of Images
Event	62 / 26.3%	3608 / 42%
Community	48 / 20.4%	904 / 10.5%
Personal	37 / 15.7%	1001 / 11.7%
Funeral	31 / 13.2%	1239 / 14.4%
Church	27 / 11.9%	1181 / 13.7%
Family	18 / 7.7%	586 / 6.8%
Community History	12 / 5.1%	72 / 0.8%
TOTAL	235	8591

Table 1. Facebook Photo Albums Created by One Community Member, Dec. 2009-Feb. 2010.

In addition to individualized use of Facebook around community cultural heritage, there were also more collectivized activities. “You Know You Grew Up In . . .” are Facebook groups that have emerged across the United States to support community remembering, a fact easily

demonstrated by doing a Google search of “You Know You Grew Up In” and “Facebook.” In Champaign-Urbana, a “You Know You Grew Up In” group emerged in January 2009, with a user community of over 4,000 individuals of all ethnicities. Memories of racism surface in this online environment. A Black community leader posted her memories of segregation in a discussion on local businesses:

Growing up in northeast Champaign [the segregated black community] . . . I remember some restaurants that you may or may not remember . . .

In recognition of this unique local Black experience, two African Americans independently started two “You Know You Grew Up In” Facebook groups in summer 2011 that have almost exclusively African American membership. One group has approximately 500 members, the other, 250. Both groups evince language patterns and memories different from those featured on the mainstream Facebook memory page, as can be seen in the title of groups like “You Know You From” and “You Know You Old If.” Shared experiences led individuals to create groups, spaces of their own, in the commercialized networks of sites like Facebook. While developing this digital community archives, we struggled to network our efforts with these commercially mediated memory activities.

PROJECT NARRATIVE

This nuanced understanding of local community cultural heritage was largely unknown to the project team as the eBlack Champaign-Urbana (eBlackCU) digital community archives project commenced. In part, this lack of knowledge derives from the fact that in 2009 this community cultural heritage activity on Facebook was just emerging. In any case, the impetus for the eBlackCU project came in summer 2009, when volunteers from the Graduate School of Library and Information Science at the University of Illinois began working with the personal papers of a deceased African American local historian who donated her holdings to a local

museum. These student volunteers were motivated by a desire to both increase their hands-on experience and contribute in a meaningful way to the local community. The museum had neither a digitization program nor a trained archivist. As a result, the papers remained largely inaccessible to the African American community. Field trips to digitize portions of the papers led to a grant proposal to support the creation of a digital portal on local African American history. The envisioned portal would include not only these personal papers, but also material from public libraries, the University of Illinois, and community institutions and individuals. The grant-funded project sought to investigate how new relationships, using new technologies, could be formed both among local cultural heritage institutions (libraries, archives, museums, historical preservation groups, and media) and between these institutions and a historically marginalized community.⁴⁰

The collaborative digitization project began in earnest in spring 2010. This moment was an advantageous time to start a locally based digitization project, because the Illinois State Library had recently cut the digital imaging grants it had offered since 2001 to support digitization projects across Illinois. As the option of state government support for digitization projects disappears, experimental local projects become even more necessary for the future of digital community archives in the public sector.



MOVIE.01. Introduction to eBlackCU, including reading of Community Technology Manifesto.

At the start of the project, the digitization team had weak ties to the local African American community, making it imperative in the first phase of the project to spend time at community sites to build trust, one of the dimensions of social capital. Field work carried out at a historic African American church and a historic center of African American business and culture enabled the project to build stronger connections in the community. Outcomes from early field work included the production and distribution of CDs (with content duplicated online) containing newly digitized information from area collections on the cultural heritage of these two sites. The distribution of these CDs prompted members of the community to alert us to the existence of additional documentation, including records, in various institutions and homes throughout the community. Recognizing that digital inequalities hampered full access to this digitized content, the project team also created four full-color posters on African American history that were posted in a local barbershop.

To build deeper community connections and social capital beyond this start-up phase, in November 2010 the project team organized a [campus-community symposium](#). At this event local leaders in the community were given awards, a collective biography booklet, and an edited print volume on the history and present state of university-community engagement in the African American community. Both print publications relied on information aggregated into the collaborative digitization portal for their production. This two-day event was attended by over 250 individuals.

Following these initial projects, digitization continued of general community cultural heritage information. This information was made available to the project team by a number of private and public sources. Work also began on collaborations with an African American sorority alumni chapter and with local high schools to digitize yearbooks. These projects continued

throughout 2010 and 2011, and were punctuated by digital community memory workshops held at churches and libraries. By December 2012, the eBlackCU portal (Figure 1) held over 70,000 pages and nearly 200 hours of multimedia information on local history.



Figure 1: The homepage of eBlack Champaign-Urbana (eBlackCU) as of fall 2012. The look and feel of the website have changed over time as we have attempted to develop the site responsively in relation to actual and anticipated uses of the site's historical content. The logo and site design were created by a local community college intern who worked with the project in summer 2010.

PROJECT ANALYSIS/DISCUSSION

The analysis of this project is framed around our central research question: How does social capital, bonding and bridging, influence reception, participation, and a sense of community ownership in digital community cultural heritage? Reception, participation, and ownership are each analyzed in turn through the lens of social capital. *Reception* refers to accessing cultural heritage information. *Participation* refers to actively contributing cultural

heritage information. *Ownership* refers to perceived community control over digital heritage representations.

Reception

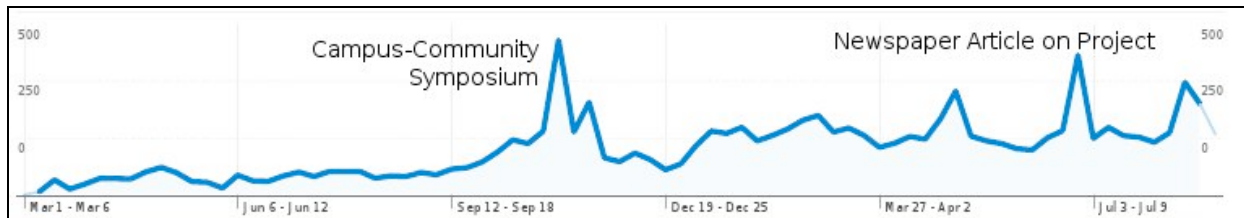


Figure 2. Number of unique visitors to eBlackCU website, from March 1, 2010, to September 1, 2011. Data points plotted by week with smoothing between. Source: eBlackCU.net Google Analytics.

Community reception of the eBlackCU project grew absolutely throughout project development, with spikes corresponding to project manifestations in physical space. Figure 2 displays data on the number of visitors to the website between March 2010 and September 2011. According to the site's analytics data, there were 8,647 unique visitors to the site during this time period. Between March 1 and October 15, 2010, there were only 1,470 unique visitors. This number was nearly matched during the following month. Between October 15 and November 15, there were 1,131 unique visitors. This surge in reception corresponds with the well-attended face-to-face campus-community symposium and its extensive community outreach. After this high point, reception slumped but resumed at higher levels during the first half of 2011. The surge in visits around July 1, 2011, corresponds to an article published in the local newspaper on the eBlackCU yearbook digitization project. These outliers in reception trends confirm the importance of face-to-face social capital for finding and accessing digital cultural heritage information in local communities.

Visitors accessing content online used this information for a variety of purposes, including family history, lifelong learning, and schoolwork. One man in his mid-twenties found

information on the site about his late grandfather; he emailed us to thank us for enabling him to surprise his mother with “some blasts from the past.” Another woman was looking for information about her great-great-grandfather, who was mentioned in one of the sources we digitized. A man now living in California who grew up in Champaign emailed to tell us, “I discovered a gallery of photos and images of C-U Black History online ... It was a joyful sight!!!!” Students from across the university have used information from the site in course papers. Others accessing the site wanted to share their own personal or family archives. A local church historian who found the material we digitized on her church emailed to tell us that she had “a few pictures of Champaign-Urbana history to preserve” that she would like to place on the website. Other individuals wanted to get print copies of the yearbooks we digitized. No dominant usage patterns emerged, but in general people accessing the site’s content did so as part of formal or informal research into family, church, school, or hometown histories.

Somewhat different reception trends emerged from the project’s Facebook group, suggesting different patterns of social capital in online SNS. Based on involved observation in the community’s use of Facebook, the project established a Facebook group in April 2010. We began posting small amounts of digitized content from the collaborative digitization portal into Facebook. As the project became better known in the community, reception on Facebook expanded. Current group membership is nearly 350, with the majority of the membership composed of past and present African American community members. The Facebook group featured especially high levels of reception by African American former residents of Champaign-Urbana. One of the first individuals to join the Facebook group was a woman currently living in Minneapolis using digital technology to find information about her Champaign-Urbana-based family.

In addition to numerical patterns of reception on Facebook, we also collected data on the types of reactions people had to this digitized content. After looking at a historic picture of a minister from her church, one woman wrote, “this is priceless! Thank you & everyone at eBlackCU!” A community elder, after finding a picture of herself as a young woman in a Gamma Upsilon Psi Cotillion Debutante Yearbook, commented, “Those were the days!!!” Many left comments such as “I remember all of them in this photograph,” “I knew everybody,” or “Wow, memories!” This type of nostalgic view of the personal past typified reception patterns on Facebook, based on the types of comments participants left.

Community reception of digitized yearbooks posted on Facebook presents an opportunity to differentiate reception between the website and the SNS. These yearbooks were made available on the project website and publicly announced both online and in face-to-face meetings throughout spring and summer 2011. However, based on both site analytics data and user comments on the website, public reception of the yearbook digitization project was minimal. In contrast, when the yearbook images were uploaded into Facebook, reception occurred almost instantaneously and continued over time. Approximately 75 individuals commented on, tagged, and in other ways actively received these digitized yearbooks within one month of their being uploaded to Facebook, suggesting that community social capital embedded in Facebook enabled individuals to access these yearbooks in ways impossible through the project website, which had much less community social capital invested within it. In these differing types and volumes of reception can be seen the daunting challenge faced by public sector cultural heritage institutions seeking to create publicly accessible cultural heritage information platforms: In a real sense the public sector is outmaneuvered by corporate platforms that grow increasingly more powerful through each new user who joins them. Bourdieu’s discussion of the ability to convert among

economic, cultural, and social capital reminds us that social capital can be exploited by those who assemble it, including corporate actors.

Participation

In addition to stimulating community reception of cultural heritage information online, the eBlackCU project remained deeply involved in stimulating and tapping into place-based community participation. One of the project's main goals was to connect digital community archives with traditional, physical ways of remembering. This goal was operationalized principally through eight digital memory workshops arranged throughout 2010 and 2011, which focused on oral history, digitization, and photograph identification. All these digital workshops were organized in conjunction with other community events: farmer's markets, community reunions, computer classes for older adults, and public forums on broadband technology. Community leaders and youth were involved in the advertising and leading of the workshops.

Community individuals who helped organize the workshops brought with them social capital that the groups they represented were able to mobilize in order to find out about and to participate in these digital memory workshops. Participation at all four workshops was strong, with twenty individuals offering oral memories to be digitized and added to the collaborative digitization portal and an additional nine individuals offering print and photographic materials to the portal. Based on informal semistructured interviews with participants at these workshops, it became clear that over half of the participants did not use, and in most cases were suspicious of, Facebook, suggesting that this offline participation differs in important ways from the online reception considered above.

Participation in the project also occurred outside of these memory workshops. A number of community individuals independently found out about the project and volunteered cultural

heritage information to the [collaborative digitization project](#). Individuals were able to contribute information in a variety of ways, including using an online contribution form, sending emails to the project director, or orally requesting assistance digitizing community information. Table 2 contains data on the individuals who participated in this manner. The table does not include submissions from formal cultural heritage institutions, nor from workshop participants. A “digital contributor” is an individual who submits information electronically, through either email or the website. An “analog contributor” is an individual who submits analog information to be digitized by the project team and added to the website. An individual affiliated with the university is an individual whose primary social identity is tied to the University of Illinois; an individual affiliated with the community is an individual whose primary social identity is not tied to the university (even if he or she is employed by the university). The fact that a majority of contributors were analog contributors suggests that bridging social capital enabled community individuals who were not heavy users of digital technology to bridge digital inequalities and seek out the eBlackCU project to request our assistance in making their cultural heritage information available online.

Community Contributors of Heritage Content to eBlackCU			
Affiliation	Digital Contributors	Analog Contributors	Total
University	3	3	6
Community	3	14	17
Total	6	17	23

Table 2. Community contributors of cultural heritage information to eBlackCU outside of formal workshops. See text for details on labels.

Additional signs of project participation emerged while training three groups of local youth to become participants in the project. Two of these groups were composed of paid summer interns; the third group was composed of volunteers from a local high school African American club. Although both cohorts of summer interns participated extensively in the program, after the

formal internships ended it became clear that their participation was contingent upon receiving payment, or economic capital. None of the attempts to involve the interns in project work led to any significant levels of participation. In this finding can be seen a failed attempt to convert economic capital into social capital. Despite the project's inability to retain high school interns as active participants beyond the summer, exit interviews conducted suggest interns did receive individualized benefits from participating in the project. They particularly enjoyed playing with power relations, and seeing themselves as powerful actors in relation to their local community. As they interacted with teachers and community elders they were able to take on the role of local history expert, a role that came with power. Reflecting on the summer, one said, "It was good to know that teachers would want to use this stuff in their classroom. . . . It was a good experience to know I could teach a teacher something instead of them teaching me all the time." Another mentioned enjoying being able to share local knowledge at work, at home, and at the barbershop. He felt this knowledge enabled him to communicate with adults and elders at a new, higher level.

In contrast to the struggles to mobilize local social capital around our paid summer intern programs, we had more success working with the all-volunteer, local high school African American club. The club members enthusiastically volunteered lunch hours throughout spring and summer 2011 to work on a digitization project on the history of the club. In total, thirty-three students from the club worked at various stages on the project. The comparative success of voluntary participation in the club's project can be attributed to both bonding and bridging social capital. Bonding social capital, or the affective outcomes sought by club members working together on a shared project directly tied to their social identity, was solidified by the mobilization of the club by its adult sponsor. Bridging social capital enabled the club sponsor to find out about and get connected to the eBlackCU project in the first instance.

Ownership

In early stages of the project, considerable time and effort were invested in creating the online collaborative digitization infrastructure. This first phase included the digitization of what the project team hoped would be enough content to convince the community of both the good intentions and community benefit of the project. This decision to pursue the strategy of “build it and they will come,” deemed necessary in the start-up phase, had negative ramifications in terms of the community’s reception and sense of ownership over the project. In trying to demonstrate a possibility of new technology for community cultural heritage, the project inadvertently framed itself as another in a long-line of university-community projects operating outside of community control. This sense of distance between the project and the community translated into reluctance by community members to take ownership over the project (invest bonding social capital into it) after the project had begun to develop and take off. Framed theoretically, this finding points to the difficulty of moving digital community archives from reliance on bridging social capital (mobilization of resources between the university and the community) to bonding social capital (mobilization of resources within the community).

A more nuanced interpretation of this finding requires recognition of the fact that no one from Facebook spent time working with the African American community in Champaign-Urbana, yet it appears that large numbers of residents in this community trust Facebook with their cultural heritage information. To reconcile these seemingly contradictory findings requires turning to a consideration of economic capital. The enormously profitable Facebook has the economic means to convert back and forth between economic and social capital. To imagine creating an alternative to the corporate cultural heritage industry requires beginning with social capital, since the economic resources of such projects will never match the political will of

corporate actors, absent significant national and international policy changes. Attempting to create something locally meaningful, we sought to network with the social capital invested in Facebook. Within the SNS, there are signs of community individuals expressing ownership over eBlackCU. In summer 2012, 457 archival photographs digitized between 2009 and 2012 were uploaded to eBlackCU's Facebook page. This massive infusion of digitized content into Facebook caused immediate ripples. A digitized newspaper clipping from an African-American-owned newspaper published in the early 1980s elicited the most visible signs of community ownership (Figure 3).

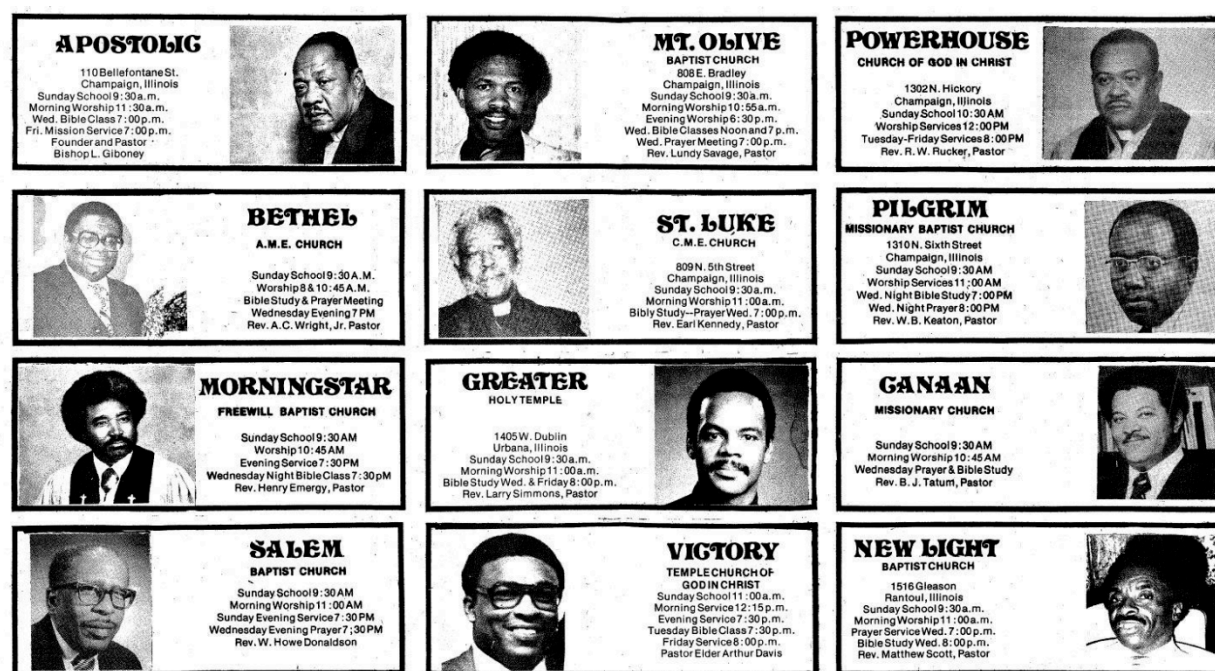


Figure 3. Digitized clipping from Black-owned newspaper *Illinois Spectrum*, 1980. The most visible sign of community ownership over eBlackCU came when a community member shared the photograph on the local memory group “You Know You Old If?” in July 2012.

Nine people were tagged in the photograph, which was “liked” seventeen times, and commented on by twenty-one people. In a sign of ownership, five individuals shared the photograph on their own Facebook walls. One individual re-posted the photograph on the Facebook memory group “You Know You Old If?” composed primarily of local African Americans in their forties, fifties,

and sixties. This act of appropriating digitized information on Facebook and recirculating it within one's own online network represents an act of expressing community ownership over digitized archival content.

Out of these difficulties of embedding the collaborative digitization project within the bonding social capital that sustains the local African American community emerged an initiative to create [a comprehensive project manual](#) that could be used independently of external resources to create their own digital community archives. The manual represents an attempt to solidify best practices into a coherent, theoretically informed document that could be used by communities to embed digitization into community cultural heritage practices. The manual currently exists as a digital book, with a corresponding [youth-produced digital video tutorial](#) for projects involving community digitization of yearbooks.⁴¹ Future work will focus on testing, refining, and utilizing this manual both in instruction at universities and in community workshops to test its potential for stimulating the creation of community-owned digital archives.

CONCLUSIONS

This article presents findings from a community-based collaborative digitization project in an African American community in East Central Illinois. Findings from this action research project demonstrate the importance of social capital for the mobilization of community reception, participation, and ownership in and around digital community archives. This case study has not solved the problem of how to develop self-determined digital community representations of collective African-American pasts. However, we suggest that studies such as this one contribute to evolving interdisciplinary discussions about how to develop alternatives to digital commercial networks.

Agency always exists in communities, but one has to be deeply connected in the community to find it and to collaborate with it. Some segments of the community in this study developed their own ways of digitizing cultural heritage information, independent of this action research project. However, this independent course paradoxically relied on a corporately controlled global information network. As a result of this finding, we suggest that both bonding and bridging social capital have roles to play in the processes of networking cultural heritage information as a public, community good. Bonding social capital and the preservation of the affective resources that sustain communities are necessary for a community-based project ⁴²to become truly community-owned. However, bridging social capital and the instrumental outcomes it can bring can help facilitate community access to new resources and frameworks. Indeed, the entire eBlackCU project can be seen as an exercise in bridging social capital between a university and a community, with additional bridging social capital drawn upon to access and digitize resources at local museums, libraries, archives, and historical societies.

Future research should seek to become more analytically precise in the use and measurement of social capital in community-based collaborative digitization of cultural heritage information. This precision would aid in finding a common language that allows for more direct comparison and contrast of case studies and communities across space. Critical, nuanced thinking around this topic emerges as a time-sensitive need for the public sector cultural heritage stakeholders when framed against the global commodification of cultural heritage information. Analysis of digital community archives should incorporate the structural constraints of late capitalism, as well as the bottom-up, bonding social capital that continues to sustain and mobilize communities, especially in the context of historical inequalities that communities seek to

challenges and overcome. Such thinking and action requires unified responses from African American Studies and African American communities.

¹ Our thanks to the Community Informatics Research Lab, GSLIS, Illinois, directed by Kate Williams and Abdul Alkalimat, and community partners in Champaign-Urbana. This project was funded by grants from the Office of the Vice Chancellor for Public Engagement, University of Illinois at Urbana-Champaign. An earlier version of this research was presented at iConference 2012, Toronto, February 7-12, Toronto.

² Ernst Posner, *American State Archives* (Chicago: University of Chicago Press, 1972).

³ Oscar H. Gandy, "Matrix Multiplication and the Digital Divide," in *Race After the Internet* (New York: Routledge, 2012): 128-45.

⁴ UNESCO, "Intangible Heritage," *UNESCO 2007*, http://portal.unesco.org/culture/en/ev.php-URL_ID=34325&URL_DO=DO_TOPIC&URL_SECTION=201.html.

⁵ The concept of digital community archives bears relation to Jeannette A. Bastian's work on "cultural archives"; see her "The Records of Memory, the Archives of Identity: Celebrations, Texts, and Archival Sensibilities," *Archival Science* (2012), doi:10.1007/s10502-012-9184-3.

⁶ Manuel Castells, *The Rise of the Network Society* (New York: Wiley, 1996).

⁷ Paul DiMaggio and Eszter Hargittai, "From the 'Digital Divide' to 'Digital Inequality': Studying Internet Use As Penetration Increases," Princeton University Center for Arts and Cultural Policy Studies Working Paper #15, 2001.

⁸ Manuel Castells, "Grassrooting the Space of Flows," *Urban Geography* 20, no. 4 (1999): 294-302.

⁹ Zizi Papacharissi, "The Virtual Sphere," *New Media & Society* 4, no. 1 (2002): 9-27.

¹⁰ Abdul Alkalimat and Kate Williams, "Social Capital and Cyberpower in the African American Community," in *Community Informatics*, ed. Leigh Keeble and Brian Loader (London: Routledge, 2001).

¹¹ Abdul Alkalimat, "eBlack Studies: A Twenty-First-Century Challenge," *Souls* (2000): 69-76; Abdul Alkalimat, "Social Cyberpower in the Everyday Life of an African-American Community," University of Toledo, 2004, <http://uac.utoledo.edu/Publications/cyberorganizing.pdf>.

¹² Ken Middleton, "Collaborative Digitization Programs," *Library Hi Tech* 23, no. 2 (2005): 145-50.

¹³ J. Palmentiero, "Hudson River Valley Heritage," in *Digitization in the Real World*, ed. K. Bor Ng and J. Kucsma (New York: Metropolitan New York Library Council, 2010).

¹⁴ P. Rowe and W. Banicourt, "NZMuseums," in *Museums and the Web 2009: Proceedings Indianapolis, April 15-18* (Toronto: Archives & Museum Informatics, 2009).

¹⁵ Evan Robb, "Gleaning Local History: Community-based Digitization Experiences in Rural Washington," *Microfilm & Imaging Review* 39, no. 1 (2010): 12-17; L. Lopatin, "Library Digitization Projects, Issues and Guidelines: A Survey of the Literature," *Library Hi Tech* 24, no. 2 (2006): 273-89;

N. Allen and L. Bishoff, "Collaborative Digitization: Libraries and Museums Working Together," *Advances in Librarianship* 26 (2002): 43–81; Steve Bromage, "Benedict Arnold Slept Here," in *Museums and the Web 2010: Proceedings Denver, April 13-17* (Toronto: Archives & Museum Informatics, 2010).

¹⁶ John H. Whaley, "Digitizing History," *The American Archivist* 57, no. 4 (1994): 660–72.

¹⁷ For examples of such projects, see Elaine L. Westbrooks, "African-American Documentary Resources on the World Wide Web: A Survey and Analysis," *Archival Issues* 24, no. 2 (1999), <http://digital.library.wisc.edu/1793/45912>; Alice Schreyer, "University of Chicago Library-Faculty Partnerships in Uncovering Hidden Collections," *Association for Research Libraries* 251 (2007), <http://www.arl.org/bm~doc/arlbr251uncap.pdf>; K. L. Stokes, *Cultural Inheritance/L.A.: A Directory of Less-Visible Archives and Collections in the Los Angeles Region* (Los Angeles: Getty Research Institute for the History of Art and the Humanities, 1999); Meredith R. Evans, "The Digitization of African American Publications," *The Serials Librarian* 53, no. 1 (2007): 203; S. Yaco and T. Graves, "Mapping the Desegregation of Education in Virginia: Where Are the Records?" *Virginia Libraries* 55, no. 4 (2009), http://scholar.lib.vt.edu/ejournals/VALib/v55_n4/yaco.html; Samantha Hastings, "Digital Image Managers for the New Millennium: A Museum/University Collaboration," *Museums and the Web*, http://www.archimuse.com/mw99/abstracts/prg_1059.html. Important literature on this topic also exists in the proceedings of the Black Caucus of the American Library Association; see "National Conference of African-American Librarians History," http://www.bcala.org/NCAAL_7/bcala_conf/NCAAL_history.html.

¹⁸ Jessica Gerrard, "Tracing Radical Working-Class Education: Praxis and Historical Representation," *History of Education* 41, no. 4 (2012): 537–58; Andrew Flinn, "Community Histories, Community Archives: Some Opportunities and Challenges," *Journal of the Society of Archivists* 28, no. 2 (2007): 151–76; Kelvin White and Anne Gilliland, "Promoting Reflexivity and Inclusivity in Archival Education, Research, and Practice," *The Library Quarterly* 80, no. 3 (2010): 231–48.

¹⁹ Susan Willis, "Memory and Mass Culture," in *History and Memory in African-American Culture*, ed. Genevieve E. Fabre and Robert G. O'Meally (New York: Oxford University Press, 1994), 178–187.

²⁰ Kate Williams and Joan C. Durrance, "Community Informatics," in *Encyclopedia of Library and Information Science*, ed. M. Bates and M. M. Maack (New York: CRC Press, 2009).

²¹ Roderick L. Lee et al., "Making Use of Scenarios in Community Computing Contexts," *Journal of Community Informatics* 3, no. 1 (2007): 309–30.

²² Victor Vos and Eric Ketelaar, "Amsterdam Communities' Memories," in *Constructing and Sharing Memory: Community Informatics, Identity and Empowerment*, ed. G. Johanson and L. Stillman (Cambridge Scholars Press, 2007).

²³ Amalia Sabiescu, "Collaborative Digital Storytelling as an Intergenerational Hub for Cultural Representation in Traditional Communities," paper presented at the 6th Prato Community Informatics & Development Informatics Conference (Monash Centre, Prato, Italy, October 27–30, 2009).

²⁴ Federico Casalegno, "Connected Memories in a Networked Digital Era: A Moving Paradigm," in *Networked Neighbourhoods: The Connected Community in Context*, ed. Patrick Purcell (London: Springer, 2006).

²⁵ Ramesh Srinivasan et al., "Digital Museums and Diverse Cultural Knowledges," *The Information Society* 25, no. 4 (2009): 265–78.

²⁶ Yehuda E. Kalay, Thomas Kvan, and Janice Affleck, eds., *New Heritage: New Media and Cultural Heritage* (New York: Routledge, 2007).

²⁷ Catherine Arden, Kathryn McLachlan, and Trevor Cooper, "Flying Blind, or Going with the Flow?," *Journal of Community Informatics* 6, no. 3 (2011), <http://ci-journal.net/index.php/ciej/article/view/774>. For similar findings from a United States-based digital public history project, see Lauren Jae Gutterman, "OutHistory.org: An Experiment in LGBTQ Community History-Making," *The Public Historian* 32, no. 4 (2010): 96–109. See also D. McClellan and K. Tanner, "Knowledge Discovery Empowering Australian Indigenous Communities," *Information Technologies & International Development* 7, no. 2 (2011): 31–46; Fiona Ross, Sue McKemmish, and Shannon Faulkhead, "Indigenous Knowledge and the Archives," *Archives & Manuscripts* 34, no. 2 (2006).

²⁸ See discussion in Kate Williams, "Informatics Moments," *The Library Quarterly* 82, no. 1 (2012): 48.

²⁹ Noah Lenstra, "The History and Future of Local History Infrastructure: Open Access and Commodification of Local History in the United States and the Anglosphere," *Proceedings of the 5th International Conference on Cooperation and Promotion of Information Resources in Science and Technology (COINFO'10): Information Sharing in U-Era, Beijing, China, November 27-29, 2010*, <http://hdl.handle.net/2142/17434>. See also Dan Schiller, *How to Think about Information* (Champaign: University of Illinois Press, 2007); Herbert I. Schiller, *Culture, Inc.* (Oxford: Oxford University Press, 1991); Robert Hewison, *The Heritage Industry* (London: Methuen, 1987); Ancestry.com, "Form 10-K Annual Report: Filed Mar 8, 2011," <http://ir.ancestry.com/secfiling.cfm?filingID=950123-11-23066>; Keith Hampton et al., "Social Networking Sites and Our Lives," *Pew Internet & American Life Project*, <http://www.pewinternet.org/Reports/2011/Technology-and-social-networks.aspx>.

³⁰ David Harvey, *The Condition of Postmodernity* (Oxford: Blackwell, 1991).

³¹ Kate Williams and Joan C. Durrance, "Social Networks and Social Capital," *Journal of Community Informatics* 4, no. 3 (2008).

³² Nan Lin, *Social Capital* (Cambridge: Cambridge University Press, 2002); Robert Putnam, *Bowling Alone* (New York: Simon & Schuster, 2000); James S. Coleman, "Social Capital in the Creation of Human Capital," *American Journal of Sociology* 94 (1998): S95–S120.

³³ Pierre Bourdieu, "The Forms of Capital," in *Handbook of Theory and Research for the Sociology of Education*, ed. J. G. Richardson (Westport, CT: Greenwood, 1986).

³⁴ Marian Orr, *Black Social Capital* (Lawrence: University Press of Kansas, 1999).

³⁵ Leigh Keeble, "Why Create? A Critical Review of a Community Informatics Project," *Journal of Computer-Mediated Communication* 8, no. 3 (2003); H. H. Cho, "Towards Place-Peer Community and Civic Bandwidth," *The Journal of Community Informatics* 4, no. 1 (2008); Kenneth B. Clark, *Dark Ghetto: Dilemmas of Social Power*, 2nd ed. (Middletown, CT: Wesleyan University Press, 1969).

³⁶ Norman K. Denzin and Y.S. Lincoln, *Collecting and Interpreting Qualitative Materials* (Thousand Oaks, CA: Sage, 2008).

³⁷ Egon G. Guba and Yvonna S. Lincoln, *Naturalistic Inquiry* (Thousand Oaks, CA: Sage, 1985).

³⁸ See the research websites: <http://eblackillinois.net/> and <http://eblackchicago.org/>.

³⁹ Information on demographics is derived from content available at the eBlackCU digital library: <http://www.eBlackCU.net>.

⁴⁰ This paper does not focus on the technical, ethical, and logistical methods of building collaborative digitization projects, but rather on the ways in which such efforts are used in local community contexts. For information on leading such a project in your community, please visit our Digital Local & Family History Project Manual at <http://manual.eblackcu.net/>.

⁴¹ This video can be accessed on the eBlackCU website. <http://eblackcu.net/portal/introduction>.

Bibliography

Alkalimat, Abdul. "eBlack Studies: A Twenty-First-Century Challenge." *Souls* (2000): 69–76.

Alkalimat, Abdul. "Social Cyberpower in the Everyday Life of an African-American Community." University of Toledo. 2004.

<http://uac.utoledo.edu/Publications/cyberorganizing.pdf>.

Alkalimat, Abdul, and Kate Williams. "Social Capital and Cyberpower in the African American Community." In *Community Informatics*, edited by Leigh Keeble and Brian Loader. London: Routledge, 2001.

Allen, N., and Bishoff, L. "Collaborative Digitization: Libraries and Museums Working Together." *Advances in Librarianship* 26 (2002): 43–81.

Ancestry.com. "Form 10-K Annual Report: Filed Mar 8, 2011."

<http://ir.ancestry.com/secfiling.cfm?filingID=950123-11-23066>.

Arden, Catherine, Kathryn McLachlan, and Trevor Cooper. "Flying Blind, or Going with the Flow?" *Journal of Community Informatics* 6, no. 3 (2011). <http://ci-journal.net/index.php/ciej/article/view/774>.

-
- Bastian, Jeannette A. "The Records of Memory, the Archives of Identity: Celebrations, Texts, and Archival Sensibilities." *Archival Science* (2012). doi:10.1007/s10502-012-9184-3.
- Black Caucus of the American Library Association. "National Conference of African-American Librarians History." http://www.bcala.org/NCAAL_7/bcala_conf/NCAAL_history.html.
- Bourdieu, Pierre. "The Forms of Capital." In *Handbook of Theory and Research for the Sociology of Education*, edited by J. G. Richardson. Westport, CT: Greenwood, 1986.
- Bromage, Steve. "Benedict Arnold Slept Here." In *Museums and the Web 2010: Proceedings Denver, April 13-17*. Toronto: Archives & Museum Informatics, 2010.
- Casalegno, Federico. "Connected Memories in a Networked Digital Era: A Moving Paradigm." In *Networked Neighbourhoods: The Connected Community in Context*, edited by Patrick Purcell. London: Springer, 2006.
- Castells, Manuel. "Grassrooting the Space of Flows." *Urban Geography* 20, no. 4 (1999): 294–302.
- Castells, Manuel. *The Rise of the Network Society*. New York: Wiley, 1996.
- Cho, H. H. "Towards Place-Peer Community and Civic Bandwidth." *The Journal of Community Informatics* 4, no. 1 (2008).
- Clark, Kenneth B. *Dark Ghetto: Dilemmas of Social Power*. 2nd ed. Middletown, CT: Wesleyan University Press, 1969.
- Coleman, James S. "Social Capital in the Creation of Human Capital." *American Journal of Sociology* 94 (1998): S95–S120.
- Denzin, Norman K., and Y. S. Lincoln. *Collecting and Interpretating Qualitative Materials*. Thousand Oaks, CA: Sage, 2008.

-
- DiMaggio, Paul, and Eszter Hargittai. "From the 'Digital Divide' to 'Digital Inequality': Studying Internet Use As Penetration Increases." Princeton University Center for Arts and Cultural Policy Studies Working Paper #15, 2001.
- Evans, Meredith R. "The Digitization of African American Publications." *The Serials Librarian* 53, no. 1 (2007): 203.
- Flinn, Andrew. "Community Histories, Community Archives: Some Opportunities and Challenges." *Journal of the Society of Archivists* 28, no. 2 (2007): 151–76.
- Gandy, Oscar H. "Matrix Multiplication and the Digital Divide." In *Race After the Internet*, 128–45. New York: Routledge, 2012.
- Gerrard, Jessica. "Tracing Radical Working-Class Education: Praxis and Historical Representation." *History of Education* 41, no. 4 (2012): 537–58.
- Guba, Egon G., and Yvonna S. Lincoln. *Naturalistic Inquiry*. Thousand Oaks, CA: Sage, 1985.
- Gutterman, Lauren Jae. "OutHistory.org: An Experiment in LGBTQ Community History-Making." *The Public Historian* 32, no. 4 (2010): 96–109.
- Hampton, Keith, Lauren Sessions Goulet, Lee Rainie, and Kristen Purcell. "Social Networking Sites and Our Lives." *Pew Internet & American Life Project*.
<http://www.pewinternet.org/Reports/2011/Technology-and-social-networks.aspx>.
- Harvey, David. *The Condition of Postmodernity*. Oxford: Blackwell, 1991.
- Hastings, Samantha. "Digital Image Managers for the New Millennium: A Museum/University Collaboration." *Museums and the Web*.
http://www.archimuse.com/mw99/abstracts/prg_1059.html.
- Hewison, Robert. *The Heritage Industry*. London: Methuen, 1987.

-
- Kalay, Yehuda E., Thomas Kvan, and Janice Affleck, eds. *New Heritage: New Media and Cultural Heritage*. New York: Routledge, 2007.
- Keeble, Leigh. "Why Create? A Critical Review of a Community Informatics Project." *Journal of Computer-Mediated Communication* 8, no. 3 (2003).
- Lee, Roderick L., Craig H. Ganoe, Wendy A. Schafer, Cecelia B. Merkel, John M. Carroll, and Mary Beth Rosson. "Making Use of Scenarios in Community Computing Contexts." *Journal of Community Informatics* 3, no. 1 (2007): 309–30.
- Lenstra, Noah. "The History and Future of Local History Infrastructure: Open Access and Commodification of Local History in the United States and the Anglosphere." *Proceedings of the 5th International Conference on Cooperation and Promotion of Information Resources in Science and Technology (COINFO'10): Information Sharing in U-Era, Beijing, China, November 27-29, 2010*. <http://hdl.handle.net/2142/17434>.
- Lin, Nan. *Social Capital*. Cambridge: Cambridge University Press, 2002.
- Lopatin, L. "Library Digitization Projects, Issues and Guidelines: A Survey of the Literature." *Library Hi Tech* 24, no. 2 (2006): 273–89.
- McClellan, D., and K. Tanner. "Knowledge Discovery Empowering Australian Indigenous Communities." *Information Technologies & International Development* 7, no. 2 (2011): 31–46.
- Middleton, Ken. "Collaborative Digitization Programs." *Library Hi Tech* 23, no. 2 (2005): 145–50.
- Orr, Marian. *Black Social Capital*. Lawrence: University Press of Kansas, 1999.
- Palmentiero, J. "Hudson River Valley Heritage." In *Digitization in the Real World*, edited by K. Bor Ng and J. Kucsma. New York: Metropolitan New York Library Council, 2010.

-
- Papacharissi, Zizi. "The Virtual Sphere." *New Media & Society* 4, no. 1 (2002): 9–27.
- Posner, Ernst. *American State Archives*. Chicago: University of Chicago Press, 1972.
- Putnam, Robert. *Bowling Alone*. New York: Simon & Schuster, 2000.
- Robb, Evan. "Gleaning Local History: Community-Based Digitization Experiences in Rural Washington." *Microfilm & Imaging Review* 39, no. 1 (2010): 12–17.
- Ross, Fiona, Sue McKemmish, and Shannon Faulkhead. "Indigenous Knowledge and the Archives." *Archives & Manuscripts* 34, no. 2 (2006).
- Rowe, P., and W. Banicourt. "NZMuseums." In *Museums and the Web 2009: Proceedings Indianapolis, April 15-18*. Toronto: Archives & Museum Informatics, 2009.
- Sabiescu, Amalia. "Collaborative Digital Storytelling as an Intergenerational Hub for Cultural Representation in Traditional Communities." Paper presented at the 6th Prato Community Informatics & Development Informatics Conference, Monash Centre, Prato, Italy, October 27-30, 2009.
- Schiller, Dan. *How to Think about Information*. Champaign: University of Illinois Press, 2007.
- Schiller, Herbert I. *Culture, Inc.* Oxford: Oxford University Press, 1991.
- Schreyer, Alice. "University of Chicago Library-Faculty Partnerships in Uncovering Hidden Collections." *Association for Research Libraries* 251 (2007).
<http://www.arl.org/bm~doc/arlbr251uncap.pdf>.
- Srinivasan, Ramesh, Robin Boast, Jonathan Furner, and Katherine M. Becvar. "Digital Museums and Diverse Cultural Knowledges." *The Information Society* 25, no. 4 (2009): 265–78.
- Stokes, K. L. *Cultural Inheritance/L.A.: A Directory of Less-Visible Archives and Collections in the Los Angeles Region*. Los Angeles: Getty Research Institute for the History of Art and the Humanities, 1999.

UNESCO. "Intangible Heritage." *UNESCO 2007*. http://portal.unesco.org/culture/en/ev.php-URL_ID=34325&URL_DO=DO_TOPIC&URL_SECTION=201.html.

Vos, Victor, and Eric Ketelaar. "Amsterdam Communities' Memories." In *Constructing and Sharing Memory: Community Informatics, Identity and Empowerment*, edited by G. Johanson and L. Stillman. Cambridge Scholars Press, 2007.

Westbrooks, Elaine L. "African-American Documentary Resources on the World Wide Web: A Survey and Analysis." *Archival Issues* 24, no. 2 (1999).
<http://digital.library.wisc.edu/1793/45912>

Whaley, John H. "Digitizing History." *The American Archivist* 57, no. 4 (1994): 660–72.

White, Kelvin, and Anne Gilliland. "Promoting Reflexivity and Inclusivity in Archival Education, Research, and Practice." *The Library Quarterly* 80, no. 3 (2010): 231–48.

Williams, Kate. "Informatics Moments." *The Library Quarterly* 82, no. 1 (2012): 48.

Williams, Kate, and Joan C. Durrance. "Community Informatics." In *Encyclopedia of Library and Information Science*, edited by M. Bates and M.M. Maack. New York: CRC Press, 2009.

Williams, Kate, and Joan C. Durrance. "Social Networks and Social Capital." *Journal of Community Informatics* 4, no. 3 (2008).

Willis, Susan. "Memory and Mass Culture." In *History and Memory in African-American Culture*, edited by Genevieve E. Fabre and Robert G. O'Meally, 178–87. New York: Oxford University Press, 1994.

Yaco, S., and T. Graves. "Mapping the Desegregation of Education in Virginia: Where Are the Records?" *Virginia Libraries* 55, no. 4 (2009).
http://scholar.lib.vt.edu/ejournals/VALib/v55_n4/yaco.html.

