Networked Cultural Heritage and Socio-Digital Inequalities: A Case Study in an African-American Community

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ABSTRACT

Digital technology facilitates the networking together of cultural heritage information held by multiple institutions and individuals. Yet socio-digital inequalities at the level of local communities shape how this possibility develops in places. This paper presents a case study of one project to network African-American community cultural heritage information in the contexts of collaborative digitization, community informatics, and the wide-spread use of commercial social networking services. Analysis occurs through the lenses of social capital theory and the eBlack Studies framework. Findings illustrate the critical dialectic between bridging/instrumental and bonding/affective social capital in community digitization: communities need bridging social capital to become aware of collaborative digitization projects and possibilities; they also need to invest bonding social capital into such projects to produce a self-determined collective digital representation. Flows of economic capital inform how these alignments of social capital inform the production of digital cultural heritage.

Keywords
Community Informatics, Cultural Heritage, eBlack Studies, Collaborative Digitization, Social Capital, Cultural Industries.

1. INTRODUCTION
Through the use of digital technology one can bring together physically dispersed information on a particular topic. Information aggregation occurred prior to the widespread diffusion of digital technologies [1], however digital technologies make this aggregation easier to perform at greater speed and lower cost. In the context of community knowledge and memory this fact makes 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 [2]. The resulting community-information-technology nexus is referred to in this paper as "Networked Cultural Heritage."

By cultural heritage information we refer to what Dalbello and Vamanu identify as an operational definition of cultural heritage within the discipline of Library and Information Science: "culture, …. knowledge (e.g., aboriginal knowledge), information (e.g., digital objects), science, sites, monuments, and historic, politic, religious, and literary records" [3]. Such a broad definition is warranted in the context of emergent theorization of cultural heritage within the LIS disciplinary literature. This empirically grounded definition of cultural heritage information serves as a starting point for analysis in this case study.

By networked we refer to the theory of the Network Society, developed by sociologist Manuel Castells [4]. According to Castells networks of digitally-mediated information are at the center of contemporary society. Castells does not argue that technology determines society – rather all the traditional socio-cultural, economic and historical forces impact how, why, if and to what ends networks are established and maintained. Castells analyzes the ways in which these networks bypass large areas of the world, not only in developing countries, but also in inner-cities in the U.S., Europe and Japan. These areas of exclusion characterize the "dual cities" occupied both by the technocratic elite and the de-linked underclass. Castells [5] later argued that this process of polarization could be reversed through what he called "grassrooting the space of flows," or delinked communities using digital networks for expressing identity and seizing power. Papacharissi calls this the "revolutionary potential" of digital technologies for locally-based public spheres [6]. Alkalimat and Williams [7] refer to this process as the community acquisition of cyberpower.

Networked cultural heritage, then, refers to networks of digitally mediated cultural heritage information shaped by traditional sociological forces in the contexts of socio-economic polarization and inequalities.

2. LITERATURE REVIEW
2.1 Collaborative Digitization
In the United States, large-scale digital cultural heritage networks have emerged over the past fifteen years through collaborative digitization networks, often under the direction of state libraries, archives or historical societies [8]. These state agencies provide funding and support to local partners in public libraries, museums, colleges and universities to enable them to digitize a portion of their cultural heritage information holdings. Region-based collaborative digitization projects have also emerged, such as at the Southeastern New York Library Resources Council [9].

Programs have also emerged in other nations [10]. Some of the principal impetuses for collaborative digitization programs include a) uncovering hidden collections for scholarship through large-scale digitization and b) sharing expertise in digitization and financial resources between state agencies and local institutions seeking to make community cultural heritage information available online [8/11].

The scholarly literature on collaborative digitization focuses primarily on questions of technical and logistical procedures, such as metadata and interoperability [12]. Social research focuses on the sometimes vexed collaborations among libraries, archives and museums, such as on how differing professional expectations impact project development [13]. More sociologically informed analysis includes Robb's discussion of communities served by public libraries in rural Washington directly participating in collaborative digitization [11], and Bromage's discussion of the Maine Memory Network moving beyond the traditional cultural heritage sector into general society through work in K-12 schools [14]. Overall, the collaborative digitization movement in the United States is top-down, in the sense that grant funding moves from an external agency into local communities. However, simply because a project emerges in a top-down fashion does preclude the possibility of it supporting bottom-up cyberpower [15].

2.2 Community Informatics

To understand the dynamics of bottom-up cyberpower in the shaping of networked cultural heritage requires incorporation of community informatics, an emerging discipline that studies the continuity of local communities in the context of transformations brought about by information technologies [16]. Community informatics research has produced many case studies useful for thinking about networked cultural heritage from the bottom-up. Lee, et.al. [17] study a digital network for amateur underground railroad researchers in Pennsylvania. Vos and Ketelaar [18] focus on an experimental program to circulate a digital oral history booth among Amsterdam's ethnic communities. Sabiescu [19] uses digital technologies for participatory production of traditional cultural expressions. Casalegno [20] analyzes the process of embedding digital technologies into the physical environment to augment community remembering. Srinivasan, et.al. [21] survey experimental projects that use digital technologies to support bottom-up digital museums. The topic of digital community cultural heritage has also been studied in the heritage studies literature, notably in the edited volume *New Heritage* [22], which features innovative case studies from Hong Kong, Brazil the U.K., and other places.

A dilemma confronted in these action research case studies centers around the question of whether to build the networked cultural heritage infrastructure first and then build local collaboration around that infrastructure, or to postpone construction until deep community ties have been established by the project team. In a multi-year project to construct a digital community portal in rural Australia, portal construction was postponed until the project was deep enough in the community so that the community could maintain the portal themselves [23]. Protracted project development led to fatigue and in some cases community annoyance. The authors conclude that such projects must accommodate the "'show me' factor inherent in Community Informatics projects," in which communities must first be presented with possibilities before they can embrace them. There is equal danger in trying to do too much showing, and not enough

collaborating. McClellan and Tanner [24] demonstrate how cultural heritage institutions containing information about Australian Aboriginal communities spend too much time working on digital library construction, and not enough time developing participatory interfaces using both face-to-face and digital communications. The process of building deep community collaboration in participatory online interfaces for community cultural heritage information is time-consuming and seemingly never ending. Yet deep collaboration is critical for community-based digital cultural heritage work, especially in the context of historical inequalities that must be confronted and overcome [25].

2.3 Commodification of Culture

These case studies cannot be assessed in isolation from the persistent, structural forces leading society towards increased commodification of many forms of information at a global level [26]. One variable to consider in the analysis of networked cultural heritage should be the impact of the heritage industry [27-28], as manifested by such entities as family history networks Ancestry.com and MyHeritage.com, as well as social network services (SNS) such as Facebook, which have developed market models that include networked family and community cultural heritage information in a commodified mileau. Ancestry.com, with over one million members, requires a paid subscription to access most of its family history databases and social networking services; its free services, such as RootsWeb, evince an explicit corporate strategy of horizontal integration [29]. The large-scale digitization of family and community heritage in SNS's is more covert. As more and more individuals gravitate to Facebook and other SNS's for information-sharing needs [30], these platforms are quickly becoming the trusted platforms of choice for sharing and accessing personal and community cultural heritage information. These increasingly all-encompassing, global corporate cultural heritage information networks can be contrasted with the locally-based experiments typified by community informatics research. It remains to an open research question how and if these local projects can coalesce into a network capable of challenging the market model of corporate capital. 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 [31]. More research and more experiments are needed to build networked cultural heritage information from the bottom-up, from places to global space.

3 THEORY AND METHODS

To combine in a single study top-down trends in the heritage industry with bottom-up community informatics requires a theory that accommodates macro- and micro-level analysis. Such a synthesis can be found in the theory of social capital, which Williams and Durrance [33] argue is emerging as a connective theoretical thread uniting disparate case studies in community informatics. Social capital refers to resources embedded in social networks and groups [32-36]. Social capital theory assists in the recognition of both large-scale structures and individual and collective actions. Nan Lin calls these structures institutions and networks [32]; Robert Putnam and James S. Coleman refer to groups formed from the relations among people [34-35]. Social capital, according to Putnam [33], 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 [32]. Bonding social capital serves to sustain community; bridging social capital enables instrumental gains across communities. Coleman adds to this theory by stating that a form of social capital is the potential for information sharing within groups [35]. Coleman and Pierre Bourdieu [36] further assert that social capital can be formed and maintained in geographic places through proximity maintained across time. Finally, Bourdieu asserts that social capital is best understood in a theoretical system in which economic capital roots all other forms of capital [36]. The theory of social capital offers tools to aid in the understanding of social dynamics in the digitization of community cultural heritage information. In this paper we focus on how trust operating between groups functions as a prerequisite for action and information sharing, and how social capital interacts with structural factors in the realm of economic capital.

The central research question of this paper is: How does social capital, both bonding and bridging, influence reception, participation and community ownership in networked community cultural heritage?

Although Lin is adamant that social capital can be quantitatively measured, this study takes a qualitative approach to this question. The methods used in this study are action research and involved observation. Action research [37] is characterized by iterative problem solving within some defined community. Involved observation goes beyond participant observation [38] to place the researcher as an active agent in the social hierarchy of the community [39]. Action research in this project focused on the construction of a collaborative digitization website, with multiple partners both within and outside of a particular African-American community. Involved observation occurred in cultural heritage 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 growing online spaces of remembering, found to exist in this community primarily in the SNS Facebook. Specific sources of information generated from action research and involved observation include: website analytics, semi-structured interviews with community participants, project meeting minutes, field-notes on community participation in the project, and field-notes on community cultural heritage activities.

The analysis of this project focuses on themes that emerged throughout the project. The themes that anchor the study come from an iterative sense-making process modeled on the process outlined by Denzin and Lincoln [40]:

> The researcher first creates a field text consisting of field notes and documents ... [that] moves from this text to a research text: notes and interpretations … that contains the writer's initial attempt to make sense …. Finally, the writer produces the public text that comes to the reader.

In addition to private research texts, versions of this study have been worked out in previous iterations available for public review [41]. An inevitable limitation of qualitative case study research is lack of generalizability. However, even without the ability to generalize findings we can still argue for what Copeland [42] calls transferability, or the ability to find meaningful parallels among similar cases. A parallel study underway analyzes the contours of African-American digital cultural heritage across the state of Illinois [43]. Early findings from this state-wide study suggest there are enough parallels between this case study and phenomenon occurring in similar communities across the state to warrant the claim of transferability of these findings to other African-American communities.

The framework guiding the action of this project is the eBlack Studies paradigm. This case study focuses less on technical digitization procedures and more on the difference digitization makes within communities. By basing the study in an African-American community, historical legacies of racism and inequality that are rarely acknowledged in the digitization literature are incorporated into the analysis. The work of Abdul Alkalimat [44-46] in the formation of electronic Black Studies (eBlack Studies) as the continuity of the activist academics of the Black Liberation Struggle in the twenty-first century roots this work in an empirical social justice framework. Alkalimat [46] argues that activist interventions into struggles to maintain African-American community memory are necessary correctives to the top-down, social reproduction of ruling class memory. The eBlack Studies framework shaped the project's name and direction: eBlackCU, or eBlack Champaign-Urbana.

4 STUDY CONTEXT
4.1 Demographics
This article presents a case study of a locally-based collaborative digitization project in the African-American community of the twin cities of Champaign-Urbana in east central Illinois.[1] 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% African-American. The historical black community, segregated from the late 1930s to the mid-1960s, continues to be over 95% African-American. It is in this historical community, known as the "North End," that many African-American churches and a number of African-American owned businesses function as anchor institutions in the community. Recent issues that have mobilized portions of the community include protracted court battles around educational disparities between white and black K-12 students, and the killing of an unarmed African-American 15-year old by a white police officer. Political struggles for equitable employment opportunities also mobilize segments of the community.

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 and university administer a number of federal economic stimulus grants to reverse negative trends in the economy. One of the federal economic stimulus grants received by the university is a $30 million broadband infrastructure grant, known as UC2B. UC2B will enable the construction of a state-of-the-art broadband infrastructure to connect under-served, predominantly low-income neighborhoods in the north of the cities.

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[1] Information in this section of the paper is derived from the eBlackCU digital library, http://www.eBlackCU.net.

4.2 Social Networking and Memory

In field-work it was found that even before UC2B existed, large amounts of cultural heritage information was being placed online by community members, primarily through Facebook. Table 1 contains data of 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. Although she made more cultural information available online than others, her story is not qualitatively exceptional. A middle-aged woman in her late 50's, she independently latched onto Facebook as a vehicle to make digital content on the community and its history available online. During this time period 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 the description:

> Mr. [XXXX] attends the Douglas Center 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 inter-generational divides around technology and memory.

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

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

Facebook's position in the community, however, is far from universally acclaimed. Numerous individuals, especially older individuals, made comments in public and private meetings regarding their concerns with the ways in which community memory was being indiscriminately broadcast online with little or no community control or oversight. Many of these individuals did not have Facebook accounts and were suspicious of the ways in which the site contributes to the erosion of community privacy.

In addition to individuals making use of Facebook to share cultural heritage, there is also evidence of more collectivize patterns of networked cultural heritage on Facebook. "You Know You Grew Up In..." are Facebook groups that have emerged around the world to support community remembering, a fact easily demonstrated by doing a Google search of "You Know You Grew Up In" and "Facebook." This phenomenon represents what Gordon [47] calls networked locality, in which both community residents and those with some connection to a community can use digital technologies to construct a sense of place online. In Champaign-Urbana a "You Know You Grew Up In" group emerged in January 2009, with a user community of over 4000 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:
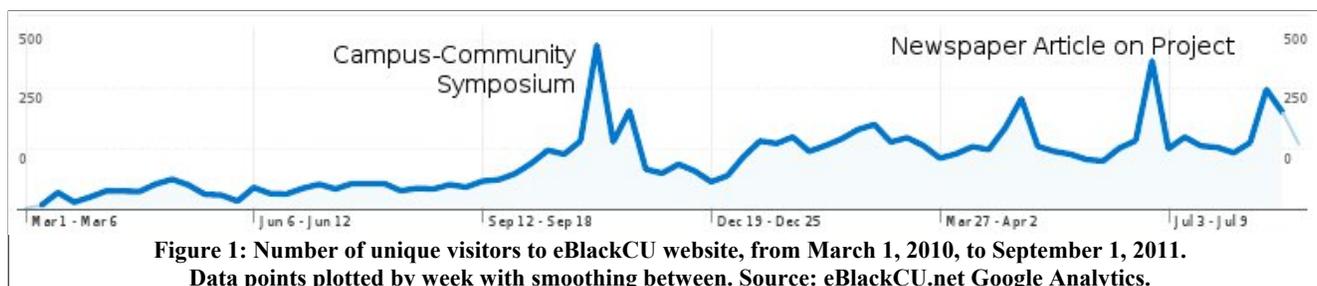
> Growing up in northeast Champaign [the segregated black community]... I remember some restaurants that you may or may not remember...

In recognition of this distinctly unique Black history, two African-Americans independently started two "You Know You Grew Up In..." Facebook groups in Summer 2011 that, as of September 1, 2011, have almost exclusively African-American membership. One group has 480 members, the other, 235. Both groups evince language patterns and memories different from those featured on the inter-ethnic, mainstream Facebook memory page, as can be seen in the title of one of the groups, "You Know You From Champaign-Urbana," which draws on African-American Vernacular English. From this finding we see confirmation of Lisa Nakamura's findings [48] regarding the ways that race is made, rather than erased, online.

5 PROJECT NARRATIVE

This nuanced understanding of online community cultural heritage was largely unknown to the project team as the eBlackCU project commenced. 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.

The collaborative digitization project began in Spring 2010. This moment was an advantageous time to start a locally-based digitization project since 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 networked cultural heritage information in the public sector (see also [49]).

Figure 1: 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.

At the start of the project, the digitization team was only weakly connected to the 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 according to Coleman [35]. 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 [50] 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 September 2011, the eBlackCU portal held over 60,000 pages and over 168 hours of multi-media information on local history.

6   PROJECT ANALYSIS/DISCUSSION

The analysis of this project is framed around our central research question: How does social capital, both 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.

6.1 Reception

Community reception of the eBlackCU project grew absolutely throughout project development, with spikes corresponding to project manifestations in physical space. Figure 1 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 1470 unique visitors. This number was nearly matched during the following month. Between October 15 and November 15, there were 1131 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.

Somewhat different reception trends emerged from the project's Facebook group, suggesting different patterns of community social capital in online SNSs. 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 more well 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 was especially featured 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.

Community reception of digitized yearbooks posted in 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 out-maneuvered 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 [36] reminds us that social capital can be exploited by those who assemble it, including corporate actors.

6.2 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 networked cultural heritage 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 20 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 semi-structured 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 off-line 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 e-mails 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 either through e-mail 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.

Additional signs of project participation emerged in sustained training with three groups of local youth. Two of these groups were composed of paid summer interns; the third group were 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. In contrast, a local high school African-American club enthusiastically volunteered lunch hours throughout Spring and Summer 2011 to work on a digitization project on the history of the club. In total, 33 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.

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

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**

6.3 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 into it) after the project had begun to develop and take-off. Framed theoretically, this finding points to the difficulty of moving networked cultural heritage 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 consideraiton 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 muscle of corporate actors, absent significant national and international policy changes.

Out of these struggles to embed 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 networked cultural heritage projects. The manual [51] 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 digital video tutorial for projects involving community digitization of yearbooks. Future work will focus on testing, refining and utilizing this manual in both instruction at universities and in community workshops to test its potential for stimulating the creation of community-owned networked cultural heritage infrastructures.

7 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 networked cultural heritage information in the public sector.

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, is necessary for a community-based project to truly become 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 networked cultural heritage information should incorporate both 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 challenge and overcome [52]. Such thinking and action requires a unified response from the public cultural heritage sector of society, especially in libraries, archives, media, historic preservation and museums, as well as from the institutions charged to educate the information professionals that work in these environments.

8 ACKNOWLEDGMENTS

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