**Collaborative Boutique Digitization: Comparison of Two Projects**

**by**

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**0.0 Preliminary text**

**0.1 Abstract**

Focuses on 2 digital projects, King County Snapshots (2001-2003) and Olympic Peninsula Community Museum (2004-2006). Compares and contrasts the two projects. Frames the discussion inside the goals of each project. Frames further discussion inside the project visions of of creating models as opposed to the needs to produce digital assets and web sites. Focuses on the following areas of digitization projects: sustainability, collaboration, quality of relationships, project staff, professionalism, digitization and scanning, file management, preservation, item selection, legal issues, partnership agreements, geographic space.

**0.2 Keywords**

Library materials – Digitization

Archival materials – Digitization

Museums – Collection management

Scholarly electronic publishing – case studies

Libraries and business – Case studies

Digital libraries – Economic aspects – United States

Information management

Digital preservation

Information storage and retrieval -- Methods

**1.0 Introduction**

**1.1 Motivation (for this article)**

Many digitization projects have been realized through collaboration across institutions.[[1]](#endnote-1) Milne (2008) has called a large subset of these projects “boutique digitization” (in contrast to mass digitization) and this phrase has entered the literature on digitization.[[2]](#endnote-2) Some literature has pointed out the limitations of boutique digitization, especially as it contrasts to systematic mass digitization.[[3]](#endnote-3) However as long as grants are supporting many projects that are initiated to digitize a specific body of materials,[[4]](#endnote-4) careful selection and description of small portions of whole collections will likely continue. Thus to add to the accumulated knowledge base[[5]](#endnote-5) of these projects past and for the benefit of those to come, we’ve decided to write this article.

**1.2 Digitization projects discussed**

The University of Washington has created well over 100 digital collections,[[6]](#endnote-6) but in this essay we will focus on two: King County Snapshots (KCS) (“King County snapshots: a photographic heritage of Seattle and surrounding communities,” 2003) and Olympic Peninsula Community Museum (OPCM) (“Pacific Northwest Olympic Peninsula community museum,” 2006). In addition to comparing and contrasting well – and to the fact that they were both funded in part by moderately large National Leadership Grants IMLS, the Institute of Museum and Library services[[7]](#endnote-7)– they represent the University Libraries’ most ambitious efforts to enter into collaboration in digitization projects with organizations outside the university. This model of cross organizational collaboration appears to be alive and well[[8]](#endnote-8) and we believe we can give an account of some areas of this type of digitization project that cannot fit well into “best practices” manuals and “how to” documents.

As for the projects we will discuss, both projects were considered successful by participants and end-users. From the viewpoint of project staff, KCS was less stressful and stayed more in line with its stated goals than OPCM. KCS was completed with a minimum of difficulty and few areas of improvement have been identified by project staff in the intervening years.

**2.0 Project goals**

**2.1 Goals of King County Snapshots (KCS)**

A full account of project goals and major activities can be found at http://content.lib.washington.edu/imls/kcsnapshots/abstract.html. The following bulleted list is a condensation of these goals as they are represented in the grant proposal:

* Develop a model program of sustained cooperation.
* Develop a model for creating multimedia databases.
* Create and document a model training program for running imaging projects.
* Disseminate a growing resource (that is, the project web site).

This resource is described in the grant narrative[[9]](#endnote-9) as follows: “Over a two-year period, MOHAI and UW staff will work with temporary staff funded by this proposal to select, scan and create LC metadata for 12,000 images (approximately 4,000 from MOHAI, 4,000 from UW and 4,000 total from AKCHO [Association of King County Historical Associations] member collections). All images chosen will be of King County, creating a valuable resource documenting the change and variety of the region….This group of images will be made accessible via the Internet, with varying amounts of metadata…. [The project will provide participants with] CONTENTdm database software. [W]eb design and permanent server space [will be a service given] to AKCHO groups, [and] the project will result in a consistent user interface for a comprehensive photo and metadata online database.”

**2.2 Goals of Olympic Peninsula Community Museum (OPCM)**

Project goals for OPCM are difficult to paraphrase and are stated verbatim from <http://content.lib.washington.edu/cmpweb/project/abstract.html> in the bulleted list below:

* Cross-cultural Collaboration and Knowledge Sharing—develop a community-driven model for surfacing, preserving, and sharing culture, history, and traditions and for increasing understanding within and between differing cultural and age groups.
* Accessibility—develop a model for providing access to comprehensive cultural information to groups that have historically been deprived of such access.
* Sustainability and Adaptability—create a cost-effective, workable model that promotes sustainable and self-motivated lifelong learning by other communities.

As stated in the same “abstract.html” document, “…a project team of members from the communities, The University of Washington, and partnering organizations […] will carry out the project over a two-year period [….] [T]he project team will surface, select, digitize, and create metadata for 12,000 images, oral histories, objects, and other cultural artifacts from a multitude of public and private collections, including those in people’s homes. [A] community documentation team will be formed and trained to photograph objects in homes, videotape events and record oral histories. [T]he project team will develop and implement a guided process of community participation in the selection and curation of exhibits. [T]he site will be developed and hosted by The University of Washington. [T]he project team will create a model Development Kit that will contain all the tools and knowledge necessary to create a Community Museum. [T]he Community Museum web site will contain a section dedicated to project design, results, press releases, and promotion of the model program.”

**2.3 Analysis of these goals**

At this point we would like emphasize that both projects sought to develop “models,” and the *processes* of developing models, first and foremost; the project web sites – and all the production work that those web sites represent – were considered “major activities” among these modeling goals.

The goals of each project as presented above are excerpts from the rhetoric employed in the original grant applications to IMLS. Well after the completion of these projects, these goals can be viewed as vision and mission statements, as articulated by the Free Management Library: “the mission statement describes the overall purpose of the organization” and “the vision statement includes vivid description of the organization as it effectively carries out its operations” (McNamara, n.d.). As Hitt, Ireland and Hoskisson, (2008) assert, we “learn a great deal about a firm by studying its vision and mission” (p. 18). Indeed this is a significant part of what PALINET did, as documented in Clareson (2007), when “asked by the Delaware Division of Libraries to develop a plan for statewide digitization activities in the libraries of the state” (p. 1) specifically, “PALINET staff reviewed nearly 50 collaborative digitization program websites to determine the purpose and goals of […] collaborative digitization groups” (p. 1). In addition, project staff for both KCS and OPCM earnestly attempted to fulfill these stated missions and certainly did not consider them empty rhetoric. Although no specific documentation was maintained in this area, both projects’ periodic reports to IMLS illustrate a high awareness of the project goals as originally summarized in the grant narratives.[[10]](#endnote-10)

Zorich (2003) proposed three categories of mission statements for digital cultural heritage initiatives, the most common being “serve the needs of a particular profession or discipline” (p. 4) which, of the three, best describes the mission statements of both our projects. Our goals also fit in her category “contribute to the public good.” It is noteworthy that Zorich later says “a more informative indicator of an organization’s role in the digital cultural heritage landscape is the products and services it offers” (p. 5). We hope we address products and services at length below, after using the mission statements as a significant starting point for this essay.

1. **Accounts of selected areas of concern**

**3.1 What are we producing? Processes or deliverables?**

*3.1.1. Comparison between KCS and OPCM*: In KCS we foregrounded the production of deliverables; in OPCM we struggled between foregrounding deliverables *and* processes.

*3.1.2. King County Snapshots:* Every day the production of our final web site was the focus of attention. In this effort we were very successful: we disseminated the resource we agreed to disseminate. As for model-building, we were not quite as successful. We *did* create a model for developing image databases (not multimedia) but the methods used to build our database were not well documented and disseminated. In fact, KCS appears to have influenced only those of us who were insiders.

In short, KCS served as a model in the following areas:

* Strong project management.
* Strong centralization with a commitment to honoring the property, purposes and goals of collaborators.
* Strong commitment to metadata production.
* Establishment of firm partnerships with well formulated agreements.

This is an interesting lesson in the usefulness of efficiency, centralization and excellent services that are well coordinated, but it is not entirely the model we intended to build – although efforts *were* made to “develop a model program of sustained cooperation” and to “Create and document a model training program.”

To build our working model in KCS we offered three workshops (image selection, metadata, design and fulfillment[[11]](#endnote-11)), sent project staff to partner organizations’ locations where staff trained and coached in accordance with participants’ wishes, provided meaningful documentation on the project web site and, at the end of the project, provided participants with a contact name and number at University of Washington Libraries (the web site host) in case more work was done that should be added to the project web site. The idea was that we would demonstrate our methods of production and training so that partners could design similar methods in digitization efforts independent of the university.

In retrospect there is general agreement that, although the partner organizations did a lot of work, project staff may have offered too many services. Partners did not build their *digital* collections, they prepared their collections for project staff to transform into digital collections. This may not have been the best way to meet our goals; specifically “develop a model program of sustained cooperation” and “create and document a model training program.” (This is discussed further in the next section, “3.2 Sustainability.”)

*3.1.3. Olympic Peninsula Community Museum:* For OPCM, the tension between processes and production was a central dilemma. One of the main reasons for this was due, on the one hand, to the presence of a community liaison, whose main job was to establish and maintain relationships; whereas, on the other hand, project coordination at the university was primarily interested in producing deliverables as promised to the funding agency. Centers for both processes and production were thus built into the project structure, and often resulted in an apparent lack of coordination. Further exacerbating this structural tension, the project staff members were not exactly “on the same page.” Naturally for staff from the community, and in the community itself, there was not an urgent need to finish the web site but, rather, to strengthen the community around this project, whereas production managers were concerned that too much attention was being paid to strengthening relationships and not enough to getting the web site done.

*3.1.4. Discussion:* This problem of feeling conflicted between producing deliverables and producing repeatable models appears to be a special problem of collaborative projects. By collaboration we mean specifically joint efforts across two or more institutions[[12]](#endnote-12). Within our own institution, outside of collaboration, it is common for us to document procedures for any production process we intend to repeat. It grows more complicated as we collaborate with other organizations: how do we agree on what we are trying to achieve and what will we adopt as good practice?

We believe we had a special problem here as ours was a type of collaboration identified in Council on Library and Information Resources (2001) as something necessary for smaller organizations to produce any digital content at all, namely, collaboration with a larger, better-funded organization: “There is concern that smaller institutions are at a great disadvantage. Production capacity and the creation and sustenance of architectures that are necessary for new opportunities are seldom encountered outside of large organizations. Thus, for many libraries and museums, the only choice is to enter into collaboration” (p. 17). This is another root of the same problem we’ve presented in this section: are we conducting this project to allow opportunities to organizations that normally wouldn’t get those opportunities? If so, what is the opportunity? To learn how to do it themselves? Or to pool our resources and simply get them on the web best as we can? If the former, than we need to establish methods and processes; if the latter, we need primarily to get the job done.

We should mention in this section that we had to respond to our funding agency (IMLS). We promised to deliver many things. Our deliverables – for example, a database with 12,000 objects – were much more concrete than “promoting lifelong learning” or creating a model of sustained cooperation. The database and metadata would be a static, one-time delivery at the completion of the project. For many of us, the more concrete nature of deliverables made them more persuasive as a motivational force.

**3.2 Sustainability**

*3.2.1. Discussion:* “Sustainability” has many meanings. As Maron, Smith and Loy (2009) wrote, “there is no clear consensus […] of what sustainability is or how to achieve it”[[13]](#endnote-13) The same publication offers a definition of sustainability: “Sustainability is the ability to generate or gain access to the resources — financial or otherwise — needed to protect and increase the value of the content or service for those who use it” (p. 6). In this section we’ll adopt this definition and clarify what *we’ve* meant by “sustainability.”

Since the University of Washington hosted both web sites, we felt we had adequately protected the resources created. When *we* speak of “sustainability” therefore, we are thinking largely of “increasing the value” of our collection; specifically of developing the collections through contributions from the small heritage organizations after the project staff was no longer active.

In chapter XI, “Sustainability,” Humanities Advanced Technology and Information Institute (HATII), University of Glasgow, and the National Initiative for a Networked Cultural Heritage (NINCH) [NINCH] **(**2002) recommends “…considering at the outset whether the digitization work you are undertaking has a finite scope, or is likely to continue indefinitely” (chapter XI). We did: in their original conceptions each project sought to continue indefinitely.

In section 3.1 of this essay, we visited the importance our projects placed on developing models and processes that could be repeated. In that section we discussed how that created some confusion when we also had to produce our deliverables. In this section we will explore the reason we wanted to create repeatable methods and processes: namely, to *sustain* each project after the project staff dissolved.

*3.2.2. Comparison between KCS and OPCM:*  Neither project was sustained (in the limited meaning we understood that term) after the project staff was dissolved. That is, neither project saw any resources added to the core collections created during the period of funding. There was one notable exception to this: a King County historical society added a relatively large collection almost four years after the project staff was dissolved.

*3.2.3. King County Snapshots:* In section 3.1 we outlined our methods for sustaining cooperation, for modeling methods for creating databases, and for modeling training programs. Although all feedback from participants in these activities was highly favorable – even years after the project – the groups did not continue working on the project or on bringing new organizations into the database.

Many of the partners say that to this day they are working on digitization projects. If this were to be evidenced on the web, we would have an *approximation* of what we wanted to achieve. One certain change is that all the organizations now have their own web site. However about half of the organizations’ web sites do not even link to the digital collections created during KCS; these organizations’ images are not available from their web sites. Two of the eleven organizations took the initiative to integrate the KCS images into their web site interface design. Only one of the organizations produced additional digital collections similar to those created for KCS and displayed those on their web site. Almost all of the organizations evidenced *some* effort in digitizing images for their web sites, including some small online exhibits. Although there is no good way to measure the influence of KCS, it does not appear we have even approached “sustainability.”

*3.2.4. Olympic Peninsula Community Museum:* Partially in response to the fact that KCS did not fully realize its goals for sustainability, OPCM sought to involve participants in all phases of production. We wanted partners to do as much work as possible so that they would have the experience and confidence to build digital collections after the project staff dissolved. As it turned out we could not bring project participants into the production process nearly as much as we’d hoped; in fact, OPCM ended up with *fewer* requirements of participants than KCS! In short, production managers became concerned we were not going to meet our production goals and scrapped much of the plan for community production.

It is very difficult to measure how digitally involved participants have remained after the project. Of the twenty-nine content contributors, only nine have web sites. Of those nine web sites, only three link to the Olympic Peninsula Community Museum – although all of them have at least small photo exhibits available on their sites. As a result, we would have to contact all organizations and ask them what digitization projects they are involved in. To further complicate this, 17 of the 29 contributors are individuals that would be difficult to locate. Our point is that we don’t know how much success we had in moving participants into the digital arena. What we do know is that we have not received any additions to the digital collections after the project staff was dissolved. Originally we had hoped there would be documentation teams and development kits still producing digital content long after the project staff disbanded. The general consensus is that we did not approach anything near the sustainability goals we had set.

**3.3 Deliverables: web sites, exhibits, etc.**

*3.3.1. Comparison between KCS and OPCM:* Both projects built a web site displaying 12,000 digital objects each. KCS displayed only digital images; OPCM was a multi-media site. KCS offered some extras, including extensive project background, links to resources that informed the project, and an historical timeline that was essentially an online exhibit. OPCM also offered project background and links to resources but went further in delivering nine online exhibits and some educational resources.[[14]](#endnote-14)

*3.3.2 King County Snapshots:* Although it was not *easy* to produce our web site, it was produced with few project-threatening mishaps (the most challenging events surrounded outsourced digitization: see section 3.6 below). The production plan was purposefully simple: digitize, produce derivatives, describe, develop an interface using CONTENTdm. The problems of preservation were already described in respectable detail in the literature that influenced us[[15]](#endnote-15) but we planned to pass this problem to collection owners. We were going to use the digital masters only to create derivative images; the masters, stored on CDs, were then to be delivered to the collection owners (see section 3.6 below). We planned only to build a single collection of 12,000 images with no custody of the content left to project staff. It was a well thought out and extremely reasonable workload and a lot of attention was focused on metadata creation.

*3.3.3 Olympic Peninsula Community Museum:* Production coordinators had a plan: build a CONTENTdm database with 12,000 digital objects with varying levels of metadata. Using that database we would produce our web site, our nine exhibits and our educational materials. As time progressed, metadata could be added to the database until the collection went live. Digital masters could be managed by collection owners, as it was successfully managed in KCS.

In reality this got quite complicated. The database was not created quickly, scanning proceeded sporadically, sometimes chaotically, and at times objects arrived with very little or no metadata or, worse – in rare cases but more than once – without even identifying who the collection owner was. In most cases owners did not want their digital masters and we found ourselves facing significant preservation issues. Then we had to start producing our exhibits before content for those exhibits were received; either that or, almost surely, risk not completing our exhibits. Although these project-threatening mishaps did not occur epidemically, they were significant bumps in the road.

In addition, exhibits were supposed to be almost entirely community-produced but, of the nine exhibits, seven were constructed largely at UW Libraries. Although it is no surprise UW Libraries accepted the technological challenges of displaying the exhibits, community members were required to write their own exhibit narratives. This was not to protect project staff: the spirit of the grant was to allow the community to tell its own story; for UW Libraries to write these narratives was a painful concession to choosing production over the development of models and processes. This happened in part because of a rigorous production timeline, but also because sometimes there was no one who was willing or able to speak as the narrator for the particular community’s story. There were also occasions community members attempted to create a storyline for their community, but were unable to bring it together in a coherent way. To this day project staff are uncertain how well the exhibits reflect what would have been created had it come from the community itself. It is worth noting however that each community was given time to edit “their” story before it went live.

**3.4 Collaborations of professionals and non-professionals**

*3.4.1. Comparison between KCS and OPCM:* Professionalism was the rule for all organizations in KCS. Professionalism was the exception in OPCM.

*3.4.2. King County Snapshots:* KCS partners were all museums, libraries, historical societies, or otherwise archivally minded. Some were large and professionally-run, others were tiny and volunteer-based. All had roughly the same focus, and in fact all partners already belonged to an over-arching museum association for the region[[16]](#endnote-16).

*3.4.3. Olympic Peninsula Community Museum:* OPCM partners were a mix of professional museums, public-sector institutions, tribes, loosely-affiliated community groups, and individual families. While the diversity of the partners added a great deal of spark to the project and the digital archive, many partners were completely unfamiliar with creating archives. For example, concepts of image selection were unknown to some partners, and no selection criteria were applied to several collections. There were even some groups that were internally diverse to the point where it was difficult to find a consistent central contact to work with. In such cases agreements would be made, a change would take place, new agreements would have to be made, etc. We lost a few collections following this sort of organizational fluidity.

*3.4.3. Discussion:*

We’ve decided to frame this as a problem of collaboration. Generally NINCH (2002), Chapter IX, recommends a solution to this: “A successful collaboration depends on establishing guidelines and creating standards that all partners adhere to.” This is, in various shapes, a commonly encountered recommendation; in fact it’s one of the main reasons the Digital Library Federation itself came into being, as can be seen in Digital Library Federation (2000): “the DLF seeks to share information about the standards and practices that are used to create, manage, and disseminate those digital information resources with which digital libraries typically come into contact.” Indeed this is a something all *professionals* agree upon at this point, even in the age of mass digitization.[[17]](#endnote-17) The problem *we* faced was, in part, communicating to non-professionals – and to less affluent professionals who generally lacked the luxury to be so meticulous – our seemingly over-complicated practices and getting them to adopt those practices.

**3.5 Project staff**

*3.5.1. Comparison between KCS and OPCM:* KCS employed one half-time project manager reporting to two principal investigators (PIs). In addition two metadata librarians were hired. In the original conception of OPCM, one half-time project manager was hired that was to report to two grant PIs and work closely with University of Washington Libraries and Clallam County Historical Society and with community consultants hired to design community-specific exhibits. A full time metadata librarian and a full time research librarian were also to be hired at the University of Washington, where research and documentation was to be developed. Although other people were paid by this project, for the convenience of this article we’ll call these the core project staff.

*3.5.2. King County Snapshots:* The KCS project staff remained stable from the beginning to the end of the project, with one notable exception: one of the co-PIs was replaced. Although this had significant impact on the project, it happened over a year into the project, well after workflows were established and the project was almost complete. The staff all had offices in one central location – the Museum of History and Industry in Seattle – although much of the work, especially metadata-creation, was done on the collection-owners’ sites, with the farthest site from that central location about 25 miles.

*3.5.3. Olympic Peninsula Community Museum:* OPCM staff was not as stable as KCS. One of the remarkable features was an attempt at de-centralization, with the project manager located in Forks, 100 miles away from the University of Washington in Seattle. This staff geography left a heavy burden on the half-time project manager, as he had to do almost everything alone. After overseeing scanning and meeting with project partners and the public, he had no time to manage metadata, select items for digitization, develop the website development, write progress reports, oversee expenses and other administrative tasks. Eventually, in a significant re-structuring, the project management tasks moved to the UW Libraries and the “project manager” was re-identified as the “community liaison.” The latter remained on the Peninsula to continue working on relationship-building, collection gathering, and scanning. There was also some staff turnover – including the significant departure of our full time Research Librarian after one year of employment (and this position was not re-filled) – causing additional workflows to be interrupted or re-designed. In addition the workflow for OPCM was much more complicated than the workflow for KCS, in part because of geography, in part because a broad range of production solutions were used.

*3.5.4. Discussion:* In manuals on managing digitization projects, staffing generally gets treated as a function of project planning, as occurs in NINCH (2002 chapter II), and Sitts (2000 p. 27-29). For those of us who did the work, the planning had been completed, staff had been hired and the project had been designed already; questions of human resources were more dynamic and intertwined with implementing workflows. In KCS what limitations and challenges we faced were usually navigable, due in part to an excellent project staff and excellent partners. In OPCM we often encountered challenges that required workflow re-structuring, job re-assignments and the hiring of adjunct staff that was not part of the original funding plan.

In both projects having half-time time rather than full-time project managers placed a large burden on the individuals in those positions. Finally, in the next section, we’ll see each project had a very different approach to an area where human labor is required: the actual digitization.

Both projects also faced some unique problems due to the hiring of temporary staff. Although gargantuan efforts were made at the host organizations to bring the temporary workers into everyday operations, there were still unanticipated mishaps. For example, in OPCM, a poor file management strategy – where 10s of thousand of files were stored on optical discs – was implemented by one of the temporary workers (described in section 3.7 below). A permanent employee of the organization probably would have had a better understanding of organizational structure and, possibly, adequate connections and know-how to get the help needed from the appropriate department to implement a better file management strategy.

**3.6 Digitization**

*3.6.1. Comparison between KCS and OPCM:* KCS set aside funds for contract labor to scan all selected items. OPCM set aside no specific funds for digitization.

*3.6.2. King County Snapshots:* The grant proposal for KCS specified allocated funding to the digitization process. Once project staff agreed upon specifications for digitization – a far more complicated task in 2001 than it is today – a company was hired to scan at our specifications. This proved to be the most challenging aspect of KCS because the hired scanners were not reliable. The work was completed however, with the TIFF master images scanned directly to CDs. Metadata specialists produced derivatives and stored those on servers at University of Washington Libraries. CDs containing master images were hand delivered during site visits. We do not know what each organization did with their CDs.

*3.6.3. Olympic Peninsula Community Museum:* In contrast, the OPCM contained zero funding for the actual scanning tasks. The grant proposal stated that these activities would be taken care of by the project staff and by “community documentation teams.” In this process a “Development Kit” would emerge – including equipment purchased from grant funds – that would be used by human digitizers. This means we were depending to some extent on free labor, but these volunteer groups never materialized. Almost all scanning was done by project staff. A student worker was hired to perform some of this work. Images were sent to University of Washington Libraries via FTP. This caused disorientation in file management (see section 3.7 below) as thousands of multimedia files arrived on the FTP server. Master images were saved but were not distributed back to the owning organization in most cases. This caused further disorientation in file management. Additional staff was needed to produce derivatives. Finally derivatives were stored in CONTENTdm and masters on optical discs.

Project specifications were written to guide digitization and derivative production.[[18]](#endnote-18) The Metadata Librarian also served as the Digitization Expert and created these specifications, which occupied much of his time in the early months of the project while legal agreements were being produced (see section 3.10 below). Because digitization efforts were widely dispersed and because the specifications were very detailed, the specifications were rarely accessed directly; rather, “how to” documents were usually created to guide people through the digitization process. In many cases the specifications were not followed at all, and the resulting master archive is inconsistent and certainly not in accordance with best practices as formulated, for example, in NINCH (2002), chapters V through VIII.

*3.6.4. Discussion:* Those of us who worked on these projects are in agreement that funds should always be set aside for digitizing. Sometimes machines will need to be paid for, but always people. We suspect that volunteers did not emerge because scanning thousands of objects is rather dull work.

**3.7 File management, digital masters, preservation, etc.**

*3.7.1. Comparison between KCS and OPCM:* KCS had virtually no file management problems. For OPCM file management, although not a project-threatening problem, become much more complicated than anticipated.

*3.7.2. King County Snapshots:* Apart from the unreliability of the hired scanners, file management went quite smoothly in KCS. Care was taken to ensure that files were not left in the custody of project staff. TIFF files were stored directly on CDs at the scanner for delivery to the collection owners. Derivative JPEGs – all produced by the Metadata Librarians using agreed-upon settings and Photoshop macros -- were stored on UW Libraries servers via FTP. The FTP transfers were unpredictable: sometimes files transferred easily, sometimes very slowly, and sometimes transfers were aborted and files had to be re-sent, but this was only a frustration: all derivatives were successfully transferred then moved to the appropriate CONTENTdm server. No preservation strategy was devised by project staff for master images as the masters were delivered to the collection owners. Derivatives were added to the UW Libraries regular backup routine and were quite safe.

*3.7.3. Olympic Peninsula Community Museum:* Most images were scanned on the Olympic Peninsula and FTPd to UW Libraries. Project staff at UW devised a formal receiving process where all objects were logged into a spreadsheet. The date received and the owning organizations were noted and the master file was moved to a temporary location within the UW Libraries’ regular backup routine. From that location derivatives were produced – which also needed to be tracked on the receiving spreadsheet so we knew which files had derivatives and which didn’t. Masters and derivatives needed to be associated. As time went on it became clear that project staff was going to have custody of masters and derivatives. All files were stored on CDs and DVDs. Backups were produced. Optical discs needed to be numbered and every file had to be associated with a disc in the spreadsheet. Discs required labels. After a file and disc got misplaced we began recording the optical disc ID printed on the disc itself. It seemed like the complications compounded until we had to hire somebody to produce derivatives and manage the files. This was an unexpected expense, possible partially because we did not replace our departed Research Librarian (as mentioned in section 3.5.3 above). In the end we stored and organized approximately 40,000 digital files and were surprised by the challenges of this task.

*3.7.4. Discussion:* During the years of these projects we had some difficulty conveying the concept of digital assets, as expressed in NINCH (2002), chapter XIII: “the process of digitizing material does not merely create an intellectual object: it creates a valuable asset.” It seems the general notion was that we were indeed creating intellectual objects for display “on the web.” We were able to express in KCS that digital images can be repurposed through image sales. This, alongside other ways of repurposing digital assets, was expressed repeatedly by the project manager in personal exchanges, then in a well-attended workshop we called our “Design and Fulfillment Workshop.”[[19]](#endnote-19)

**3.8 Selection of items to digitize**

*3.8.1. Comparison between KCS and OPCM:* KCS successfully promoted a rigorous selection process. OPCM never established selection as a priority.

*3.8.2. King County Snapshots:* Largely through initial agreements and early discussions, the KCS PIs and project manager were able to stress to the importance of appropriate image selection. Also about one half year into the project, participants gathered at an image selection workshop devoted to selection and related themes like archiving, preservation, etc.[[20]](#endnote-20)

*3.8.3. Olympic Peninsula Community Museum:* Many factors allowed selection to appear less important during OPCM. First we didn’t emphasize selection as much as KCS. In KCS selection was conceived as a serious professional undertaking that “experts” would advise and coach; in OPCM it was conceived only as a “community process.” Also initial agreements and conversations got complicated in OPCM and selection may have gotten de-emphasized in the confusion. The original project manager (later project liaison) had a systematic *collection* scanning strategy for the first several months that de-emphasized selection. Also the scope of the project wasn’t as clear as the scope of KCS. As the project matured, we became increasingly concerned about meeting production goals and time was not taken for careful selection. There were many exceptions to this de-emphasis on selection; the difference between the professional, archivally-minded organizations and non-professionals was quite stark here. Non-professionals with private collections preferred to have their full collections scanned. We received several scrapbooks and photo albums scanned from cover to cover for example. The organizations with professionals quickly grasped the importance of selection and did all they could to meet project goals using careful selection.

With a de-emphasized selection process, we received many images we could not use, many images we *did* use that were not accompanied by information useful for descriptive metadata, and several images that were out of the scope of the project. There were occasions collections were retrieved then items were selected *at the time of digitization*, often by people not qualified to make the selection. What was worst in these cases – and fortunately the exception – were occasions people outside the community selected items to represent that community, which was expressly a violation of the aims of this project.

*3.8.4. Discussion:*

One of the distinguishing characteristics of “boutique digitization” is its selection process. Much has been written about selection.[[21]](#endnote-21) The first principle in NISO Framework Working Group (2007) is the following collection principle: “A good digital collection is created according to an explicit collection development policy.” Warnings of poor decisions in this area include Paula de Stefano, “There are many legitimate reasons for favoring one selection methodology over another, but the success and efficiency of a project will suffer if the wrong choice is made” (Kenney and Rieger, 2000 p. 11). With KCS we followed the best practices in selection in almost all areas and built a good collection. In OPCM we did *not* have a collection development policy; efficiency in the project certainly suffered but, it should be noted, we still built a good digital collection.

**3.9 Metadata**

*3.9.1. Comparison between KCS and OPCM:* KCS established and maintained a rigorous metadata workflow. OPCM could not establish anything approaching a consistent metadata workflow.

*3.9.2. King County Snapshots:* KCS participants were well informed that they were *expected* (a) to place their selected images into folders for scanning, (b) collect all information that already existed and place it in the folder near the image to be scanned; (c) place in the same folder any original research that was done. There was no particular way this *had* to be done, as long as it was done – or at least something approximate. When metadata specialists arrived at the site, all this information was ready to be shaped into metadata. Before any metadata was created however project staff worked closely with collection owners to create a metadata schema for the specific collection. These schemas were always in accordance with the project-wide schema drafted by project staff and the Metadata Implementation Group at the University of Washington.[[22]](#endnote-22) In most cases metadata specialists remained on site day after day until all images were described. This workflow was very successful; the organizations worked very hard to comply with project requirements and metadata specialists worked diligently to produce the most consistent, standards-based metadata possible.

*3.9.3. Olympic Peninsula Community Museum:* Lack of centralization, lack of clarity and/or communication among project staff, lack of awareness of “metadata” even among professionals (and almost unanimously among non-professionals) all contributed to the lack of a consistent metadata workflow in OPCM.

Only one metadata specialist was hired for the project, and although a “research librarian” was intended to assist the metadata specialist, that person did not remain with the project more than a year and, as stated earlier, was never replaced.

The metadata specialist’s work was complicated by the fact that many objects arrived without descriptive information, making it difficult to create descriptive metadata (although at times this helped speed up the work, as descriptions could be very short indeed). What further complicated the issue was that the metadata specialist always worked with a digital object, not the original. The metadata specialist could not travel to the site every day, as was done in KCS, to view originals. In the case of photographs this meant a lot of information on, say, the photographic print – written in the margins, on the verso, any notes that might have been attached and so forth – would not have been seen. Interviews were set up with collection owners to collect descriptive information, but these were time consuming and unsustainable. In these cases we had to settle with generic description and indexing that wasn’t very useful.

Fortunately many collections *did* arrive with descriptions and the metadata specialist was able to create standards-based metadata. Like KCS, collection-specific metadata schemas were drafted[[23]](#endnote-23) that were based on a project-wide metadata schema produced with the Metadata Implementation Group at the University of Washington.

*3.9.4. Discussion:* Both projects shared a common method for producing metadata schemas. This allowed for each collection to display custom metadata elements mapped, in the background, to Dublin Core (DC) elements.[[24]](#endnote-24) These mappings allowed cross-collection searching (a) at the project level, across all participants’ collections, (b) at the University Library level, across all UW digital collections, which also had DC mappings, and (c) at a national or international level, since the DC-mapped metadata in CONTENTdm could be harvested via OAI-PMH by indexing services if they wished to do so.[[25]](#endnote-25) DC mappings had already become a common practice at the University of Washington Libraries and other organizations using CONTENTdm software, which was developed at the University of Washington with some assistance from UW Libraries.[[26]](#endnote-26)

**3.10 Agreements, permissions and legal issues**

*3.10.1. Comparison between KCS and OPCM:* KCS finalized agreements before the project staff was hired; the project was greatly enhanced by these early agreements. OPCM establishment of agreements and permissions grew so complicated that production was delayed until agreements were finalized.

*3.10.2. King County Snapshots:*  Detailed partnership and permissions agreements were in place before the KCS grant period had even begun. Once the funding became available, the project hit the ground running. Early excitement fueled immediate productive activities and the first project milestones were swiftly realized.

*3.10.3. Olympic Peninsula Community Museum:* OPCM lost a good deal of time while partnership and permissions agreements were created, negotiated and signed. Although most partners *had* agreed to participate before the grant began, partnership agreements were never put together in which expectations were described in detail. In addition, permissions agreements were diverse and required multiple documents, including special agreements designed to address digitization and web display of tribal materials. The negotiation process between the project’s legal team and the three tribal entities took much longer than expected. Work could not begin until agreements were complete.[[27]](#endnote-27)

**3.11 Relationships**

*3.11.1. Comparison between KCS and OPCM:* KCS brought together many stakeholders with very little difficulty. OPCM brought together a more diverse group of stakeholders between which tension existed at times, which often created difficulty for the project

*3.11.2. King County Snapshots:* Although there was not abundant tension between partners in KCS, there was an awareness of the difference in wealth between the organizations. This resulted in a mild mistrust and the occasional feeling that too much was asked of the smaller organizations. The largest organization in the project by far was the University of Washington Libraries. Second largest was the Museum of History and Industry, Seattle. The remaining organizations were smaller organizations that were members of AKCHO (see endnote 16 for more detail). The AKCHO participants were quite diverse, but without exception had all stretched their resources as far as they could. Participation in KCS was demanding and some of the organizations had difficulty completing their work. This brought out some tension between the participants but it did not interfere with production. In some cases a participant could not meet production goals; in those cases other groups were asked to make up the difference. By shuffling responsibilities, KCS easily managed to deliver all digital objects as promised.

*3.11.3. Olympic Peninsula Community Museum:* In OPCM, well before the project was even conceived, there were some difficult histories between select participants. For example, there was pre-existing tension between several participants and the University of Washington as a whole; those associated with logging in particular had distrust of anyone associated with the university or with government in general. Hines (1990) describes some exemplary distress in the logging community; the stoppages in logging described in this article are still associated with the University of Washington among many on the Olympic Peninsula. Native American tribes were also participating; there may have been some distrust of the project among the tribes. Although they were welcoming to us on all occasions, our project liaison’s reports suggested a strong protectiveness around the tribal community. On top of this, difficulties might arise in general anytime a non-local university arrives in a community and tells them it will help tell their story. We strolled into many communities: Latinos, Native Americans, loggers, pioneers and the very rural west end of the peninsula generally – all quite close-knit and different from similar types of cultures than are found in urban Seattle.

It should be noted, as mentioned earlier, that the genesis of this project was in the community itself, and the UW was invited by the community to participate. Rice (2004, p. 54-57) is the best documentation of this. Reception in general in the community was never hostile – quite the opposite, it was almost always extremely welcoming; but kind reception and building trust are very different things.

*3.11.4. Discussion:* The establishment of trust seems crucially important in a collaborative effort.

Many of us who worked on OPCM believe the presence of a project liaison from within the community is extremely useful if not necessary. The assumption here is that a local liaison can build – or build upon existing -- trust relationships in ways outsiders cannot. Some of us have gone further and believe, in such a project, a local liaison is a full time job in itself and should be written into the grant proposal without additional management or specific production responsibilities.

Another feature of relationship-building is that the participants themselves have histories with each other. These are difficult for outsiders to discover and interpret during a temporary project with heavy production demands. We needed help clarifying, translating, and interpreting different world views and interpersonal relations between groups, families, and individuals. This is another reason why hiring a local community liaison is so helpful for projects of this nature.

**3.12 Empowerment or exploitation?**

*3.12.1. Discussion:* We should at least entertain the idea that we often in fact exploit communities to advance our institutions, our careers and our profession. This seems especially important when there is widespread talk about “crowdsourcing,” “social media optimization” and “viral content.” In the case of OPCM – and the some extent KCS also – we used as much volunteer labor “in the community” as possible. We won’t offer our thoughts on this as it is outside the scope of this paper, except to make mention of it and consider our own case in OPCM.

The original concept of OPCM was bold. On the one hand, it was populist, shifting the burden of production – including the production of meaning – into the community in order to empower the community. On the other hand, it thrived on free labor and could be seen as exploitative. Naturally at UW we continue to view the original conception as populist rather than exploitative, but we question whether our “empowerment” model – at least as we conceived it -- can be successfully implemented.

**3.13. Geographic space**

*3.13.1. Comparison between KCS and OPCM:* Both projects required travel, but the distances in OPCM were much greater than in KCS.KCS partners were close enough to each other that any partner could visit another and return home the same day. Travel between Seattle and the Olympic Peninsula could not reasonably allow for the 4-5 hour round trip commutes required.

*3.13.2. King County Snapshots:* All partners were within 25 miles of the University and within the large urban footprint of Seattle, so it was relatively easy to conduct meetings and to bring the entire group of partners together

*3.13.3. Olympic Peninsula Community Museum:* The Olympic Peninsula is not located near any urban center. The distance between the Seattle project office and the peninsula project office was about 100 miles. Some partners were closer than this distance and some farther. Often these distances made accomplishing our tasks more difficult.

**4.0 Conclusions**

**4.1. OPCM design was influenced by KCS.**

By now it may be clear that KCS was highly influential on the design of OPCM. Due to the different types of participants and the distances however, the KCS model could not simply be imposed on OPCM. In addition, different staff on OPCM had different ideas on how to accomplish the project; sometimes the KCS model did not agree with these ideas.

It may also be clear that KCS was more of a “model” project than OPCM and that OPCM was more of a “problem child” – although both projects were successful. We believe we may have learned more from the troubled project; indeed after KCS we patted ourselves on the back and prepared for the next project. After the completion of OPCM, we felt obliged to compile our “lessons learned” and present them in various forms. We felt that we learned more from the difficult project and had more to say about it.

**4.2 Our OPCM “lessons learned”**

It seems appropriate, by way of conclusion, to present our conclusions after facing some of the problems outlined above. We’ll offer these below as a list

*4.2.1 Some advice*

* Pay people to do scanning and digitization; do not expect volunteers to do this job.
* Volunteers can be "free like a puppy" - get volunteers with skills and commitment.
* Put a lot of effort in educating the community about the value of metadata.
* Don’t be surprised by the quantity and types of files you will receive and may need to store. Make a good estimate and detailed plan to handle this.
* Know the intended audience and keep reminding those who submit content.
* Allocate extra time for everything.
* Use videoconferencing for long-distance communication.
* The project office should be in a public and neutral space, such as the local Community College.
* The Community Liaison should be someone the community already knows and trusts.
* Do not expect the Community Liaison to simultaneously manage the project and oversee production work & meet with the public.
* Before a grant is submitted, all partners should have signed partnership agreements.
* Purchase all domain names at once.

*4.2.2. Some observations*

* Non-professionals may not want to do selection.
* Image selection cannot happen while scanning is taking place.
* The concepts behind exhibit design, especially for web display, are very difficult to convey to some participants.
* Duplicate images abound in the community, especially of important people/places/events.
* Time runs at a different rate in rural communities than in urban communities.
* Permission agreements take a long time to negotiate and move through chains of command.
* Community mobilization takes time - a three-year grant would have enhanced participation

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**6.0 Author Biographies**

**6.1 Anne Graham**

Anne Graham is a Senior Computer Specialist in the Digital Initiatives unit of the University of Washington Libraries. She was the project coordinator for the IMLS-funded Community Museum Project (<http://communitymuseum.org>), the database manager for the IMLS-funded Crossing Organizational Boundaries Project (<http://kcsnapshots.org>), and the project coordinator for the University of Washington’s portion of the IMLS-funded Western Waters Digital Library. She has presented at many conferences of interest to Libraries and Museums. She is well-versed in digitization technologies, workflows and best practices, as well as inter- and intra-organization coordination. With a background in IT and databases, she also maintains the University’s installation of CONTENTdm, which holds over 250,000 images and digital objects (<http://content.lib.washington.edu>). She also administers the University’s installation of Open Journal Systems.

**6.2 Theo Gerontakos**

Theo Gerontakos is Metadata/Cataloging Librarian in the Monographic Services Division of University of Washington Libraries. He was a Metadata Specialist for King County Snapshots and the Metadata Librarian/Digitization Specialist for Olympic Peninsula Community Museum Project. He went on to serve as Metadata Librarian for the William Craft Brumfield Russian Architecture database, and is currently the coordinator for the University Libraries' Metadata Implementation Group, a member of the Data Services Planning Committee and the Electronic Theses and Dissertations Implementation Group.

**6.3 Ann Lally**

Ann Lally is the Head of the Digital Initiatives program at the University of Washington Libraries where she is responsible for the coordination of digital-based projects throughout University of Washington Library system including the implementation of an institutional repository service.  She is also involved in the Libraries Digital Scholarship initiative activities which include new media documentation and access, and digital publishing.  Her current research is focused on the “social life” of digital images… what happens to archival images once they leave the confines of our analog collections?

1. **7.0 ENDNOTES**

 A useful web page to view collaborative digitization programs is: <http://www.bcr.org/dps/cdp/programs.html#Wash> “Collaborative Digitization Programs in the United States.” [↑](#endnote-ref-1)
2. See for example Ceynowa (2009), Dooley (2009), Gueguen and Hanlon (2009). [↑](#endnote-ref-2)
3. See for example Erway and Schaffner (2008) and Milne (2008) although he is careful to point out the excellent products of boutique digitization. The RLG forum “Digitization Matters: Breaking through the Barriers” was convened “to push the envelope on increasing the scale of digitization of special collections” (see “Digitization Matters: Breaking Through the Barriers—Scaling Up Digitization of Special Collections,” (2007) for all the presentations at this excellent event. [↑](#endnote-ref-3)
4. This is the wording found in Gueguen and Hanlon (2009), in the Introduction: “The ‘boutique model’ […] is […] favored by funding models based on grants that focus on digitizing a specific body of materials selected to meet grant guidelines.” [↑](#endnote-ref-4)
5. There are many remarkable guides to “boutique digitization.” Some of the more remarkable – which establish proportions of discussing digital projects that this small essay does not aspire to – include Humanities Advanced Technology and Information Institute (HATII), University of Glasgow, and the National Initiative for a Networked Cultural Heritage (NINCH) [NINCH] (2002) and the current NISO Framework Working Group (2007). And of course the other essays in this book also contribute to this broad “knowledge base.” [↑](#endnote-ref-5)
6. Most of which are listed at <http://content.lib.washington.edu/cdm-ayp/search.php>. [↑](#endnote-ref-6)
7. The award announcement can be viewed by searching the IMLS database of grant recipients at <http://www.imls.gov/search.asp>. To find the KCS award, search “National leadership Grants for Libraries—Library-Museum Collaboration,” and state=WA, year=2001. To search for OPCM, search “National leadership Grants for Libraries—Library-Museum Collaboration” and state=WA and year=2003. [↑](#endnote-ref-7)
8. There are several cross-organizational boutique digitization efforts in progress. Just to name a few: “Minnesota Reflections” (available at <http://reflections.mndigital.org/index.php>) entered into its sixth phase in May 2009 (see the announcement at <http://www.mndigital.org/reflections/phase6.php>). The National Library of Medicine received a grant in 2010 to partner with 4 other libraries to digitize selections on the history of medicine (see announcement at <http://www.nlm.nih.gov/news/digitize_grant.html>). “Washington Rural Heritage” is an ongoing digitization project based at the Washington State Library: “The collection is a project of small, rural libraries and cultural institutions throughout Washington, in partnership with the Washington State Library” says the web site at <http://wrh.statelib.lib.wa.us/>. Several projects at the BCR “Collaborative Digitization Programs” are alive and well. The list is quite lengthy. [↑](#endnote-ref-8)
9. Available at http://content.lib.washington.edu/imls/kcsnapshots/narrative.html. [↑](#endnote-ref-9)
10. Only the final project reports were posted on the project websites; see the KCS final report at http://content.lib.washington.edu/imls/kcsnapshots/final-report.html and the OPCM final report at http://content.lib.washington.edu/cmpweb/project/docs/UWCommunityMuseumProjectFinalReport-small.pdf. [↑](#endnote-ref-10)
11. These were described at http://content.lib.washington.edu/imls/kcsnapshots/workshops.html. [↑](#endnote-ref-11)
12. There is an excellent discussion of collaboration in NINCH (2002), chapter IX, where collaboration is identified as inter-institutional and where *types* of collaboration are described; the type of collaboration for our projects would be the elusive “collaboration in different shapes,” which we think further suggests the complexity of our collaborative efforts. [↑](#endnote-ref-12)
13. This quote actually appears in the Executive Summary on a JISC web page -- <http://www.jisc.ac.uk/publications/programmerelated/2009/scaithakaprojectstoday.aspx> -- but not in the actual report itself. [↑](#endnote-ref-13)
14. The educational resources can all be accessed at http://content.lib.washington.edu/cmpweb/resources.html. [↑](#endnote-ref-14)
15. Primarily the 3 following publications: Digital Library Forum (2001): this is of course the “Framework” that became a NISO recommended practice in 2004. Kenney and Rieger (2000). Sitts (2000). [↑](#endnote-ref-15)
16. The Association of King County Historical Organizations established in 1977. Their current web site is at http://www.akcho.org/. [↑](#endnote-ref-16)
17. Reports from mass digitization collaborations generally call for a *reassessment* of agreed-upon guidelines and standards, as in Rieger (2008). [↑](#endnote-ref-17)
18. These were documented in detail and can be found on the project web site at http://content.lib.washington.edu/cmpweb/project/docs/TechSpecs\_FinalVersion3.htm. [↑](#endnote-ref-18)
19. This is described on the KCS website at http://content.lib.washington.edu/imls/kcsnapshots/workshops-3.html. [↑](#endnote-ref-19)
20. This is described on the KCS website at http://content.lib.washington.edu/imls/kcsnapshots/workshops-1.html. [↑](#endnote-ref-20)
21. This terrain has shifted quite a bit with the emergence of mass digitization and systematic digitization strategies, but at the time of these projects several highly regarded publications -- containing information still highly pertinent -- included sections of Kenney and Rieger (2000), Sitts (2000), NINCH (2002), Hazen, Horrell and Merrill-Oldham (1998), and of course the NISO/IMLS framework now in its 3rd edition as NISO Framework Working Group (2007). [↑](#endnote-ref-21)
22. All project schemas are available at <http://content.lib.washington.edu/imls/kcsnapshots/tips-data.html>, where they are referred to as data dictionaries. [↑](#endnote-ref-22)
23. These are available in the "Metadata Guidelines" section of the project's "Project Resources" page at http://content.lib.washington.edu/cmpweb/project/proj-resources.html. [↑](#endnote-ref-23)
24. For anyone not familiar with Dublin Core, the Dublin Core Metadata Initiative has a very informative web site at http://dublincore.org/. [↑](#endnote-ref-24)
25. At the time OAIster, launched in 2002 at the University of Michigan, was the only service we were aware of. OAIster is now part of OCLC. See the OCLC OAIster page at http://www.oclc.org/oaister/. [↑](#endnote-ref-25)
26. The most informative article we know of from the early development days of CONTENTdm is Bunker and Zick (1999). The OAI-PMH is described well in the Open Archives Forum web site at http://www.oaforum.org/tutorial/. [↑](#endnote-ref-26)
27. Because the agreements required considerable effort and represent an achievement of the project, four of them are posted at the project web site at http://content.lib.washington.edu/cmpweb/project/proj-resources.html, under the section “Permissions Documents.” [↑](#endnote-ref-27)