

**International, Multilingual, and Non-Western Digital Libraries:
Collaboration and Partnerships**

Aparna Ghosh

School of Information, University of South Florida

LIS 6514: Digital Libraries

Dr. Richard Austin

October 4, 2021

Abstract

This paper provides a discussion of the collaboration and partnerships necessary to create and maintain successful international, multilingual and/or non-Western digital libraries. Four different types of collaboration are identified through the examination of several case studies: collaboration between institutions, collaboration with scholars, collaboration with communities to whom the cultural objects belong, and collaboration with users of digital libraries in crowdsourcing.

Keywords: digital libraries, digital collections, collaboration, international, non-Western, multilingual

Introduction

Digital collections or libraries are often a particularly good way to organize and provide access to non-Western and often multilingual material, called by Therani a “de facto choice for organizing and sharing non-Western materials” (2020, p. 221). They are created with the knowledge that they will be used by many different communities, and it follows that these communities must also be consulted and collaborated with in order to make certain that they will be useful to them. Digital libraries are boundary objects, or “entities that link different communities together” (Calhoun, 2014, p. 150).

According to Dan Cohen, the founding Executive Director of the Digital Public Library of America, “successful digital projects mainly involve getting diverse people working together towards an ideal” (Calhoun, 2014, p. 252). Collaboration is a necessity for the creation and development of successful digital library collections for many reasons: time and effort can be saved by providing access to resources and information via one portal; the expertise and skillsets of many people can be shared to the best advantage of a digital library project; the user experience for those using these collections can be prioritized, and so on (Buchanan et al., 2012). In this paper, however, I lean away from a service-oriented perspective, and I look more closely at the collaborations themselves. I specifically look at the collaborations in the context of international, multilingual, non-Western digital collections in terms of the partners themselves.

Four different types of collaboration are identified and elaborated upon below. These are collaboration between institutions, collaboration with scholars and researchers, collaboration with communities to whom the cultural objects belong, and finally collaboration with an undefined group of users in crowdsourcing.

Background

Several case studies were consulted to identify and discuss the different types of collaboration that take place in the development of digital libraries. The digital libraries and projects studied are as follows: The “Preserving and Creating Access to Afghanistan Literature” collaborative project of the University of Arizona Libraries and the Afghanistan Center at Kabul University (Han, 2009); Project Gutenberg, Meeting of Frontiers, the Latin American Open Archives Portal, and the International Children’s Digital Library (Budzise-Weaver et. al., 2011); the Digital Library of the Caribbean (Asencio, 2017); the palm leaf manuscript collection of the Lanna community in Thailand (Jarusawat et. al., 2018); and the *Ginan* collection of the Ismaili Muslim community (Therani, 2020).

Collaboration with Institutions

Collaboration between institutions positioned in geographically different areas is often a key feature of digital libraries that include collections of non-Western and multilingual artifacts and knowledge. The Digital Library of the Caribbean (dLOC) is “an open access, multi-institutional, multilingual, inclusive, international digital library” (Asencio, 2017, p. 818). The digital library is on a centralized content management platform that provides access to the collections from Caribbean and circum-Caribbean institutions. The founding partner institutions are many: Archives Nationale d’Haïti, Caribbean Community Secretariat (CARICOM), National Library of Jamaica, La Fundación Global Democracia y Desarrollo (FUNGLODE), Universidad de Oriente, Venezuela, University of the Virgin Islands, Florida International University, University of Central Florida, and University of Florida (Asencio, 2017).

Having partner institutions in several areas comes with advantages and challenges simultaneously. A key advantage is the reduction of costs. Grant funding can often be successful

when several institutions apply together: “Multiorganizational projects may also result in decreased interorganizational competition for funding, and it has been previously argued that funding bodies are likely to look on joint applications more favorably, as the resources have the potential to reach more of the population” (Buchanan et. al., 2012, p. 341). In the case of dLOC, they were able to secure this from the U.S. Department of Education (Asencio, 2017). Most public domain digital libraries that are products of collaboration obtain funding from “non-profit organizations and public institutions that promote open source and freely accessible collections for teaching and research” (Budzise-Weaver et.al., 2011, p. 223). Funding is important for initial development of digital libraries, as well as for maintaining services afterwards. In the Budzise-Weaver et.al. study, Meeting of Frontiers, the Latin American Open Archives Portal (LAOAP), and the International Children’s Digital Library (ICDL) are all products of collaboration and receive funding from a variety of sources, including government, grants and educational institutions (2017). In a paper detailing the collaboration between the University of Arizona Libraries (UAL) and the Afghanistan Center at Kabul University (ACKU), their project, called “Preserving and Creating Access to Afghanistan Literature,” received a \$300,000 grant from the National Endowment for Humanities (NEH). (Han, 2009, p. 47).

Collaborations between institutions is extremely important for the building and maintenance of digital libraries in two main ways: the institutions are both data providers and service providers. LAOAP, for example, is both “a network of data providers that provide publications in an electronic format” and “a service provider that includes a metadata harvester, a metadata database, and a user interface for searching and additional services” (Budzise-Weaver et.al., 2011, p. 228).

Many institutions already have in possession many items – data, research papers, gray literature etc. – that would be valuable when available in an online digital library. In the UAL-ACKU collaboration, it is notable that the Afghanistan Center at Kabul University boasts of the most extensive collection on Afghanistan from 1989 to 2006: “It has 13,802 titles of gray literature and unpublished materials on the history, political, social, and economic situation of refugee issues, and also maintains materials from the Civil War, the Taliban era and the US intervention” (Han, 2009, p. 47). In addition, the collection is in multiple languages – 61% in English and 39% is Pashtu and Dari. Institutions located in the geographical area of the focus of area studies are necessary collaborators in these international, multilingual digital projects.

Institutions, as mentioned above, are also service providers. In some cases, each member institution in a collaboration not only provides collections of items, but also the standardized metadata for their collections. For LAOAP, “Each member institution must also be able to generate Dublin Core metadata for their object collection...[t]his strategy shares the expense instead of one institution housing and cataloging all of the objects.” (Budzise-Weaver et.al., 2011, p. 228). In the UAL-ACKU collaboration, both institutions played a major role as service providers. There were two project teams, the ACKU team in Kabul, and the UAL team in Arizona. Because of the challenges of digitizing materials in the US for several reasons, including the frequent use of these materials by scholars in Afghanistan and international visitors, higher staff salaries in the US compared to Afghanistan, cost of shipping and most important, the goal to build a digital infrastructure in Afghanistan for these materials, much of the digitization and delivery work was done by the ACKU team, after the selection and preparation of materials, and registration and the creation of metadata. UAL was responsible for providing training in digitization techniques to ACKU and for working on post-digitization tasks,

such as image processing and quality control and structural metadata production (Han, 2009, p. 47).

Despite the obvious need for collaborations between institutions located internationally, such partnerships can be difficult to achieve and maintain for several reasons. Institutional partnerships involve building communities, which requires trust, patience, and diplomacy. Ownership and control of content are important issues to navigate when making partnerships across borders; in the case of the Digital Library of the Caribbean (dLOC), this is a primary concern with Caribbean and circum-Caribbean institutions: “Establishing new partnerships in the region is sometimes met with reservations, as institutions are reticent about partnership because of past experiences with content rights and ownership of collection materials with unknown or untrusted providers” (Asencio, 2017, p. 821). As dLOC was designed to be “inclusive, open-access, and managed through shared governance”, it was made sure that “partners and contributors retain full control and ownership over their data”, keeping a foundation of trust intact.

Other challenges to collaborations may include barriers in technology, though this may be a decreasingly important consideration. The UAL-ACKU project was active in the first decade of the 2000s. More than ten years ago, there were challenges such as finding and using digitization equipment in Afghanistan. Communication in real-time was also challenging, and email was the most frequently used means of communication, even though it was not effective for immediate feedback. “Regular post, logistics services, email, instant messaging, telephone, and Voice over IP (VOIP) were used” (Han, 2009, p. 50).

It may be worthwhile to mention that even if technological advancements have been made since 2007, long-distance collaborations must also keep in mind that the politics of a

region can help or hinder projects. The collaboration between UAL and ACKU would not be possible in the latter half of 2021, when this paper is being written, as Afghanistan is no longer occupied by the United States, and is now under control of the Taliban. Even at the time of the project, some on-site training had to accommodate political crises, and took place in an entirely different country (Han, 2009).

Collaboration with Scholars

The users of digital libraries and collections include many communities, but none so much as the scholars who work with the artifacts in these collections. From the works by Borgman (2007) and Calhoun (2014), we know that scholarly communication is an important process to be considered in the creation of digital repositories. Interviews with digital library experts have “noted the importance of builders’ being members of the intended audience for the digital library” (Calhoun, 2014, p. 163). In other words, collaboration with scholars is key to the success of digital libraries. In international, multilingual, and non-Western digital library projects, collaboration with scholars remains as important.

The Digital Library of the Caribbean (dLOC) was created out of a need for researchers and scholars to have access to resources, especially primary sources, that were geographically scattered: “dLOC was born out of necessity. Researchers have a need for greater access to resources that are physically spread throughout the world, and institutions thrive for centralized content management platforms to make their collections accessible” (Asencio, 2017, p. 819). Because the needs of scholars and researchers are paramount, it goes to follow that collaboration with them is necessary to make sure that the digital library serves their needs. Researchers and scholars “have provided valuable suggestions based on their experiences and needs to help build robust, and sustainable digital collections on the dLOC” (Asencio, 2017, p. 822). In the case of

dLOC, collaboration with scholars is adapted into the workings of the library; a Scholarly Advisory Board is appointed by the Executive Committee, made up of seven members, all academics and professionals in the fields of Caribbean Studies and Digital Libraries and more generally speaking, provides guidance on collection development, collection accessibility, and technical issues. The board convenes once a year in conjunction with the Caribbean Studies Association (CSA) conference and provides guidance to both the Executive Committee and the Project Coordinator by “reviewing proposals for collections, by nominating collections for inclusion, and by reviewing standards developed by sub-committees” (Asencio, 2017, p. 822).

Collaboration with Communities

While collaboration between institutions and with scholars is an obvious necessity for most digital library projects that are spanning countries and continents, it is vital that the communities to whom knowledge belongs are consulted and made partners in this process. In terms of DEIA (diversity, equity, inclusivity, and accessibility), Western library systems have often fallen short in how they handled knowledge from non-Western cultures. For example, existing controlled vocabularies, such as Library of Congress Classification, Library of Congress Subject Headings, Dewey Decimal Classification, are especially problematic for non-Western communities where many of the materials are in languages other than English (Therani, 2020). However, there have been initiatives to address these issues, such as the Decolonizing Description Project, in which members of Indigenous communities were “consulted and empowered to develop local controlled vocabularies for inclusion in library KOSs [knowledge organization systems]. This approach is an example of...tangible progress toward social justice for marginalized knowledge” (Therani, 2020, p. 221).

Something to consider when working with non-Western materials is that they are often in foreign languages and non-Latin writing systems. However, many such languages have standardized conventions for romanization, and where help is needed, the language expertise of community members should be consulted. Consultation and collaboration with communities are important in the process of creating a specialized knowledge organization system regardless, as they are key to identifying and describing materials, while also providing knowledge in determining the sensitivity of any materials (Therani, 2020).

Communities lend not only language expertise but also provide extensive cultural knowledge. Any knowledge system providing access to the material from their culture must center their needs: “For any specialized KOS to be acceptable and useful for the community, librarians must commit to putting the needs of the community at the forefront” (Therani, 2020, p. 229). An example of how to work to center the needs of the community can be found in the paper “Community participation in the management of palm leaf manuscripts as Lanna cultural material in Thailand” (Jarusawat et al., 2018). While this paper describes a project less concerned with digital collection building, it provides a valuable perspective on working with communities with cultural knowledge. The paper discusses the importance of community participation in the management of palm leaf manuscripts as part of the cultural heritage material of the Lanna region in northern Thailand. It notes the ways community members and professional ‘experts’ saw the palm leaf manuscripts (PLMs) differently:

Both thought PLMs contained important knowledge, but community members gave emphasis to them as sacred objects and the way that activities around them such as donation, handling or re-wrapping earned merit...the experts placed greater emphasis on the knowledge the PLMs contained than the objects themselves. From a documentary

theory perspective, their cognitive function was more important than their physical form or social aspects. (Jarusawat et al., 2018, p. 961)

In such cases, the collaboration between ‘experts’ and community members need to focus on increasing community participation. “Experts would need to build trust and avoid trying to dominate the agenda” (Jarusawat et al., 2018, p. 962).

Collaboration with Undefined Users in Crowdsourcing

Some large digital libraries collaborate with an undefined group of users in a process known as crowdsourcing. Crowdsourcing can be defined as “using social engagement techniques to help a group of people achieve a shared, usually significant, and large goal by working collaboratively together as a group” (Budzise-Weaver et.al., 2011, p. 228). A well-known example of crowdsourcing is Wikipedia, where users can create and edit pages freely, which can then be seen by a worldwide audience: “Wikipedia is one of the most popular applications that allows for communal input and editing...It has been developed into a valuable multilingual information resource through the collective effort of numerous voluntary authors all over the world” (Budzise-Weaver et.al., 2011, p. 228). Social networking websites, such as Facebook and LinkedIn, also have made use of crowdsourcing, particularly with dealing with language issues, such as multilingual information access.

Some digital libraries that have used crowdsourcing to sustain their digital collections and services include Project Gutenberg (PG) and International Children’s Digital Library (ICDL). Project Gutenberg’s crowdsourcing project called Distributed Proofreaders dates back to 2000 and the volunteers involved in this project have helped converted tens of thousands of public domain titles into freely available e-books (Calhoun, 2014, p. 253). International, multilingual

digital library projects such as ICDL have been successful in creating partnerships with volunteers through collaborative projects:

In addition to multilingual translation, ICDL allows users to contribute books along with scanning the material and entering metadata for the DLs catalogers. The ICDL also enlists Library Ambassadors who are volunteers that assist with acquiring new materials, testing software, promoting multilinguality, and recommending books. (Budzise-Weaver et.al., 2011, p. 228)

Overall, while crowdsourcing is useful in many aspects of digital library creation and maintenance, it provides a particular advantage for large, international, multilingual digital library projects. Combined with other partnerships, crowdsourcing the efforts from many volunteers can help develop and sustain international multilingual digital libraries (Budzise-Weaver et.al., 2011).

Conclusion

Digital collections or libraries have already been identified as a particularly good way to organize and provide access to non-Western and often multilingual material, especially in an effort to raise the awareness of this knowledge to that of Western knowledge. “Librarians have been at the forefront of utilizing digital technologies as an equalizer in restoring social justice in libraries” (Therani, 2020, p. 221). In the process, however, they not only provide access to such knowledge, but they also bring together communities who can create new knowledge together: “Digital libraries not only provide or aggregate widely distributed content critical to [cognitive or knowledge work]; they enable new frameworks for the social aspects of creating and certifying new knowledge” (Calhoun, 2014, p. 150).

Thus, collaboration is key in the creation and maintenance of digital libraries of non-Western and multilingual knowledge: “DLs are complicated information systems. The collaboration of multiple partners is necessary not only for reducing cost for individual institutions, but also for achieving their mission and goals” (Budzise-Weaver et.al., 2011, p. 225). In this paper, we discussed the collaboration with different groups that are necessary in the process of creating and maintaining digital collections: collaboration between institutions, collaboration with scholars, collaboration with communities to whom the cultural objects belong, and collaboration with users of digital libraries in crowdsourcing.

There are many possibilities for future research, such as an investigation into the politics of certain collaborations, which we could only briefly touch here. Another timely research topic could be collaboration in the context of social justice. The possibilities are endless and are all worthwhile areas to consider for the future of digital library work in the larger global context.

References

- Asencio, M. (2017). Collaborating for success: The Digital Library of the Caribbean. *Journal of Library Administration*, 57(7), 818–825. <https://doi.org/10.1080/01930826.2017.1362902>
- Borgman, C. L. (2007). *Scholarship in the digital age: Information, infrastructure, and the internet*. MIT Press.
- Buchanan, S., Gibb, F., Simmons, S., & McMenemy, D. (2012). Digital library collaboration: A service-oriented perspective. *The Library Quarterly (Chicago)*, 82(3), 337–359. <https://doi.org/10.1086/665930>
- Budzise-Weaver, T., Chen, J., & Mitchell, M. (2012). Collaboration and crowdsourcing: The cases of multilingual digital libraries. *Electronic Library*, 30(2), 220–232. <https://doi.org/10.1108/02640471211221340>
- Calhoun, K. (2014). *Exploring digital libraries: Foundations, practice, prospects*. Facet.
- Han, Y. (2010). The road to digital: building unique Afghanistan collections. *OCLC Systems & Services*, 26(1), 46–57. <https://doi.org/10.1108/10650751011018509>
- Jarusawat, P., Cox, A., & Bates, J. (2018). Community participation in the management of palm leaf manuscripts as Lanna cultural material in Thailand. *Journal of Documentation*, 74(5), 951–965. <https://doi.org/10.1108/JD-02-2018-0025>
- Tharani, K. (2020). Just KOS! Enriching digital collections with hypertexts to enhance accessibility of non-Western knowledge materials in libraries. *Knowledge Organization*, 47(3), 220–230. <https://doi.org/10.5771/0943-7444-2020-3-220>