Boundary Objects/Boundary Staff: Supporting Digital Scholarship in Academic Libraries

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ABSTRACT

In response to the increased construction of digital scholarship infrastructure in academic libraries this article articulates a new staffing model for the management of digital platforms in the academic library environment. Based on two cases, this article discusses the increased use of digital infrastructure in pedagogy by Library Special Collections at UCLA, and the workflow pressures these infrastructures created that challenge traditional staff roles. Digital infrastructures are then framed as types of *boundary object*, catering to multiple communities of practice. In order to tend to these boundary infrastructures, a new staffing model has been introduced—that of the *boundary staff*—whose primary purpose would be to support these hybrid infrastructures and more effectively integrate them into the general library environment. This approach to digital project collaboration can set the stage for more flexible and innovative digital instruction, building on the current skillsets of library staff to facilitate new modes of faculty and librarian partnerships.

INTRODUCTION: NETWORKED DIGITAL RESOURCES

The construction of networked digital resources to facilitate instructional and pedagogical initiatives in special collections and archives has increased substantially in recent years, particularly in academic libraries and university settings.[1] Networked resources are those online platforms that are built to both manage digital content as well as provide instructionally useful interpretive content using said resources. Summarizing some of Jenny McCarthy's research, Jaya Raju indicates, "Changes in areas of teaching and learning, influenced and enabled by technology … have impacted on [sic] academic libraries—for example, the creation of new knowledge products such as subject portals and subject specific websites to support teaching and learning; or the re-purposing of physical spaces and the expansion of virtual spaces to support new pedagogies and changes in the teaching and learning process" (Raju, 2014, p. 164). Networked, digital resources provide constructive spaces where digitized library resources can be creatively utilized alongside physical, archival and rare book material, and interpretive scholarship contributed by faculty and students of all levels.

Unlike other online pedagogical tools and approaches well-documented in the library settings that involve supporting traditional library teaching goals, such as the use of research guides, information literacy tutorials, and embedded librarianship within established course management systems (Bowles-Terry, 2012; Courtney & Wilhoite-Mathews, 2015; York & Vance, 2009), the kind of networked resources examined in this paper involve the collaborative creation of flexible online systems that are primarily meant to meet the pedagogical goals of university faculty, usually created in concert with libraries to ensure the long-term preservation of these infrastructures (Montoya, 2016). The design and implementation requirements of these digital infrastructures, include: deep collaboration between faculty and librarians (Meulemans & Carr, 2013), the online elaboration of a specific subject or classroom content using library assets, and the creation of complex technical content management systems (CMS) developed within the library environment. The planning and coordination of such complex digital platforms, then, requires a host of resources, skills, and individuals from both the library and faculty domains in order to be successfully implemented; it is the approach to coordinating these resources that is the subject of this article.

This paper begins by discussing the specific kinds of digital projects relevant to this discussion, exemplified by two cases the author was deeply involved in producing: *History of the Book and Literacy Technologies* and *Seeing Sunset: Learning Los Angeles*. The attention will then shift to the UCLA Library Special Collections (LSC) Public Services Division to illustrate what staff resources were necessary to bring these projects to fruition, as well as how intra-library departmental coordination was

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[1] In this manuscript I will often use the term "special collections" to refer to *both* special collections and archives. I acknowledge that archives are often separate entities in some institutions, but at UCLA, the Library Special Collections Department also stewards the University archival collection.

essential as part of this process. These cases will situate the basic tensions networked resources present in special collections environments and help ground some of the potential solutions I articulate in the second part of the article. The concept of a *boundary object* will then be introduced as an analytic frame to conceptualize how digital resources, as negotiated spaces, inhabit multiple library domains, and thus act as mediating online spaces connecting multiple communities of practice. The conclusions of this analysis will be that academic libraries should begin to think about possible alternative hybrid staffing approaches to support the production of these digital infrastructures to more optimally meet the needs of internal library departments. Such *boundary staff* could manage the multiple contingencies and processes that exist within each library department to create globally functional, yet locally flexible, digital resources.

In conceptualizing the production of networked digital resources, this article assumes an implicit series of stages to be at play here: (a) project conceptualization, (b) project collaboration, (c) project implementation, and (d) project maintenance. This paper roughly follows this trajectory through its narrative, placing most of its emphasis on stages (b) and (c). Admittedly, this schematic is just one way of understanding an extremely complicated institutional process, and surely it can be far more specific in its elaboration, so the author apologizes for any perceived reduction in its articulation. Secondly, a note on terminology: at times, the article may refer to networked digital resources as "digital infrastructures," "digital projects," and "digital platforms"—all of these terms collectively refer to the same entities (such as those described in the "cases" below).

METHODOLOGY AND CASES

This paper takes a qualitative approach based on the author's eight-plus years working with digital resources in special collections and archives. As the Head of Public Services for UCLA Library Special Collections (LSC) the author was responsible for the articulation of policies for, and implementation of, all instruction and outreach that arose within from the department. Taking two specific networked digital resources as its cases—*Seeing Sunset: Learning Los Angeles* (Reiff, 2015) and *History of the Book and Literacy Technologies* (Drucker, 2016b)—that originated from the cooperation between the UCLA Library and faculty between 2012 and 2015, this paper will unpack how current staff structures support the creation of these projects for use within UCLA's instructional environments. Both projects were jointly supported by grants from the UCLA Office of Instructional Development and the Vice Chancellor of Research (Reiff, 2015), and were intended to prototype and develop workflows to produce research and pedagogical infrastructures in collaboration with the UCLA Library.

A major purpose of these grants was to identify and document the necessary activities involved in this type of faculty/library collaboration, in order to foster long-term, sustainable projects of this sort for the UCLA environment. Identified workflows included, the selection of appropriate archives and rare books for use in the projects; the digitization of selected material; the articulation of staff-time required to support each project phase; the production of some digital space for the delivery of content; and the long-term hosting, maintenance, and versioning of created platforms. Each project stressed the importance of articulating two parallel activity streams that needed to comingle in this infrastructure: (1) the production of scholarly content, interpretive material, and pedagogical frameworks to be set and maintained by UCLA faculty sponsors, and (2) the workflows and support systems specific to the Library environment, including staff roles and responsibilities, managerial oversight, intra-library cooperative relationships, project planning and coordination, technical and preservation requirements, and, if necessary, administrative approval for the use of funds to support such processes (including, but not limited to technical equipment, temporary staffing, student assistances, etc.). Each project required different levels of collaboration with the UCLA Library, different content management

and delivery approaches, and different funding models, and modes of long-term preservation. The following analysis describes how these projects impacted the LSC public services environment and their ability to support these endeavors. The hope here is that challenges and lessons experienced in this space can be generalized within a broader library context. Given the importance of special collections as key players in digital spaces within the library (Little, 2012), it is an apt starting point for this kind of discussion.

Each case project is briefly described below to provide context for the subsequent discussion of how such infrastructures are challenging staff roles within LSC Special Collections. Projects relied heavily on UCLA archives and rare book objects for content, pointing toward the importance of primary sources and special collections material as a unique avenue by which university campuses can create "textbooks" with local resources and materials.

HISTORY OF THE BOOK AND LITERACY TECHNOLOGIES

The *History of the Book and Literacy Technologies* (*HoB*) is conceptualized as a resource that sought to highlight underutilized or hidden rare book collections within special collections. *HoB* is pedagogical in two senses: to be used as affordable course materials for both instruction within undergraduate and graduate level courses, as well as to provide a platform by which undergraduate and Masters of Library and Information Science (MLIS) interns can learn the design, production, and maintenance process associated with online publishing. Built using basic HTML schemas, HoB could service as a training ground for basic coding and mark-up languages. *HoB* consists of four basic elements: (1) a course book that serves as the backbone for instruction in history of the book courses; (2) exhibits that spotlight student created content, as well as standalone interpretive spaces highlighting conceptually-related material; (3) galleries, which are pages that allow for browsing of digitized special collections material; and (4) a book history resource that provides useful references for students, such as online sources, a glossary, and "recommendations for further study" (Drucker, 2015).

One of Dr. Drucker's goals for *HoB* has been to use the platform to spotlight student work produced out of her annual "History of the Book and Literacies" seminar offered to MLIS students in the Department of Information Studies. This course is often organized around a central theme; one example is the "ABCs of the UCLA Children's Book Collection" (ABC) course which spotlighted the children's book collection housed in LSC (Library Special Collections, 2015). Assignments throughout the quarter are crafted such that content is formatted in chunks suitable for the *HoB* online exhibit space. In the ABC course, assignments were designed to examine "books as evidence of changing attitudes towards literacy, childhood, and other cultural issues, as examples of techniques in print production, and for what they tell us about the emerging children's publishing industry" (Drucker, 2016a). Students were tasked with describing these various social dynamics for each of their assigned books in short-text form, thus creating a final product conceptually and spatially catered to the modular "graphical space" that "[contributes] to the production of … narrative" (Drucker, 2008) within the overall *HoB* publishing infrastructure. While many books were pre-selected by Dr. Drucker, given the course-based production of *HoB* content and the assignment's interpretive format, some rare book artifacts had to be chosen while the class was in session. The photographic capture of said objects within Special Collections had to be in collaboration with LSC staff throughout the term—this is particularly the case because each student chose representative images to coincide with the narrative and argument of their text.

SEEING SUNSET: LEARNING LOS ANGELES

The *Seeing Sunset* networked resource is meant to be an "online companion" ("RBMS, 2015 Schedule: Thursday, June 25," 2014) to the year-long UCLA General Education (GE) Cluster, *Los Angeles: The Cluster*,