Notes on Operations
Making Beautiful Music Metadata Together

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This paper discusses how the Howard B. Waltz Music Library and the University of Colorado Boulder’s Metadata Services Department cooperated to resurrect and complete a long-dormant retrospective conversion cataloging project involving musical scores and vinyl records. It addresses the resources that both groups brought to the relationship; the collaborative process by which decisions were made; the implementation plan and challenges; and how fostering a culture of customer service within the Metadata Services Department contributed to the project’s success. It also contrasts Colorado’s project with two other cooperative music cataloging projects and explains how its approach can serve as a model to other libraries who have significant cataloging backlogs or hidden collections but may feel hindered by the lack of specialized in-house cataloging expertise.

It has been almost twenty years since the Association of Research Libraries (ARL)’s Task Force on Special Collections released its white paper on the problem of “hidden collections” within libraries, material that is inaccessible to library users because it is uncataloged, unprocessed, or underprocessed. Although this paper focused on special collections, other library resources have suffered the same fate, including media materials. Many specialized library units have a limited number of staff with the necessary training or the time to deal with this problem, forcing them to look elsewhere for assistance. Often that “elsewhere” is the library’s general cataloging department. That was the case at the University of Colorado Boulder (CUB) Libraries.

In 2015, the Head of the Howard B. Waltz Music Library at CUB had a major dilemma in the form of a card catalog prominently located in the Music Library’s public services area. The card catalog posed two types of access problems—physical and intellectual. Since its placement impeded ADA accessibility to the card catalog and the reference stacks, it was critical to reorganize that part of the library to accommodate wheelchair access. Removing the card catalog was not possible since some of the Music Library’s scores and vinyl records were not represented in the online catalog. Furthermore, it was not clear to patrons why they needed to use the card catalog to find these materials since most of the Music Library’s other content was discoverable in the online catalog. The scores and vinyl records that were accessible solely via the card catalog were virtually undiscoverable, and the situation was compounded by the fact that many of these items are unique pieces held by few other libraries. The card catalog therefore contained a hidden collection that was physically housed on the Music Library’s shelves yet undiscoverable and ultimately underused. This paper discusses how the Music Library and the Metadata Services Department (MSD) collaborated to resolve this access issue through retrospectively converting the uncataloged scores and vinyl records despite MSD’s lack of music cataloging skills.

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Literature Review

The perception that technical services librarians, particularly catalogers, are not collaborative is widespread, and technical services librarians are themselves complicit in fostering this stereotype. The longevity of large-scale institutional partnerships such as the Program for Cooperative Cataloging (PCC) and library networks that host shared catalogs such as OhioLink and the Orbis Cascade Alliance belies this unflattering stereotype. Recent research has highlighted several collaborative initiatives undertaken by smaller groups of catalogers. Several instances of cooperation among catalogers from different institutions exist, but the most natural opportunities for partnership are frequently within the same organization, as was the case at CUB. Falk, Hertenstein, and Hunker describe a successful collaborative effort among catalogers from various cataloging units at Bowling Green State University to create a new cataloging manual, resulting in more transparency among the decentralized units. A similar endeavor was undertaken at Troy University, where catalogers across three campuses collaborated to create an online policy and procedures manual. In both cases, catalogers that historically worked in isolation from each other found that collaboration achieved greater transparency and more standardized procedures. Schroeder and Williamsen’s paper relating Brigham Young University’s experience in providing streaming video services to their patrons demonstrates how catalogers effectively work in concert with other departments in the library.

More directly relevant to CUB’s undertaking are two recent papers about the collaborative cataloging of music materials. One describes the cooperation between the University of California San Diego (UCSD) and the University of California Santa Barbara (UCSB). This project used specialized cataloging expertise from UCSD staff to catalog backlogged audio CDs held by UCSB through the implementation of a workflow using packets of files containing surrogate information from these items. The surrogates contained scans of key components of the publication and a form document that included size and pagination information. The surrogate packets were shipped to UCSD catalogers to create catalog records in OCLC. While this process was cost-effective in that it did not require outsourcing to a vendor, batches of thirty to fifty surrogate items took an average of three weeks to complete. Although the project was still ongoing at the time of the paper’s publication, the authors deemed it a success.

Lorimer described another project in which previously hidden music materials were made discoverable through cataloger cooperation. Yale, Stanford, and the New York Public Library received a joint Mellon Foundation grant to catalog an estimated three hundred thousand 78 rpm sound recordings with little or no bibliographic access in their respective local catalogs. Grant participants created high-quality original cataloging records and used batch searching techniques to find cataloging copy for the items. By the conclusion of the grant, approximately twenty-four thousand catalog records were added to WorldCat, although much work remained. Contrasts between CUB’s project and the two cited will be discussed later in the paper.

Collaborative cataloging projects such as those undertaken by UCSD and UCSB and Yale, Stanford, and the New York Public Library, in which hidden material was made discoverable for users through the efforts of catalogers working together, are examples of the increased attention in library literature to the customer service aspects of cataloging. Cataloging as a customer service focuses on meeting end user needs and emphasizes the importance of perceiving users as clients or customers, and carefully considering their search techniques, information needs, and access to unique collections when establishing cataloging policies and practices. Embracing a customer service model may also be useful for librarians facing increased expectations of high-quality services and access to resources from diverse customers, who may range from fellow staff members, professors, or community patrons. Moreover, to meet growing customer expectations, Walters emphasizes that by recognizing fellow staff members as potential customers, libraries can promote a culture of customer service within their organization. Adopting a customer-focused approach along with a culture of assessment has been proposed as a critical method for libraries to accommodate changing user expectations and demonstrate their value. Additionally, to develop a user-oriented library catalog along with a “new relationship between the cataloguer and the user,” library staff at the University of Florence formed a work group for the management and maintenance of the catalog to create a “sense of service” among catalogers and implement cooperative authority control practices. Finally, after surveying the literature on quality in cataloging, Paiste describes how in addition to knowing user expectations and needs, it is critical to regularly measure, evaluate, and adjust cataloging workflows to meet service-oriented goals, as opposed to simply meeting production standards.

The projects discussed above, in which catalogers cooperate to meet their own or their users’ needs, illustrate one way to use collaboration as a means of providing cataloging customer service. An alternate model, absent in library literature but an emerging theme in the business world, is the concept of co-creation, in which businesses and customers collaborate directly to determine both the process and the outcome of an end product. In co-creation, consumers are no longer passive recipients of a firm’s goods
and services but are actively engaged in both defining and creating value. Prahalad and Ramaswamy, widely regarded as the originators of the idea of co-creation, identify four key building blocks in the process of co-creation between firms and customers: dialogue, access, risk assessment, and transparency.18 This paper explains how MSD and the Music Library incorporated some of co-creation’s building blocks to use collaboration as an essential factor in providing excellent customer service and achieve a successful project outcome.

Institutional Context

The CUB University Libraries’ MSD has been a long-standing participant in all the Program for Cooperative Cataloging (PCC) programs (BIBCO, NACO, SACO, and CONSER), and recently became an Electronic CIP Program (ECIP) partner and metadata and cataloging contributor to the US Government Publishing Office (GPO) Partnership Program. MSD’s Monographic and Special Materials Cataloging Unit consists of twelve full-time and one part-time staff: three faculty librarians (including the unit head), three cataloging managers, and seven catalogers. Seven unit members provide original and complex copy cataloging and are trained BIBCO/NACO/SACO contributors. The remaining staff concentrate on complex copy cataloging. As its name implies, the unit catalogs monographs (including e-books), media materials, government publications, and maps. Some staff also create non-MARC metadata for digital projects. Although each cataloger has a primary area of responsibility, there are not rigidly defined expectations about the types of materials or projects on which they work. The collective ethos is one of embracing challenges. This has enabled the unit to foster strong cataloging partnerships both internally with other library departments and branch libraries such as the Music Library, the Special Collections, Archives, and Preservation Department, the Government Information Library, and the Maps Library, and externally with campus units such as the Classics Department and the School of Education.

The Head of the Howard B. Waltz Music Library is a faculty librarian who reports to the Director of the Arts and Humanities division of the University Libraries. The current staffing model in the Music Library includes the faculty head, and four full-time staff members; two in public services, two in technical services. One of the technical services staff oversees processing, workflow, and copy cataloging. The other is responsible for original cataloging, complex copy cataloging, and database maintenance. The Music Cataloging Specialist position includes responsibilities formerly held by a faculty librarian cataloger position that was eliminated in 2013. Fortunately, the individual in the Music Cataloging Specialist position had longevity in the organization and had contributed to the retrospective conversion project in the 1990s. She was instrumental in helping participants to understand the project’s history and the nature of the outstanding work.

Administratively, the Waltz Music Library is funded and managed by the CUB Libraries. However, the original and subsequent leadership of the Waltz Music Library (all musicologists embedded in the College of Music faculty) and the library’s physical location, led to a blurring of boundaries between the College of Music and the Music Library. Many music faculty members regarded the Music Library as an extension of the College of Music, not a branch within a larger system. Music Library leadership reinforced this perception through restrictive circulation policies and procedures that kept more materials in the building for easy access, a primary concern for patrons, despite the fact that these policies conflicted with those of the rest of the Libraries.

This insular environment explains why cataloging for a portion of the Music Library’s scores and vinyl records lagged behind that of CUB’s other libraries, which had mostly completed their retrospective conversion almost two decades earlier. The Waltz Music Library was the last library in the system to convert its holdings to the online catalog. In the early 1990s, the centralized Catalog Department undertook a retrospective conversion project to convert all book records in the Libraries, including the Music Library, to the OPAC, and other formats were to be handled by the individual units. In 1995, the Music Library began a retrospective conversion project to convert records from the card catalog to the online catalog. Temporary staff were hired to handle print scores, microform scores, and LPs. At the conclusion of the funding period in 1997, approximately 10 percent of the scores shelf list and 15 percent of the LP shelf list were unconverted due to the lack of available copy in OCLC. Rather than develop a workflow to create original records for these items, the Music Library leadership halted the project. Thus, the public card catalog and shelf list remained in the Music Library, providing the only intellectual access to these items.

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Cooperation Between the Music Library and MSD

MSD and the Music Library’s contributions were symbiotic. MSD had skilled catalogers and the capacity to dedicate staff time that the Music Library lacked, while the Music Library could supply music cataloging expertise that was lacking in MSD. Together, the Head of MSD’s Monographic and Special Materials Cataloging Unit and the Music Cataloging Specialist assessed the project’s requirements.

In keeping with the department’s PCC legacy, MSD’s policy is to provide the fullest level of cataloging possible. It became clear, however, that this project presented serious challenges that made it impractical to adhere to this rule. Despite the expert guidance that the Music Cataloging Specialist could offer, the MSD unit head and she realized that MSD’s catalogers lacked time to develop the specialized music cataloging skills necessary to contribute full level records to OCLC, particularly RDA-compliant preferred titles for music and assigning appropriate Library of Congress subject headings. An even greater obstacle was the absence of physical access to the scores and LPs. At the project’s outset, the Music Library had limited staff workspace, making it difficult for MSD catalogers to work on-site and consult the items. Nor was it feasible to transport the materials to MSD’s workspace in the Norlin Library since that area was undergoing renovation. The biggest hindrance was that a considerable number of items already had been relocated to offsite storage and were impractical to retrieve.

These factors led the project leaders to determine that the best course of action was to forgo having catalogers physically examine each piece and instead use the Music Library’s shelf list cards as the chief source of information for cataloging. Existing OCLC records were used when available, and either AACR2 or RDA records were acceptable. If copy cataloging was not found, catalogers were expected to create original records based on the shelf list card data using RDA rules. Core data elements were identified for each format and were to be included in both copy and original catalog records. All persons, corporate bodies, preferred titles, and LC subject headings found on the shelf list card would be recorded. In response to concerns expressed in previous research that the lack of subject headings hinders effective retrieval, catalogers were instructed to provide at least one general LC subject heading if the card did not include any subject headings. All access points were checked for validity and corrected as needed. Access points with no corresponding authority records were recorded as found on the shelf list card. LC classification numbers found on the shelf list cards were input into the library’s catalog but were not included in original records contributed to OCLC since the numbers on the shelf list cards were often outdated or locally devised.

The project was conducted in two phases: scores were cataloged first, then LPs. Separate procedures for copy and original cataloging were developed for each phase. The MSD unit head drafted general instructions for each phase, which the Music Cataloging Specialist enhanced with music cataloging best practices and local policies. Copy cataloging procedures included OCLC searching strategies and a list of elements used to identify matching records. Original cataloging procedures offered guidance on typical fixed field MARC 006 values. Extensive directions were provided for coding content, media, and carrier (CMC) types (i.e., the 33X MARC fields) and constructing RDA-compliant access points for preferred titles. NACO authority work was not done for unauthorized access points since it would unduly delay the project’s completion. Additionally, none of the catalogers had the requisite expertise to create authority records for music preferred titles.

The decision to use shelf list card information as the basis for description had consequences for original cataloging. The quality of data on the shelf list cards varied greatly. Having been created over a long time span, the shelf list cards incorporated a variety of cataloging rules, or in many instances there were no discernable rules. Some cards presented a full description, as in the case of Library of Congress cards (see figure 1). More commonly, however, the cards followed local treatment and contained scant information (see figure 2).

Given these factors, the project leaders decided that participants would input original records created using OCLC encoding level K, which are minimal-level. The pros and cons of using minimal-level cataloging (MLC) are an ongoing topic of debate. Proponents of MLC reference growing backlogs and the ability to make “hidden” collections discoverable as justification for providing less-than-full bibliographic descriptions. Faced with fewer staff to address these problems, many technical services managers have concluded that “some access, in a minimally defined format, is better than no access at all.” Those who object
to this approach typically counter that, while MLC provides access, it is not enough to benefit users, particularly if subject headings are not included.\textsuperscript{21} The approach CUB adopted, however, proved successful for the University of Nevada, Reno to catalog several hundred Basque sound recordings despite lacking staff expertise in either the language or format, and as noted previously, the concern about deficient subject access was ameliorated by instructing CUB catalogers to assign at least one subject heading.\textsuperscript{22}

To reach agreement on the project’s key decision points (level of cataloging, chief source of cataloging information, and provision of authority work), the MSD unit head and the Music Library, primarily with the assistance of the Music Cataloging Specialist, relied on two of the co-creation building blocks: dialogue and transparency. For Prahalad and Ramaswamy, dialogue implies shared learning and communication between two equal problem solvers, while transparency of information is necessary to create trust between institutions and individuals.\textsuperscript{23} The MSD unit head and the Music Library Head and Music Cataloging Specialist viewed themselves as co-equals, each dependent on the other’s expertise and resources to complete the project. The Music Library shared its music cataloging expertise with the unit head, who in turn shared his knowledge of his catalogers’ capabilities. The Music Library was transparent about the level of access that the catalog records needed to provide, while the MSD unit head was forthcoming about the amount of staff time he could devote to this endeavor and what his group of catalogers could reasonably achieve.

**Implementation and Challenges**

A team of four MSD catalogers was quickly assembled. Two of the catalogers selected possessed the foreign language skills essential for these materials, and another had extensive experience with special collections resources. Each cataloger was initially expected to contribute four hours weekly to the project, although the time varied when there were other departmental assignments. The MSD unit head cataloged items and reviewed the other catalogers’ work. A faculty cataloger joined the team later in the project. He helped with cataloging the LPs and assumed the MSD unit head’s reviewing responsibilities.

A few catalogers initially had difficulty limiting their descriptions to the information recorded on the shelf list cards and sometimes did extensive online research to resolve problems. The tendency to “agonize about the adequacy of each brief record” and to enhance it with fuller data was noted in previous research and, while understandable, it threatened to undermine the increased productivity hoped for with MLC.\textsuperscript{24} This behavior abated with time, due to occasional reminders from the MSD unit head about the project’s goals.

When the copy cataloging of scores was complete, the catalogers had gained sufficient familiarity with the format to more confidently tackle original cataloging. In the beginning stages of both copy and original cataloging, the MSD unit head reviewed every record created to correct inconsistent practices and clarify points of confusion. This was reduced to spot-checking as the project progressed. The catalogers completed scores cataloging in December 2016. They cataloged 1,076 items, 586 (55 percent) of which required original cataloging. The LP cataloging phase proceeded similarly, with an exception: the catalogers believed that dividing the work by copy and original cataloging segments was not necessary, which simplified the process. Work commenced on this phase in March 2017 and concluded in December 2017. A total of 622 LPs were cataloged, 257 (41 percent) of which needed original cataloging.

Extensive revision of the catalogers’ work was needed during the preliminary stages of each phase as they adjusted to cataloging unfamiliar formats and tapered off as they gained experience. The diverse array of foreign languages in the scores and LP collections posed a problem. The cataloging team included members with Asian and Slavic language expertise, but some staff were less acquainted with the Romance and Germanic languages. This was compounded by the fact that catalogers were usually transcribing information from shelf list cards that were created on typewriters that lacked the ability to represent all diacritics. To simplify matters, the catalogers were instructed to record the information as found on the shelf list cards and ignore diacritics when they could not be deciphered.

The policy of accepting cataloging copy as found had consequences, particularly for post-cataloging database maintenance. As noted, the shelf list cards were created over time and followed different cataloging rules. When reviewing names, preferred titles, and subject headings, catalogers were expected to consult the LC authority file and record the authorized form. The authorized form often

![Figure 2. Local shelf list card](image-url)
could not be ascertained, and in such cases, catalogers were instructed to record the information as found on the shelf list card. When the library’s bibliographic records were sent to its authority control vendor Backstage, many of the access points were subsequently reported as errors. It then became the task of the Music Cataloging Specialist to review and revise these errors when possible.

**Project Assessment**

The partnership between MSD and the Music Library proved to be quite effective, but it was not without challenges. The Music Cataloging Specialist’s input on documentation compensated for MSD’s music cataloging inexperience by creating a streamlined cataloging process while ensuring that the major data elements in the bibliographic records needed for effective access were present. Although all the catalogers, including the MSD unit head, were initially out of their comfort zones, most eventually viewed the work as an interesting, challenging puzzle. Although the catalog records were minimally cataloged, the authors believe that they provide effective access to these items. They include access points for personal and corporate names, preferred titles, and at least one LC subject heading. This is underscored by the fact that, even after fifty or more years, no OCLC records yet existed for almost 50 percent of the items in the project.

Another hurdle was the shift in the catalogers’ conception of what constituted quality cataloging. Although the provider-customer relationship between MSD and the Music Library was never made explicit, and the Music Library undoubtedly did not see itself as MSD’s customer, a customer service ethos underlies all of MSD’s relationships with its cataloging partners: MSD surveys the scope of the work, coordinates with the client to understand their needs, and allocates resources to the project until it is complete. The persistent emphasis throughout the project of viewing their cataloging work through a customer-focused lens was useful to revise MSD catalogers’ expectations and to understand their limitations for this project. It was critical for catalogers to remember that completing the project in a way that was satisfactory to the Music Library while simultaneously balancing the time demands of this task with MSD’s other work was more important than continuing MSD’s tradition of creating PCC-like work, which would have substantially hindered progress in this case. The successful mindset change of MSD’s catalogers demonstrated their commitment to providing quality customer service, and consequently MSD has expanded its relationship with the Music Library by agreeing to provide media cataloging services for rush requests.

**Comparison with Similar Music Cataloging Projects**

As noted, two recent projects involving the collaborative cataloging of music materials directly relate to CUB’s undertaking: UCSD and UCSB’s collaboration as described by Nyun, Peters, and Devore, and the partnership among the sound archives of Yale, Stanford, and the New York Public Library, detailed by Lorimer. There were significant differences between CUB’s project and the other two. Both UCSD and the sound archive collaborative employed music catalogers, some with advanced degrees in music. In contrast, CUB used only general catalogers, although they received music cataloging guidance from the Music Cataloging Specialist. The different levels of music cataloging expertise drove different decisions about the level of cataloging to provide. UCSD provided full-level cataloging and the sound archive catalogers agreed to provide the “fullest level of cataloging possible,” while CUB decided K-level cataloging records were sufficient to support access and discovery. UCSD catalogers’ expert knowledge of music cataloging likely also enabled them to transition to new cataloging standards several months into the project, whereas CUB followed the same standard throughout. Furthermore, there were disparities in funding for the projects. Yale, Stanford, and the New York Public Library received a Mellon Foundation grant, allowing them to employ temporary and student workers and devise a batch search process to increase productivity. CUB received no additional funding and members of the cataloging team balanced the music retrospective conversion with other departmental priorities.

Despite the major differences between these projects, there were several interesting similarities that may be useful for other institutions to consider when establishing workflows and standards for their own retrospective projects. None of the projects included the creation of authority records in their workflow, although UCSD and CUB catalogers were instructed to control headings and verify access points. Creating new authority records would have inevitably slowed progress. Additionally, the UCSD and CUB projects conducted their cataloging using surrogates, but with some variations: UCSD catalogers used scans from items and other accompanying material to perform its cataloging, while CUB used shelf list cards.

**Conclusion**

The project’s success underscores the fundamental notion behind the concept of co-creation: collaboration is a key element in providing excellent customer service. It is
recognized, however, that this collaboration was not a true co-creation experience. The Music Library, although an essential intermediary between MSD and music library users, is not the ultimate end user of the catalog records; it is library users. Further research might explore how catalogers could co-create directly with end users to produce more effective catalog records. Nevertheless, the model CUB employed illustrates how institutions lacking specialized cataloging expertise and funding can still coordinate with other library units to accommodate user needs when approaching retrospective cataloging projects. Using catalogers who lacked music cataloging experience, the Music Library and MSD collaborated to complete a long dormant retrospective conversion project that included many unique scores and LPs. While MSD was fortunate to have a music cataloging expert on campus, similar assistance could also be garnered by reaching out to specialized cataloging communities via email discussion lists. Although the cataloging provided is less-than-full level, the Music Library’s physical and intellectual access problems were solved. Key factors in the project’s success were MSD’s adoption of a customer-first mindset and acceptance of a lower level of cataloging for this particular project—traits that were already present in the catalogers but which needed to be periodically reinforced. Had MSD not employed a customer service approach for the retrospective conversion project, the Music Library may have pursued other options to meet its cataloging needs. As the cataloging community faces seemingly constant change in its standards and rules, employing a customer service approach may serve as a lasting model for cataloging units to foster meaningful relationships with clients both locally and beyond.

References


