Sound Practice: Exploring DACS Compliance in Archival Description of Music Recordings

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Abstract

Standardization of descriptive practice supports improved access to archival collections with sound recordings of music, but the standard for archival description in the United States, Describing Archives: A Content Standard (DACS), does not supply specific rules for describing music sound recordings. Instead, it recommends supplementary standards without indicating how to incorporate them in a DACS-compliant finding aid. Given the wide range of descriptive options available via this recommendation, this exploratory study evaluates the extent to which finding aids for music collections with sound recordings successfully follow DACS, both in overall compliance and in the application of The International Association of Sound and Audiovisual Archives (IASA) Cataloguing Rules, the only supplemental standard recommended by DACS that covers music sound recordings. Drawing from a randomized, purposive sample of 20 finding aids for music collections at 11 repositories, this study applies document analysis to establish common reasons for non-compliance and evaluates the elements required by DACS in each finding aid. The results show low compliance with DACS and that the finding aids in the study commonly fail to apply IASA's Rules correctly in description of music sound recordings.

Introduction

Standardization of descriptive practice supports improved access to archival collections with sound recordings of music; however, description of music sound recordings is complicated because of the unique characteristics of both music and sound recordings. The standard for archival description in the United States, Describing Archives: A Content Standard (DACS), does not supply specific rules for describing music sound recordings. Instead, DACS recommends supplementary standards, including The International Association of Sound and Audiovisual Archives (IASA) Cataloguing Rules: A Manual for Description of Sound Recordings and Related Audiovisual Media and the Oral History Cataloging Manual for guidance on sound recording description (Society of American Archivists, 2013, p. 142). Given the wide range of descriptive options available via these recommendations, this study considers their utility and examines the extent to which finding aids for music collections with sound recordings successfully follow DACS. Drawing from a randomized, purposive sample of 20 finding aids for music collections at 11 repositories, this study applies document analysis to establish common reasons for non-compliance and evaluates the required elements in each finding aid according to DACS instructions for description. This two-pronged approach provides both a baseline evaluation of whether the finding aids comply with DACS requirements and qualitative analysis of archival description of sound recordings in the finding aids, including adherence to IASA's Rules, the only supplemental standard that covers music sound recordings. The results show low compliance with DACS and that the finding aids in the study commonly fail to apply IASA's Rules in description of music sound recordings.

Background

Archivists who describe recorded sound collections choose from a bewildering array of descriptive options. Using metadata schemas and standards such as, but not limited to, RDA: Resource Description and Access (RDA) or Public Broadcasting Core Metadata Dictionary Project (PBCore), archivists can describe a recording based on its format, content, preservation requirements, provenance, and more. Archivists must make decisions about what descriptive standard is best for their respective institutions, weighing additional factors including staff resources and user needs. In many archival repositories, recorded sound materials are included in collections with different kinds of materials, ranging from photographs to correspondence to computer hard drives, so archivists must decide on a descriptive strategy that accommodates this diversity.

DACS is the accepted best practice guide for describing archival collections in the United States and is widely used by archivists in other countries. DACS is intended to apply to all archival materials, "regardless of form or medium" (Society of American Archivists, 2013, p. xvii) and is output-neutral, meaning that archivists may use DACS to create any type of finding aid, from a single MARC record to a multi-page PDF document. Adopted by the Society of American Archivists in 2005, DACS recommends a range of descriptive elements, so the standard is flexible, with only nine required elements for a finding aid to be in compliance: unique identifier, title, creator(s) if known, dates of the materials, extent, conditions governing access, scope and content note, language(s) of the materials in the collection, and the name and location of the repository. This flexibility is beneficial, given the unique nature of archival collections, but since the standard gives archivists wide descriptive latitude beyond the nine required elements, it makes uniformity in application more challenging.

Standardization of archival description is important because it allows archivists to leverage digital technology that facilitates easier collections administration and that improves online access to collections through machine-readable finding aids. Since 1996, Encoded Archival Description (EAD) has been the standard document type declaration in the U.S. for encoding machine-readable finding aids. DACS was developed, in part, to normalize archival description such that machine-readable finding aids, including those encoded using EAD, could be shared online more easily.² This machine-readability advances user discovery of archival collections via the Internet and as a result, enables increased and widespread access to archives, one of the primary goals of any archival program. Because consistent markup of similarly structured documents is critical to processing them electronically, creating EAD finding aids that comply with a content standard such as DACS is essential. The fundamental idea behind DACS is to improve access to and administration of archival collections through standardized practice.

Although the rules in DACS apply to all archival materials, the standard recognizes that specialized description may be necessary for some archival collections and recommends other descriptive frameworks as needed. These are detailed in DACS' Appendix B, where the standard recommends using *The IASA Cataloging Rules* or the *Oral History Cataloging Manual* for description of sound recordings (Society of American Archivists, 2013, p. 142). IASA's

I This study is based on the last edition of DACS published by the Society of American Archivists (SAA) in 2013 with revisions from March 2015. Newer revisions that do not affect the outcomes of this study are available on Github, where SAA's Technical Subcommittee on DACS began maintaining the current version of the standard with all new revisions in 2015. DACS was put on a constant revision cycle in 2012, but no new complete editions have been published since 2013.

² For more background on DACS' development, see Hensen et al. (2011).

"Preliminary Notes" chapter, on the scope of its *Cataloging Rules*, provides a good summary of its contents:

The IASA Cataloging Rules specify requirements for the description and identification of sound recordings and related audiovisual media...They are designed for use...in the preparation of cataloguing records and as a standard for the exchange of bibliographic information (IASA, 1999).

As indicated by its title, the *Oral History Cataloging Manual* provides rules for archival cataloging of oral history recordings, which are outside the scope of this study. Even so, there are obvious similarities between description of oral history recordings and other kinds of sound recordings, as characteristics such as format and duration are not content-dependent, so the *Manual* and IASA's *Rules* have many parallel requirements and recommendations. Also, both borrow freely from and are meant to align with *Anglo-American Cataloging Rules*, *Second Edition* (AACR2), which is another reason for their similarity, so although this study does not examine description of oral history recordings, many of its findings may be also be relevant in an oral history context.

DACS' recommendation of both the *Oral History Cataloging Manual* and IASA's *Rules* is problematic. As both are based on AACR2—an obsolete standard since RDA supplanted AACR2 in 2010—following their instructions means that the resultant description is unlikely to represent current practices since RDA's rules differ from those of AACR2.³ Also, cataloging at the item level using a bibliographic approach de-emphasizes how the materials were created or collected and how they were ordered originally, both of which are essential in an archival context and emphasized in DACS. Compounding this, DACS provides little information about how to bring together the alternate standards recommended for sound recordings within a DACS-compliant finding aid. The loose directive to follow cataloging rules in archival description leaves the application of these rules open for wide interpretation, which can negatively impact standardization of description.

The granularity of description for music sound recordings is another issue because the appropriate level of description is dependent on the situation and reflects many factors: the contents of the collection, user needs, repository resources, extent of backlog, significance of materials, etc. Item-level description generally provides the most comprehensive access to sound recordings but is time-consuming, and given that many repositories face large processing backlogs, spending time on item-level description means that other collections remain inaccessible. However, describing sound recordings in bulk eliminates many descriptive details users find helpful or necessary, even if a finding aid author compiles detailed index terms and names for inclusion in the finding aid. When less granular description is appropriate and item-level cataloging is unwarranted, for example when processing a collection using "More Product Less Process" (MPLP) (Greene and Meissner, 2005), adapting item-level cataloging standards to a collection-level finding aid according to DACS and IASA's *Rules* can be difficult. Neither DACS nor IASA's *Rules* provides guidance on how to make decisions about the granularity of description for music sound recordings, so archivists must make these decisions based on local priorities, policies, and other considerations.

³ Paradis (2010) provides a full discussion of the difference between AACR2 and RDA for music materials, including sound recordings and how description of both the recorded content and its carrier differ using the newer RDA.

The rules in the *Oral History Cataloging Manual* provide for different types and levels of oral history description and the relationships between them (i.e., oral history collections, projects, and individual interviews), but IASA's *Rules* focus primarily on cataloging items as opposed to collections and the context of materials, with a couple exceptions. There is brief discussion of collective description above the item level in Chapter 9 and an appendix that recommends following outdated standards or versions of standards for archival description including *ISAD(G)*: *General International Standard Archival Description, Rules for Archival Description*, as well as *Archives, Personal Papers, and Manuscripts:A Cataloging Manual for Archival Repositories, Historical Societies and Manuscript Libraries* (AAPM), a predecessor to DACS published initially by the Library of Congress in 1983 that is now obsolete. Since AAPM has been superseded by DACS, this recommendation is somewhat problematic.

Describing music, which is a temporal and often non-lingual form of expression, comes with additional challenges. Instrumentation, form, genre, mood, tempo, and other musical features are critical to understanding and identifying music, and while IASA's Rules allow for description of some of these, using DACS to determine whether genre and instrumentation should be included in a scope and content note or in some other descriptive element is unclear. Moreover, characteristics such as mood are often meaningful only in specific cultural contexts, so considering all potential users and describing the context accordingly often becomes impractical, if not impossible. Even beyond specific musical characteristics, music sound recordings offer additional descriptive problems. Following the guidelines in DACS alongside IASA's Rules when describing sound recordings of music is difficult because DACS aligns more easily with paper-based archival records, while IASA's Rules were developed to cover all types of audiovisual recordings.4 Music sound recordings come in a wide variety of formats, and determining what features to describe depends on a number of factors. The multi-generational nature of audio preservation means that archivists must also frequently wrangle description for multiple copies of the same recording and connect digitized surrogates to the original recording.⁵ Identifying a creator for music recordings according to DACS and IASA's Rules can be problematic because the circumstances of a recording's creation and acquisition by an archive involves many people—the musician(s), the composer(s), the arranger(s), the person who owned the recording, etc. Describing titles of music sound recordings can also be tricky: some recordings feature one song, while others contain multiple pieces of music as part of a separately titled album. If a recording is unlabeled, the archivist may identify the recording using aural clues, but DACS and IASA's Rules conflict on how best to devise a title for unidentified material. DACS suggests using a name segment, indicating the nature of the archival unit, and providing topical information when available. IASA's Rules give options ranging from using the term "unedited" for unvariegated production audio to supplying a devised title in brackets, which DACS generally discourages. In short, an attempt to follow DACS recommendations by incorporating IASA's Rules can be extremely difficult.

⁴ See Schwartz (2002) for related critical discussion regarding the similarly problematic relationship between archival description of textual records and the bibliographic classification of photographic images.

⁵ One area that warrants further study is how better to connect metadata for digital surrogates with archival description.

Given the complicated nature of archival description of music sound recordings according to DACS and the various standards recommended in the literature, this study evaluates and uses document analysis of 20 online finding aids to examine how DACS has been applied and seeks to explore the following questions:

- To what extent do finding aids for music collections with sound recordings follow DACS?
- What are the most common ways in which they are non-compliant at the finding aid level?
- What are the most common ways in which they are non-compliant in more granular description of music sound recordings?
- Do finding aids use IASA's Cataloging Rules to describe sound recordings of music, since this is the recommended external standard for doing so?

Literature Review

To date, no studies have evaluated to what extent and how DACS has been implemented in the archival description of sound recordings. However, a number of authors have touched on archival description of sound recordings in music archives and written about the challenges of DACS implementation. There are also several recent guides and manuals for description of sound recordings that provide instructions using alternative standards separate from DACS and IASA's *Rules*.

As far as research on music archives, Lisa Hooper's study on music libraries with archival holdings (2011) and her book with Donald Force (2014) both deal with archival description of music materials, including sound recordings. In her 2011 article, "Moving to Preserve the Past: Current State of Archival Music Collections and Future Possibilities," Hooper presents the results of a survey of music librarians with questions about "hidden" archival collections in music libraries and how they are managed and made accessible, including an overview of descriptive practices. Although she demonstrates that local convention is used more frequently than "archival standards" to describe collections, including those with sound recordings, she recognizes the need for further study of "the processing standards ... for music archival collections," (2011, p. 26). Since description is an important part of archival processing, evaluating DACS compliance of finding aids for archival collections with music recordings helps address the need Hooper identifies. Her more recent book with Donald Force, Keeping Time: An Introduction to Archival Best Practices for Music Librarians (2014) touches specifically on description of sound recordings, but in the context of metadata created during digitization, as opposed to archival description in finding aids. As an introductory manual, the book provides an overview of many considerations involved in administering an archives and may be useful for readers who are less familiar with archival practice as they make decisions about how best to describe sound recordings.

DACS encourages readers to use the "most recent edition" of standards other than DACS "where further guidance is needed" (p. 141), and although IASA's Rules and the Oral History Cataloging Manual are based on the obsolete AACR2, several authors provide useful guidance on following RDA in descriptions of sound recordings. DACS includes a crosswalk to RDA (pp. 150-153), so these bibliographic guidelines could be used to create RDA-compliant descriptions. Since 1989, Richard Smiraglia has published four editions of his classic cataloging manual, Describing Music Materials, in various iterations. The most recent edition (Smiraglia and Beak, 2017) addresses RDA but unfortunately eliminates the discussion of archival description that was included in earlier editions, which was based on the now obsolete Archives, Personal Papers, and Manuscripts: A Cataloging Manual for Archival Repositories, Historical Societies

and Manuscript Libraries (Hensen, 1983 and 1989). In 2015 the Music Library Association published its report Best Practices for Music Cataloging Using RDA and MARC 21, with updated information about bibliographic description of sound recordings. Because the rules in RDA and AACR2 differ for cataloging music materials, these guidelines do not fully align with those in IASA's Rules, but instead they give helpful information about application of RDA.

Other authors have considered issues related to description of music sound recordings and how best to support user needs, one of the goals of standardized description. Although she focuses on libraries, C. Rockelle Strader's detailed history of cataloging music sound recordings in the United States (2015) highlights many issues that are also common in archival description, such as the extent to which the musical content should be described as opposed to its carrier. Similarly, Suzanne Mudge and D.J. Hoek (2000) present a number of considerations and recommendations for the library cataloging of 78 rpm sound discs of popular music, recognizing that MARC "cataloging rules generally offer little guidance for describing and providing access to 78 rpm discs" (p. 2). In Delaina Sepko's 2013 study on archival description of popular music, she considers the meaning of music genre and its relationship to the detailed guidelines for sound recordings in Rules for Archival Description (RAD), the Canadian equivalent to DACS. RAD devotes an entire chapter to description of archival sound recordings, and Sepko evaluates its strengths and weaknesses. She finds the standard's treatment of genre to be limited and suggests that music genre should be described in a finding aid's scope and content note. Although Sepko is looking at a different standard using different criteria, her study demonstrates that description of archival music recordings can be challenging, and her recommendation for including information about genre in a scope and content note could easily be applied in a DACS-compliant finding aid.

Several case studies on DACS implementation projects (Rush et al., 2008) focus on how repositories have adapted existing descriptive practice to accommodate DACS rules, and some of the issues that emerged were common to finding aids in this study Two of the repositories had previously adopted Steven Hensen's Archives, Personal Papers, and Manuscripts as a descriptive standard, and all three were using MARC records to describe archival collections before they implemented DACS. Two of the archives were also implementing EAD finding aids at the same time as DACS, and one of the case studies documents how a moving image repository integrated PBCore metadata with DACS collection-level description in an existing library system with MARC records. The case studies found that legacy practice especially in relationship to the use of abbreviations and the "access," "date," and "languages and scripts of the material" elements—required changes to existing finding aids for DACS compliance. The repositories also found DACS to be flexible and easy to implement, and despite the incumbent changes that came with adopting a new standard, the repositories benefited from being able to use DACS alongside MARC records, EAD finding aids, and other descriptive metadata schemas. Although these studies were unrelated to archival description of sound recordings, their findings align well with the results of this study, as discussed below.

A number of recent guides to archival description of sound recordings present various standards with which to describe archival sound recordings. In the ARSC Guide to Audio Preservation (2015), Marsha Maguire's comprehensive chapter on description of audio recordings provides information about both library and archival options for description, but she does not recognize that DACS recommends the use of IASA's Rules. She writes, "At present, there are no DACS-compatible content standards or guidelines for describing unpublished sound recordings" (Brylawski et al., 2015, p. 96). Then she suggests that readers apply rules from AACR2, RDA, or PBCore in formulating description beyond title, date, and shelf location, for which DACS provides sufficient guidance in most cases (Brylawski

et al., 2015, p. 96). According to Maguire these other standards work well for description of published or unpublished sound recordings, and she implies that bibliographic cataloging fills some of the gaps in DACS, especially related to technical and preservation metadata for sound recordings. Finally, Megan McShea's *Guidelines for Processing Collections with Audiovisual Materials* (2015), created for the Smithsonian Institution's Archives of American Art, provides the framework used at the Archives for preparing finding aids using the software Archivists' Toolkit, including their descriptive standards. Even though McShea's *Guidelines* are intended to standardize institutional practice according to DACS and EAD, her best practice recommendations were published online to serve as a guide for other institutions and could easily be applied in other repositories, as she provides explicit rules for description of sound recordings according to DACS.

Methodology

To identify finding aids for the study, I used purposive sampling. First I compiled a list of all institutions (n=256) with members in SAA's Performing Arts Section, the Association for Recorded Sound Collections, and the Music Library Association's Archives and Special Collections Committee. I reasoned that these would be repositories where I would be able to identify finding aids for music collections. Next, I randomized the list and used the first twenty organizations in my search for finding aids in order to improve the potential reliability of the results, but because this study is qualitative and exploratory, they provide only a sample of the full range of descriptive practice.

I visited the websites of the repositories and searched for the word "music" using the search tools available on each. I then scanned the finding aids that populated the search results, especially the scope and content notes, biographical and historical notes, and series listings, to evaluate the extent to which the collections included music materials. I was looking for collections with finding aids that met the following criteria:

- The finding aid was created in 2005 or later, after DACS was first published, and
- The collection documents the musical activity of its creator or is comprised primarily of music materials (i.e., one series or sub-series devoted to music materials, as applicable). I define music materials as notated music or sound recordings of music. I excluded collections with a strong focus on non-musical activities.⁶

After I started looking for finding aids from my sample set of 20 repositories, I determined that many of the institutions—eight total—were not suitable for inclusion in the study, either because they had no online finding aids and/or discernable music collections. I defined finding aid loosely so I could explore the full range of descriptive practice. At minimum, a finding aid had to name the collection and provide some sort of collection-level description to be included in the study.

Once I confirmed a finding aid was suitable for inclusion, I listed the name of the collection and the finding aid URL by repository in order of the search results. Then I randomized these lists to avoid potential bias based on the search algorithm of each repository's online search tools. For the repositories with finding aids that met my criteria (n=160), I analyzed the first three in the randomized list for every repository. Some repositories had well over three finding aids that met my criteria, but the only exception was San Jose State University,

⁶ This sampling strategy, set of repositories, and associated finding aids were also used in a forthcoming study about the characteristics of music described in finding aids for collections with notated music, sound recordings, or both.

which had only two relevant finding aids. Finally, I eliminated finding aids that contained only description of notated music. In total, I analyzed 20 finding aids from 11 repositories for collections that ranged in size from 1 to 55 linear feet (Table 1). All of the sampling and data collection was completed in 2016.

(Table I) Repositories and collections included in the study

Name of the home institution	Name of the collection	Type(s) of music materials described	Multi- or Single- level
Bowling Green State University	Joel Rudinger Papers	sound recordings	Multi
Bowling Green State University	Steve Allen Collection	sound recordings	Multi
Bowling Green State University	Ray B. Browne Collection	sound recordings and notated music	Multi
Case Western Reserve University	Donald Erb papers	sound recordings and notated music	Multi
Case Western Reserve University	Maurice Goldman Papers	sound recordings and notated music	Multi
Cornell University	Adler hip hop archive	sound recordings	Multi
Cornell University	Black Metal Music collection	sound recordings	Multi
Cornell University	Breakbeat Lenny Archive	sound recordings	Multi
Emerson College	Warren Debenham Comedy Sound Collection	sound recordings	Multi
Great American Songbook Archives and Library	Margaret Sauter Sheet Music Collection	sound recordings and notated music	Multi
Kansas Historical Society	William E. Koch Collection	sound recordings	Single
San Jose State University	San Jose State College Songs and Music Collection	sound recordings and notated music	Multi
State University of New York at Potsdam	Allen L. Richardson Papers	sound recordings and notated music	Multi

Name of the home institution	Name of the collection	Type(s) of music materials described	Multi- or Single- level
State University of New York at Potsdam	Mary E. English papers	sound recordings	Multi
State University of New York at Potsdam	Paul A. Steinberg papers	sound recordings and notated music	Multi
Texas Tech University	Box Family [sic]	sound recordings and notated music	Single
University of Iowa	Lynda Mendoza Collection of David McCallum Memorabilia	sound recordings and notated music	Multi
University of Iowa	Philip Greeley Clapp Papers	sound recordings and notated music	Multi
University of Iowa	Wilferd Kracht and Vincent C. Brann Papers	sound recordings and notated music	Multi
University of Miami	Ramón S. Sabat Panart Collection	sound recordings	Single

Once I identified the finding aids, I used two approaches to gather and evaluate my data. First, I determined if the finding aid met the minimum requirements in DACS, including whether all the required elements were present and in compliance. Next, I focused more specifically on the description of sound recordings in each finding aid, evaluating whether the content followed DACS and IASA guidelines. This two-pronged approach provided both a collection-level and more granular perspective on DACS compliance based on its requirements and its recommendations.

To evaluate overall DACS compliance, I made an electronic form to gather data (Appendix I). Using the form, I indicated whether the required elements were present and if so, marked whether the element was formulated according to DACS rules. With the exception of the name and location of the repository and unique identifier, all of the required elements in DACS can include information about music sound recordings, so checking the application of these fundamental requirements, while a relatively blunt measure, helped me consider the quality of descriptive practice represented by the finding aids in the sample. Related to this, I also recorded whether the finding aids were single- or multi-level because DACS requirements vary accordingly. The multi-level finding aids included a box or container list or a more detailed inventory of the contents of the collection. My sample included 17 multi-level and three single-level finding aids. This part of the study looked overall at music collections, including those comprised of sound recordings only and a mix of sound recordings and notated music.

⁷ A similar methodology may be found in Park and Maszaros's evaluation of the quality of MODS records in digital repositories (2009).

To focus more specifically on description of sound recordings, for each collection I transcribed verbatim in a spreadsheet any description of music sound recordings in the finding aid (see Table 2, Example spreadsheet for Mary E. English papers, 1930-2005). I also indicated the type(s) of described materials (i.e., sound recordings or sound recordings and notated music), and evaluated the extent to which the description was DACS-compliant. Given the inherent flexibility of DACS, compliant descriptions ranged considerably in structure, content, and extent. A compliant description could be as simple as "The collection includes jazz sound recordings," or as complicated as "Series 3 includes 12 sound discs (CD) published between 1992 and 1998 featuring avant-garde jazz by San Francisco Bay Area-based performers, including Vijay Iyer." I copied into individual spreadsheet cells the discrete units of relevant descriptive information—dates, folder titles, scope and content notes, collection abstracts, and so on. DACS contains guidelines for twenty-five elements, so I copied text that would be equivalent to these, but only the text that specifically described music sound recordings. Although some finding aids labeled the elements differently than DACS, the descriptive units were easy to identify based on the formatting of the finding aid. I made a note in the spreadsheet both of the applicable DACS element names and the terminology used in the finding aid when it differed. This data was gathered to determine whether the description followed the instructions contained in DACS for that particular element (e.g., creator) or combination of elements (e.g., title and date presented as one descriptive unit). In total, I transcribed and analyzed for DACS compliance 379 data units that described sound recordings from the 20 finding aids in my sample.

(Table 2) Example spreadsheet for Mary E. English papers, 1930-2005

Finding Aid Element	Name if different	Туре	Text	DACS	Code	Code
Title (item- level) with date	Item level description	Sound recordings	Massachusetts Music Educators Association Vinyl Record Album, 1961	No	Capitalization	Not IASA
Title (item- level) with date	Item level description	Sound recordings	9 Unidentified Cassette Tapes (3 lecture, 6 music), undated	No	Capitalization	Not IASA

For descriptive units I transcribed that did not follow DACS, I iteratively developed a set of codes to categorize in what way(s) the description varied. The codes were not developed in relationship to a specified element, set of elements, or level of granularity. Instead, to develop the codes, I recorded a brief, natural language description of the manner in which the description did not follow DACS, and then compared across collections to look for similarities in my notes. Seven common issues emerged, which comprise the codes I then applied retroactively to all of the descriptive units (Table 3). Finally, I compared the frequency of codes across collections to find the most common ways in which description did not follow DACS.

(Table 3) DACS compliance codes

Code:	Description of Code:
Not descriptive enough	Applied when description is insufficient or unclear. (e.g., title uses "collection" or "archives" as opposed to "papers and sound recordings")
Date format incorrect	Applied when dates were not formatted according to DACS
Mixed elements	Applied when multiple elements were included as one. (e.g., arrangement note is part of scope and content note or playback speed of recording is included in an item-level title instead of a separate physical access element)
Not IASA	Applied when description did not follow IASA Cataloging Rules, which is the DACS companion standard for music sound recordings
Missing date	Applied when no date information was supplied
Abbreviation	Applied when abbreviations were used, as DACS discourages the use of abbreviations
Capitalization	Applied when DACS capitalization rules were not followed

Results

Sound recording description DACS compliance

Looking at the extent to which the specific description of sound recordings follows DACS, the level of compliance is relatively low. No finding aid contained 100% DACS-compliant description of music sound recordings. In fact, only three of the finding aids had description that was 80% compliant or higher, with two of these being from the same repository, while six finding aids from five repositories had no description whatsoever that was compliant. I analyzed the descriptions from each collection (n=20) separately so that the relative sizes of the collections would not skew the results and ranked the codes according to their frequency for each collection. I then compared across collections to see what codes occurred most regularly overall.

Three finding aids had more than one primary reason for noncompliance, with the same frequency of occurrence for each reason, but one of these was also more common in other finding aids— not following IASA Cataloging Rules—with nine finding aids total (45%) displaying this issue more than the others. Although this was not the most common error for every finding aid, all repositories but one had finding aids with at least one occurrence of this issue. One common example of this error is when finding aid authors use incorrect terminology to describe the physical format of sound recordings, such as "vinyl LP" as opposed to "sound disc: analog, 33 1/3 rpm." The second-most common issues were mixed elements and incorrectly formatted dates, with six finding aids (30%) each respectively represented in these categories. An example of a "mixed elements" error is in the following excerpt from one collection's scope and content note, in which the finding aid author has inserted information better suited for a separate "physical access" element:

Reel to reel audio recordings probably made in the 1950's primarily for Browne's Alabama folk lyric research have become too brittle to be accessible. Cassette audio recordings document mostly sessions from popular culture conferences and interviews with Ray Browne and others in the field (Honneffer, 2007).

Only three finding aids (15%) had "missing date" as the most common error, while both capitalization errors and description that was insufficient were the most common errors for only one finding aid each.

Finding aid DACS compliance

Single-level finding aids

The three single-level finding aids all came from different repositories, and none included all the required elements. As indicated above, required elements for both single- and multi-level finding aids include a unique identifier and a title for the collection, an indication of the collection's creator(s), dates of the materials, extent statement, description of conditions governing access, scope and content note, language(s) of the materials in the collection, and the name and location of the repository. All three finding aids were missing any mention of conditions governing access. Two were missing information about the language(s) of the materials, and one was additionally missing both a unique identifier and an extent statement. This last finding aid was particularly deficient, in that the only information provided about the creator was in the name segment of the collection's title, as opposed to a separately identified element for creator or clear statement on the creator's identity. Further, the date(s) of the materials were unclear, as they could only be inferred from the dates mentioned in the biographical note.

DACS compliance issues in the other two single-level finding aids included dates that were incorrectly formulated as well as titles that were not sufficiently descriptive. DACS specifies the use of the word "collection" only when a collection has a topical or format-specific focus and recommends naming the primary forms of the materials in the title instead of a generic word such as "collection." For example, The William E. Koch Collection includes professional papers and sound recordings related to Koch's work as a folklorist, so the title "William E. Koch papers and sound recordings" would comply better with DACS and be more descriptive.

Multi-level finding aids

Multi-level finding aids in the study (n=17) tended to be better in terms of containing the prescribed elements and following DACS guidelines, with six finding aids complete according to DACS. It requires multi-level finding aids to include all of the same elements as single-level finding aids and to provide an indication of the relationship between different levels of the collection (e.g., an arrangement note). DACS also requires the identification of any new creators of materials at lower levels, should these entities differ from the creator(s) identified at the collection level.

Looking at both completeness and compliance, four of the multi-level finding aids fully adhered to DACS. Others came close. One multi-level finding aid was complete but non-compliant in only one way, while three others were missing one element, but were complete and in compliance otherwise. As with single-level finding aids, multi-level finding aids frequently did not

include the language element, with 53% of multi-level finding aids leaving out any description of the language(s) or scripts of the materials. Although no other error occurred as commonly as omission of the language element, three of the multi-level finding aids did not name new creators at lower levels of the descriptive hierarchy, even though the materials being described were by a different creator than the one(s) named at higher levels of description. Finally, the element "conditions governing access" was missing from two of the multi-level finding aids.

Failure to name new creators at lower levels of the finding aid's descriptive hierarchy could be connected to music-related descriptive issues or to a finding aid author's determination that the creator named at a higher level suffices to satisfy the requirements in DACS. They state, "At subsequent levels of a multilevel description, this element [name of creator(s)] is required only if the person(s) or organization(s) responsible for the creation or accumulation of the material at the subsequent level differs from the higher level(s)" (Society of American Archivists, 2013, p. 10). DACS also allows for identification of new creators in title elements. so the decision whether and how to name a new creator presents a number of descriptive options. Although one weakness of document analysis as a methodology is that it does not explain why certain descriptive practices occur more commonly than others, the possibility that music recordings often involve complicated relationships between creators, compilers, and the materials being described could explain why several finding aids did not name new creators at lower descriptive levels. For example, the Lynda Mendoza Collection of David McCallum Memorabilia includes a series of audiovisual recordings with item level description and fourteen subseries, some of which are arranged according to a specific creator and some of which are arranged based on format or content. Ultimately, the collection-level identification of Lynda Mendoza as the collection's creator trickles down to the granular item-level description in the audiovisual series, so technically, the finding aid remains in compliance with DACS requirements for creator. However the description is inconsistent between sub-series and even between items. Some name individuals and organizations responsible for the creation of the item being described (i.e., publisher, performer, composer, etc.), while some do not. The finding aid does not provide a clear explanation for these differences or identify the full relationship between the names listed and their role in creating the items. As a result, the range of creators and the fact that some of the recordings do not have any new creator information supplied makes this part of the finding aid and its arrangement unclear.

Looking at multi- and single-level finding aids together, only 24% of the finding aids I evaluated were complete and contained no errors according to DACS requirements. Both single- and multi-level finding aids demonstrated problems with the language and "conditions governing access" elements, but as mentioned above, document analysis is insufficient for determining the cause for these mistakes. Even so, they are probably less likely to be associated with musicrelated descriptive issues, as application of DACS to music materials for these elements is straightforward. For the element "conditions governing access," DACS requires confirmation or otherwise that a collection is open for use without restrictions related to the nature of the information in its materials, per institutional, statutory, or donor requirements. Rights-related access restrictions and restrictions due to physical format and condition are included under different elements that are not required by DACS. These kinds of restrictions are more likely to impact music sound recordings than an institutional or statutory requirement, as rightsrelated restrictions and legacy media formats would more frequently cause access restrictions in relationship to music as opposed to what DACS includes under the "conditions governing access" element. In regards to language of the materials, even collections comprised entirely of recorded instrumental music are likely to feature writing on the recording or storage containers, and DACS requires that archivists describe this language.

One possible reason to explain these errors is failure to update legacy descriptive practices to adhere to DACS. In Prudence Backman's discussion of applying DACS at the New York State Archives (Rush et al., 2008), she identifies legacy practices at the Archives that did not comply with DACS—specifically, omitting mention of access conditions when there were no restrictions and omitting description of language, unless a collection was not in English. These practices may be common at other repositories and might explain why finding aids in this study omitted the language element and often did not include the "conditions governing access" element.

Conclusion

Looking broadly at archival description of music materials, whether a finding aid follows DACS requirements does not seem generally to be connected to the unique qualities of archival music materials, with the possible exception of multi-level finding aids failing to identify creators at lower descriptive levels. More research is needed to determine the reason(s) for this noncompliance to improve descriptive practice and address the underlying cause(s). . The most commonly missing required element was description of the language(s) and script(s) of the materials. Even so, since DACS provides clear guidance on how to describe language(s) and script(s) in a way that applies unambiguously to music sound recordings, it is unlikely that the complicated nature of music sound recording description explains the absence of this element in non-compliant finding aids. Alongside this, the problem of "mixed elements" and incorrectly formatted dates might indicate that there is a need for additional training for finding aid authors in the application of DACS. These issues may also be due to the display settings in a repository's finding aid web delivery platform, as the underlying description could very well be DACS-compliant but delivered through a website that changes the date formatting or merges information from multiple elements under a new heading, for instance.

Closer analysis shows that the finding aids in this study regularly do not follow IASA guide-lines when specifically describing sound recordings, as recommended by DACS. Given these guidelines are meant to clarify descriptive practice for this format, the prevalence of this issue in finding aids suggests the need for clearer direction in how to describe the unique characteristics of sound recordings in a way that complies with DACS. Until improved guidance is available, archivists may well choose to describe archival sound recordings of music using a standard other than DACS, as more specific and up-to-date guidance is available in RDA, *Rules for Archival Description*, and PBCore, for example. Using another standard in conjunction with DACS and applying it consistently could help address the DACS-compliance issues identified in this study. Ultimately, archivists must decide what descriptive practice would be best, balancing the resources of their repositories with the needs of their current and future users.

The initial results of this study were presented at the 2016 Society of American Archivist's Research Forum in the paper, "Discord in Archival Description? Evaluating DACS Compliance and Best Practices through Document Analysis of Finding Aids for Music Materials." SAA Annual Meeting. Portland, Oregon. August 2, 2016. The study was designed as part of the 2014 Institute for Research Design in Librarianship, with special thanks to my colleague Emily.

References

- ARSC Guide to Audio Preservation. (2015). Brylawski, S., Lerman, M., Smith, K. and Pike, R., eds. Washington, D.C.: Council on Library and Information Resources. [online] Available at: https://www.clir.org/wp-content/uploads/sites/6/pub164.pdf [Accessed 15 March 2018].
- Association of Moving Image Archivists PBCore Advisory Sub-Committee and American Archive of Public Broadcasting, (2015). PBCore, the Public Broadcasting Metadata Dictionary Project. [online] Available at: http://www.pbcore.org [Accessed 15 March 2018].
- Greene, M.A. and Meissner, D. (2005). More Product, Less Process: Revamping Traditional Archival Processing. *The American Archivist*, 68(2), pp. 208-263.
- Hensen, S. (1983 and 1989). Archives, Personal Papers, and Manuscripts: A Manual for Archival Repositories, Historical Societies, and Manuscript Libraries. Washington, D.C.: Library of Congress [1983]. Chicago: Society of American Archivists [1989].
- Hensen, S., Landis, W., Roe, K., Rush, M., Stockting, W. and Walch, V. (2011). Thirty Years On: SAA and Descriptive Standards (Session 706). The American Archivist, 74(Supplement 1), pp. 1-36.
- Honneffer, E. (2007). PCL MS 107 Ray B. Browne Collection. [online] Available at: https://lib.bgsu.edu/finding_aids/items/show/1729 [Accessed 24 July 2016].
- Hooper, L. (2011). Moving to Preserve the Past: Current State of Archival Music Collections and Future Possibilities. *Music Reference Services Quarterly*, 14(1), pp. 14-29.
- Hooper, L. and Force, D.C. (2014). Keeping Time: An Introduction to Archival Best Practices for Music Librarians. Middleton, Wis.: A-R Editions, Inc. and Music Library Association.
- International Association of Sound and Audiovisual Archives. (1999). The IASA Cataloguing Rules: A Manual for the Description of Sound Recordings and Related Audiovisual Media. Milano, M., ed. Stockholm: International Association of Sound and Audiovisual Archives. [online] Available at: https://www.iasa-web.org/cataloguing-rules [Accessed 15 March 2018].
- Joint Steering Committee for Revision of AACR. (1998, 2002 revision). Anglo-American Cataloguing Rules, Second Edition. Chicago: American Library Association; Ottawa: Canadian Federation of Library Associations; London: Chartered Institute of Library and Information Professionals.
- Matters, M. (1995). Oral History Cataloging Manual. Chicago: The Society of American Archivists.
- McShea, M. (2015). Guidelines for Processing Collections with Audiovisual Material at the Archives of American Art. Washington, D.C.: Smithsonian Institution, Archives of American Art. [online] Available at: https://www.aaa.si.edu/documentation/guidelines-for-processing-collections-with-audiovisual-material [Accessed 21 June 2015].

- Mudge, S. and Hoek, D.J. (2000). Describing Jazz, Blues, and Popular 78 RPM Sound Recordings: Suggestions and Guidelines. *Cataloging and Classification Quarterly*, (29)3, pp. 21-48.
- Music Library Association RDA Music Implementation Task Force. (2017). Best Practices for Music Cataloging Using RDA and MARC21, Version 1.1. [Online]. Available at: http://www.musiclibraryassoc.org/resource/resmgr/BCC_RDA/RDA_Best_Practices_v1.1-1502.pdf [Accessed I May 2017]. Newest version available, with subscription, at: http://www.rdatoolkit.org/.
- Paradis, Daniel. (2010). RDA and Music: An Overview of the Differences from AACR2 [PowerPoint presentation]. International Association of Music Libraries Congress, Moscow, Russia, 29 June. Concordia University. Available at https://spectrum.library.concordia.ca/6828/1/RDA_and_music_(IAML)(with_examples)_Oct._2010.pdf [Accessed 28 June 2018].
- Park, J. and Maszaros, S. (2009). Metadata Object Description Schema (MODS) in Digital Repositories: An Exploratory Study of Metadata Use and Quality. *Knowledge Organization*, (36) I, pp. 46-59.
- RDA Steering Committee. (2015). RDA: Resource Description and Access. Chicago: American Library Association; Ottawa: Canadian Federation of Library Associations; London: Chartered Institute of Library and Information Professionals. [Online]. Available, with subscription, at: http://www.rdatoolkit.org.
- Rush, M., Holdzkom, L., Backman, P., Santamaria, D.A. and Leigh, A. (2008). Applying DACS to Finding Aids: Case Studies from Three Diverse Repositories. *The American Archivist*, (71)1, pp. 210-227.
- Schwartz, Joan M. (2002). Coming to Terms with Photographs: Descriptive Standards, Linguistic "Othering," and the Margins of Archivy. *Archivaria*, (n. 54)Fall 2002, pp. 142-171. [Online]. Available at: https://archivaria.ca/index.php/archivaria/article/view/12861/14092 [Accessed 28 June 2018].
- Sepko, D. (2013). Sound records: genre and popular music in Rules for Archival Description. IASA Journal, 40, pp. 5-13.
- Smiraglia, R.P. and Beak, J. (2017). Describing Music Materials: A Manual for Resource
 Description of Printed and Recorded Music and Music Videos, Fourth Edition. Lanham:
 Rowman and Littlefield.
- Society of American Archivists. (2013, March 2015 rev.), Describing Archives: A Content Standard, Second Edition. Chicago: Society of American Archivists. [Online]. Available at: http://files.archivists.org/pubs/DACS2E-2013-v0315.pdf [Accessed 8 May 2018]. Current revisions available at: https://github.com/saa-ts-dacs/dacs [Accessed 28 June 2018].
- Strader, C. Rockelle. (2015). Cataloging Music Sound Recordings in the United States: An Evolution of Practice and Standards. *Notes*, (72)2, pp. 276-327.

Appendix I: Sharing Notes Form for Finding Aid Level DACS Compliance

QΙ	Ν	Name of the home institution:				
Q2	Ν	Name of the collection:				
Q3	М	1ulti- or single-level description?				
Q4	Siı	ngle-level Finding Aids				
ı		conditions governing access				
ı		creator (if known)				
ı		date				
ı		extent				
ı		ID				
ı		language				
ı		name/location of repository				
ı		scope and content note				
ı		title				
Q5	М	ulti-level Finding Aids				
ı		arrangement note/whole-part relationship/container list				
ı		conditions governing access				
ı		creator (if known)				
ı		date				
ı		extent				
ı		ID				
ı		language				
ı		name/location of repository				
ı		title				
ı		new creators named in lower levels				