# Preserving Hymnals Through Digitization at Gardner-Webb University

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ardner-Webb University is a small, private liberal arts college rooted in the Baptist tradition and located in the rural foothills of North Carolina. The Hymnal and Songbook Collection in the Gardner-Webb University Archives contains 124 volumes, with 109 unique titles spanning from 1850 to 1982. This collection was selected for digitization because of increasing requests from researchers and musicians to use the collection. It includes rare titles published by regional printing/publishing houses across the Carolinas, Tennessee, and Georgia. "Shape-note" titles are of particular interest and are a high priority for digital preservation because they represent a tradition uniquely concentrated in the Appalachian region of the southern United States. The four shapes in this system of notation (triangle, oval, square, and diamond) correspond to the four syllables (fa, so, la, mi) developed by Thomas Morely in 1597 (Marini, 2003). The intention was to create a notation system that could be

easily understood by large populations of varying literacy and little formal musical training (Marini, 2003). The southern United States is the only location in which an unbroken tradition of four-shape (and later seven-shape) notation has endured (Music, 2005).

The digitization project described in this chapter focused on rare, public-domain titles, many of which are regionally published shapenote editions. The physical condition of the hymnal collection was a significant reason for digitization but also posed challenges for the project. Book manufacturing during the 1880s through the early 1900s used highly acidic raw materials, resulting in artifacts that are unsuitable for frequent use and long-term preservation (Kurlansky, 2016). Yet hymnals are, by design, texts intended for weekly use and handling. This problem makes the digital preservation of these texts urgent. We offer here a brief description of our initial efforts to pursue this goal.

## Development of the Project

Our project began in May 2019 and concluded in April 2020, focusing on 43 titles that were in the public domain and, therefore, eligible for digitization. We began with an in-depth analysis of these titles, creating qualification rankings for digitization, establishing metadata standards, and determining a plan for long-term file storage. We were able to devote roughly 25 hours per week to the project.

A spreadsheet of the titles was created using OCLC's Digby inventory app. Columns for publication date, notation style, and worldwide holdings were included to enhance the ability to sort and search titles. Worldwide holdings were collected for each title, using the OCLC Number/Unique Identifier; titles with multiple holding records used the record with the greatest number of worldwide holdings. A comprehensive internet search was conducted to check the digitization status of each title. To qualify as a digitized volume, each hymnal or songbook needed to be accessible as a complete facsimile of the print edition, including covers, front matter, and advertisements. The digital edition needed to be accessible through a stable open-access platform, such as the Internet Archive, HathiTrust, or an institutional repository. Hymnals digitized through *Hymnary.org* were categorized as not digitized because they only contain digital images for individual hymns rather than complete hymnals.

The analysis allowed us to establish the following guidelines to qualify for digitization:

- Qualifier 1: The title is rare (defined as fewer than 25 worldwide holdings in WorldCat).
- Qualifier 2: The title was published regionally (defined as published in North Carolina or one of its bordering states—South Carolina, Virginia, Georgia, or Tennessee).
- Qualifier 3: The title uses shape notes.

Forty-three hymnals were scanned as part of the project. To be eligible for digitization, a hymnal needed to have met at least one of these qualifiers. Of the 43 titles, 18 titles met all three qualifiers.

### Plan for Digitization and Metadata Creation

Hymnals and songbooks were scanned using a Bookeye 4 V2 scanner at 600 dpi with 32 bit color depth. JPEG was used for the digital surrogate file and PDFs with optical character recognition (OCR) capability as a digital derivative. JPEG was chosen as the preferred surrogate medium because it allows flexibility in file use and sharing and takes up less storage space than TIFF. Master surrogates were stored both in institutional cloud storage and on an external hard drive.

Digitized hymnals were uploaded to both the Internet Archive and the Digital Commons, Gardner-Webb's institutional repository, which serves as the primary access point for the collection. The rationale for also uploading to the Internet Archive was two-fold. First, the Digital Commons platform includes an Internet Archive integration that displays an interactive "flipbook" at the bottom of each record page, allowing users to engage with and preview a text before downloading (see Figure 8.1). Second, because researchers use the Internet Archive as a standalone database, creating an additional access point there increases exposure to the collection.

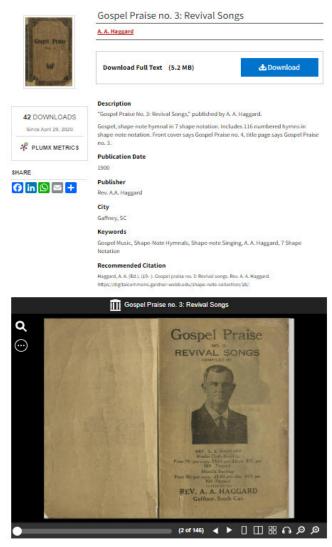


Figure 8.1: Digital Commons record page with interactive flipbook

Metadata writing caused a significant bottleneck in the digitization process. While creating a standardized metadata template was easy, writing descriptions was time-consuming. Initially, the template included indexing of topics (and sometimes of unique or rare hymns) for each title, but this method was unsustainable. Since each record includes an OCR PDF, we decided to eliminate the topical indexing and only highlight unique elements, such as notation style or regional publication. This process increased efficiency and

elevated readability of the descriptions, as the following examples illustrate.

Description Following the Original Metadata Template

Sankey, Ira D., James McGranahan, and George C. Stebbens, eds. 1895. *Gospel Hymns, nos. 5 and 6 Combined, Breiver Edition*. Chicago, IL: The Bigalow and Main Co. <a href="https://digitalcommons.gardner-webb.edu/shape-note-collection/1/">https://digitalcommons.gardner-webb.edu/shape-note-collection/1/</a>

"Gospel Hymns, nos. 5 and 6 Combined," edited by Ira D. Sankey, James McGranahan, and George C. Stebbin, published by the Biglow & Main Co.

Shape Note Hymnal - 438 hymns in shape-note notation, with indexes. Character note edition.

Topical Index: Adoption; Assurance; Blood of Christ (The); Children; Christ a Friend; Christ Seeking; Christ, the Shepherd; Coming of Christ (the); Confession; Consecration; Cross of Christ (The); Faith; Fear Not; Fellowship with Christ; Funeral; God's Word; Guidance; Heaven; Holy Spirit; Invitation; Joy; Love; Miscellaneous; Missionary; Parting Hymns; Peace and Rest; Praise; Prayer; Precious Promises; Refuge; Repentance; Resurrection; Salvation; Suffering of Christ; Temperance; Temptation; Trust; Warning; Work; Worship.

Description Following the Modified Metadata Template

Vaughan, James D. ed. 1910. Voices for Jesus: for Sunday-Schools, Revivals, Conventions and All Religious Work and Worship.

Lawrenceburg, TN: James D. Vaughan. <a href="https://digitalcommons.gardner-webb.edu/shape-note-collection/3/">https://digitalcommons.gardner-webb.edu/shape-note-collection/3/</a>

"Voices for Jesus," edited by James D. Vaughan and published by James D. Vaughan, Music Publisher.

Shape Note Hymnal with 7 shape notation. Includes Index.

The reason for highlighting hymnal publishers and printers in the metadata is that the rarer titles were often produced by small printing houses that are now defunct. George Pullman Jackson noted in 1933 that there were at least 29 known publishers of seven-character shape notes in the southern United States (Goff, 2002). While some regional publishers, such as James D. Vaughan, John B. Vaughan, George Sebren, and Arthur Sebren, appeared in the scholarly literature on shape notation and singing schools, other regional printers are absent from the literature. By creating metadata points for those absent in the literature, such as George A Minor, David E. Dortch, Alfred Helton, A. A. Haggard, and George W. Bacon, we hope to assist scholars in expanding the scope and depth of shape-note research.

### Use of the Digitized Collection

Based on analytics from May 2020 through May 2023, use of the collection has been significant. There were 3,572 metadata page hits of the collection on the Digital Commons platform (1,296 of these were downloads), and there were 2,533 views on the Internet Archive platform (Internet Archive does not provide access to information about downloads).

The titles listed below were among the top Digital Commons downloads, Digital Commons page views, and Internet Archive page views during the period analyzed. All of these titles are shape-note hymnals except for Coleman's *The Modern Hymnal* (round note) and Sankey's *Gospel Hymns, nos. 5 and 6 Combined, Breiver Edition* (words only). All of the titles are in fragile condition with one or more of the following issues: loose text blocks (mostly folios), torn covers, and brittle pages. Of these titles, four have fewer than five worldwide holdings each, with Haggard's *Gospel Voices No. 3: Revival Songs* being held only in the Gardner-Webb University Archive.

Bacon, George W., and Rev. W. B. Cook. 1919. Truth and hope, a collection of sacred songs, both new and old, for the church, the Sunday-school, the revival meeting, the singing school, the singing convention, and all kinds of religious work and worship. Hudson, NC: The Teachers' Music Publishing Co.

- Coleman, Robert H., ed. 1926. *The Modern Hymnal: Standard Hymns and Gospel Songs New and Old, for General Use in all Church Services*. Dallas, TX: Robert H. Coleman.
- Coleman, Robert H., ed. 1924. Harvest Hymns: Singable Gospel Songs for General Use in Churches, Schools, Young People's Meetings, and Evangelistic Services. Dallas, TX: Robert H. Coleman.
- Dortch, David E., ed. 1902. *Dortch's Gospel Voices No. 3*. Columbia, TN: The Dortch Publishing Co.
- Haggard, A. A., ed. 1900. *Gospel Voices No. 3: Revival Songs*. Gaffney, SC: Rev. A. A. Haggard.
- Sankey, Ira D., James McGranahan, and George C. Stebbens, eds. 1895. *Gospel Hymns Nos 1 to 6, Brevier Edition*. Chicago, IL: The Bigalow and Main Co.
- Vaughn, John B., ed. 1914. Heavenly Echoes No 2: For Sunday Schools, singing schools, and social gatherings. Lawrenceburg, TN: The J. B. Vaugn Co.

Users of the digitized collection span worldwide, with a high concentration in the United States. Figure 8.2 is a readership map of Digital Commons views, North America only, from May 2020 to May 2023.



Figure 8.2: Digital Commons readership map

Measured by views and downloads across the Digital Commons and Internet Archive platforms, usage indicates a demand for titles in the collection. As a result, we initiated a second phase of the project in 2023.

#### Conclusion: What We Learned and What Comes Next

During the course of the project, we encountered three main challenges: developing an efficient and sustainable plan for metadata creation, digitizing materials that were often in fragile condition, and determining how best to release the digitized collection. In the second implementation of the project, we will continue to use the modified template for metadata description but will also include short notes on the condition of the items. These notes will provide a record of the physical fragility of volumes where handling is a concern.

Because so many of these books are in fragile condition, in the second implementation of the project we will create a TIFF image as the master, with JPEG and PDF derivatives. We chose JPEG for the master image in the first implementation for the reasons already described. Because TIFF images are of higher quality, however, we believe this will eliminate the need to re-scan in the future and so reduce long-term physical handling of volumes in poor condition.

The initial project was released in two large batches—the Round-Note Collection and Shape-Note Collection. In the second implementation of the project, we will again identify qualifying titles for digitization based on the qualifiers used during the project development stage. We will also continue to deposit all titles in the Internet Archive, which allows us to take advantage of flipbook integration and exposes collection images to a wider audience.

Since the initial implementation of this project, we have received two gifts of hymnals from alumni who saw the digital collection online. Six of those titles are rare shape-note editions with fewer than five worldwide holdings each. While the publication of new hymnals has stagnated across all major denominations, there has been an increase in the study of hymnody, particularly of unusual features of its history such as the regional use of shape notes. Gardner-Webb University Archives intends to continue implementing digitization projects that preserve shape-note hymnals and songbooks to support future scholarship and a growing shape-note singing community.

#### References

- Goff, James R., Jr. 2002. *Close Harmony: A History of Southern Gospel*. Chapel Hill: University of North Carolina Press.
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- Marini, Stephen A. 2003. Sacred Song in America: Religion, Music, and Public Culture. Urbana: University of Illinois Press.
- Music, David W. 2005. A Selection of Shape Note Folk Hymns From Southern Tune Books, 1816-1861. Middleton: A-R Editions.