

BINDING AND CARE OF PRINTED MUSIC
REVISED EDITION

By

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ABSTRACT AND BIO

The second edition of *Binding and Care of Printed Music* brings the manual fully up to date. The detailed, step-by-step instructions have been updated and streamlined, and a full treatment of digitization, both the theoretical underpinnings and a practical and cost-effective workflow, has been added. New tips, tricks and procedures have been integrated as well. The new edition is also profusely illustrated with hundreds of photographs taken by the author to clarify the descriptions of the binding and repair techniques covered. As before, the manual's very detailed approach is designed as an introduction for staff with little or no previous conservation experience, while also offering a fresh perspective for career conservators, in particular regarding the special needs of musical scores.

Alice Carli is the Conservator at the Sibley Music Library, serving the Eastman School of Music. Decades of personal experience and training students in music binding and conservation techniques have contributed to her engaging, no-nonsense approach. The variegated stream of scores needing to be bound, rebound, repaired and replaced for conservatory and research use at Sibley present endless opportunities for trial and error, allowing the errors to be weeded out and novel ideas tested and perfected. As a result, Alice has become a sought-after consultant on matters involving the conservation and preservation of musical scores. When she is not preserving music at the lab, Alice engraves her husband's orchestral accompaniments to silent film, manages his rag-time orchestra, and cares for their Rochester, New York home and three rescued cats.

CHAPTER ONE

MUSIC BINDING OVERVIEW

Consider the difficulties of maintaining a music score collection: scores tend to be hard to acquire, hard to catalog, hard to bind, hard to shelve, and hard to find in the catalog and on the shelf. We go to the trouble because we, and our patrons, love the music, but our affection is increasingly tempered by an awareness of our shrinking resources, both of money and of time. This manual focuses on the particular problems of binding music scores and of physically maintaining a score collection for the gamut of uses library patrons may intend. Many other resources already exist that deal with the binding and conservation of books. This volume is intended to be used on its own for resolving the binding and conservation problems that are specific to scores.

The first point of approach to the problem of binding library music is the expected use of the scores, which will vary in some degree from one library to another, and very much among different types of publication. Scores used for performance and practice will incur considerable stress on the pages and hinges as well as a high risk of markings and other damage, and loss of parts. Performance scores must be able to lie flat (or at least not close themselves) even when resting in a nearly upright position on a stand. This category of use is the central focus of this manual. Scores used primarily for study will still suffer a high risk of markings, but less likelihood of other types of damage—more like the use of most books. The openability requirement will be less stringent for these scores, though they may still be flattened in photocopy machines. Rare or unusual scores kept for use in comparing editorial practices or for their artifactual value will probably receive extra protection by circulation restrictions and special housing. Again, the use of rare scores tends to approximate the use of rare books, security and fragility being the primary issues. Each of these classes of use invokes its own set of criteria for binding and repair decisions, with the treatment accorded to a rare early edition, as an obvious instance, being wholly inappropriate for a common edition of heavily used repertoire, and vice versa. Alongside these use-based criteria, however, basic factors of score construction also determine what can and cannot be done in binding or rebinding a score.

STANDARD BINDING FORMATS

These other factors that determine the type of binding most appropriate for a musical score include the method of page attachment and whether parts or other media are included. While page size is a primary element of format, it almost never makes a difference in how a score should be bound—only in how much trouble and expense will be involved. The



Figure 1.1. A folio is a single sheet folded in half; a bifolio is two sheets folded in half together; a pamphlet is many sheets folded together.

following illustrations show the bindings in which published music is most commonly received by libraries, with suggestions for appropriate **library binding** for each specific published binding style.

PAMPHLETS

Fortunately, the **pamphlet** is still the standard format for sheet music; it is certainly the best for library use. If there is a “classic” library binding for music, it is the pamphlet bind, since so much music is produced in single-signature pamphlets that need rigid covers to protect them from damage while in use and deformation while standing on shelves. There are several methods available for attaching the rigid covers, including sewing (most recommended—sturdy and easily reversible), stapling (reversible and quick but less sturdy) and gluing (not reversible and therefore not recommended). All of these options, both as in-house and commercial procedures, and treatment of attached parts, will be considered in depth in chapters 2 and 3.

BINDINGS FOR THICKER SCORES

Pamphlet binding works well for scores comprising up to 60 pages (including front matter).¹ In evaluating thicker scores for binding, begin by looking at how the pages are attached. One may hope to find **signatures**—sheets of paper folded in half like pamphlets and sewn

¹ Occasionally, one encounters much thicker pamphlets. If the thickness makes it impossible to sew into a binder, one solution may be to cut the score down the middle and send it for adhesive binding. In some cases, there is not enough inner margin for this to offer sufficient openability for a score. An alternative discussed in chapter eight is to scan the score, remove it permanently from circulation, and treat it as a digital file to be printed; libraries are permitted to do this under Section 108 of copyright since the supplied copy cannot be bound.

together through the fold. This is, for excellent reasons, the standard method for printing and binding music. Sewn signatures are much more durable than single pages glued to one another and much easier to open flat on a stand than single pages clamped, sewn or stapled together along one edge.

Therefore, while signatures should be preserved in the library binding process in practically every case, attachments of single sheets, including comb and spiral bindings, are nearly always removed (if practicable) and replaced with artificially created signatures. There are standard procedures for binding signature-format music for library use (pamphlet binding for single signatures, sewing and recasing for multiple signatures) whether carried out in house or by commercial binderies. The situation for music printed in single sheets is more complex, and sometimes a librarian must choose among several imperfect alternatives. Below are summarized the different formats in which music is normally published, with recommendations for rebinding as needed for library use.

SIGNATURE BINDINGS

If one can tell in advance that a score will be bound in signatures, the best course—less expensive as well as producing the best binding—is to buy the score in soft covers and send it for **LBC (Library Binding Council)** binding, since the price difference between soft and hard covers is usually greater than the cost of the LBC bind, which will certainly be sturdier. LBC binding is likely to be cost effective for any multi-signature score arriving in soft covers and is recommended. Most major music publishers recognize that music libraries will pay more for a signature binding, whether in hard or soft covers, and do provide signatures even for softcover bindings. For **texts** (i.e., not scores), there may be reason to reconsider this practice since the hardcover edition may be bound in signatures and the softcover version adhesive bound, and they may even use different quality paper.

Occasionally scores or texts are offered only in hardcover bindings. This format is nowadays reserved almost exclusively for monumental editions and other series publications, though occasionally offered for opera scores and some text volumes. Since these editions tend to receive respectful use (with occasional exceptions!), the volumes are normally shelved as received. However, the hardcover bindings contracted by publishers are usually inferior to those supplied by LBC binders. While it is not usually cost effective to send case-bound scores for immediate rebinding, it is not unusual to find the need to rebind such a score after a relatively short period of use because the book block has torn free at the hinges. Rebinding by an LBC binder will resolve the problem long term.

LBC binders are very much accustomed to rebinding books and scores printed in signatures and tend to prefer to make their own decision in each case about how each book is to be rebound. They generally have three options. If the sewing on the score is sound, recas-

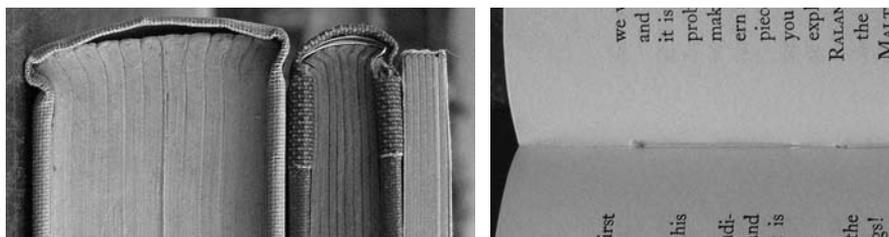


Figure 1.2. *Left:* Top view of signature bindings *Right:* Sewing visible at the center of a signature.



Figure 1.3. *Top:* Signatures hand sewn on tapes *Middle:* Signatures sewn using interlock sewing (no tapes) *Bottom:* Commercial interlock sewn volume with spine covering removed.

ing is usually most appropriate. This involves removing the old cover, then attaching new endpapers and cloth hinges (usually as some sort of unit, and usually by some combination of sewing and glue) to the **book block**. (A book block is the block-shaped unit of attached pages, to which some sort of cover is normally added.) The new cover is then glued to the cloth hinges and outer endleaf. If the sewing of the signatures that comprise the book is broken or loose, then the extra strain (for the spine folds) of resewing the signatures will be necessary. A third option that binders occasionally use is to cut off the signatures and adhesive bind the book. Do not let them do this to scores! While adhesive binds are preferable to sewn bindings for single sheet scores, they are much less sturdy than sewn signatures. For any score that is expected to receive either heavy or long term use (e.g., monumental editions and critical editions of standard repertory), consider such a misbinding as being tantamount to the destruction of the book, and follow up accordingly with the binder.

ADHESIVE BINDINGS

On the other hand, do not ask binders to sew scores that consist of single sheets. The only sewing that is possible in this case involves stabbing through the sheets (see Figure 1.7, p. 8), creating an extremely sturdy bind that is resistant to opening, since it requires each page to have its own separate hinge along the edge of the sewing line. The better alternative, and the second most common binding for scores too thick to print as pamphlets, involves gluing the individual pages together along the spine. An early version of this type of binding was invented for mass-market paperback books and was ironically called the “perfect binding.” The process called for printing and cutting the book block, dipping the binding edge into “hot melt” glue, and slapping a cover over it. Done. Perfect. The fact that the volume was unlikely to survive more than one reading was the buyer’s problem.

Modern adhesive bindings use better glues, at least, and may also involve a process whereby the book block is clamped with the spine edge protruding about four inches above the clamp. The spine may then be abraded or notched to help it accept more glue, especially if the paper is coated. Next, the whole block is pushed to one side so that the spine edge fans out, a thin coat of glue is applied, then immediately the spine is fanned in the other direction and the glue rebrushed so that each page is glued to its neighbors for a fraction of an inch along its entire spine edge. Because the fanning and glue application is done twice, this process is referred to as “double-fan adhesive binding.” LBC binders can do this job both rapidly and effectively with machinery,² and if high-quality glue is used, the paper is new, and the glue is not applied too thickly, double-fan binding can be expected to last a long time even with heavy use. An adhesive-bound *New Grove*³ dictionary will give way at “Bach” after about seven to ten years, however, so make sure the library binder retains signatures if they exist.

The most common reasons for the occasional rapid failure of this type of binding (and it does happen, even with LBC binders) are insufficient tamping or fanning of the book block (so some pages receive no glue) and overly thick glue application (see Figure 1.4 center, and Figure 1.5 top), either by accident or on the mistaken theory that more glue is better. Both faults result in the individual pages coming detached from the spine soon after binding. The case of too little glue explains itself, while an overly thick layer of glue forms a sort of board over the spine, which will crack along its length or pull free from the book block. For thinner scores, the likely result is that the score pops out of the binding whole, while

² For machine binding, the process involves moving the block back and forth over a spinning glue roller.

³ Stanley Sadie, ed., *The New Grove Dictionary of Music and Musicians* (London: Macmillan, 1980). With the advent of online editions, this issue is less pressing.

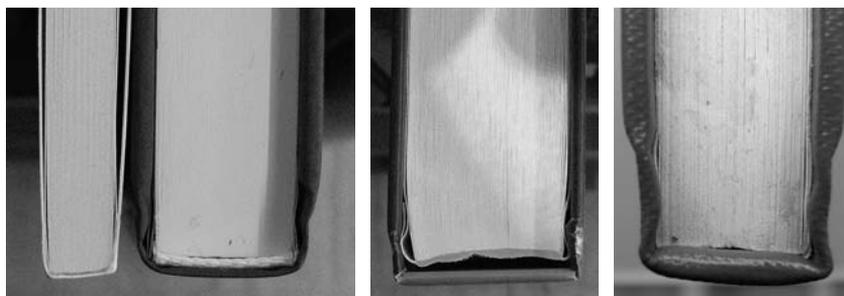


Figure 1.4. *Left:* Adhesive bound books in soft and hard publisher bindings *Center:* Publisher binding with “glue board” *Right:* Adhesive library rebind.

thicker ones will break in two. If you see a “glue board” on a volume you have sent out for LBC binding, send it back for correction. They happen more commonly in publisher bindings; if the binding has hard covers, use your own judgment about whether to have the volume rebound at once or wait for the binding to give way first. It is worthwhile taking the time to open such a volume flat at some point during processing to see if it breaks on the spot. Glue boards can also occur with signature bindings (indeed, they are not uncommon in publisher bindings). Figure 1.5 shows how much difference a glue board makes in the flexibility of a book’s spine.

Adhesive binds were used less often for scores than for texts until quite recently, but they are growing more common for scores in soft covers. The optimal binding solution—sending the item for immediate double-fan rebinding in hard covers by an LBC binder—is at least straightforward, if not as ideal as a signature binding. Offering scores with an adhesive binding and hard covers is happily rare in music publishing (though very common for books and serials). While volumes that are bound in this way can normally be sent straight to the shelf (after checking for under- or over-gluing), if the paper is acidic the volume should be either deacidified or rebound by an LBC binder (and preferably also deacidified), sooner rather than later. By the time any but the shoddiest adhesive binding fails on an acidic book block, no further binding, whatever its quality, will last very long. No matter how high the quality of the glue and its application in an adhesive rebind, the acid-damaged paper itself will give way internally. Once an adhesive bind has failed on an older acidic score, the item is too brittle to rebind even if the paper still passes the **double-fold test** (fold a small corner one way, then the other; if it falls off, the paper is brittle). Non-acidic paper should be more rebindable, and even acidic paper, if it is rebound right away while new, will retain the new binding for a longer time, since the glue has more

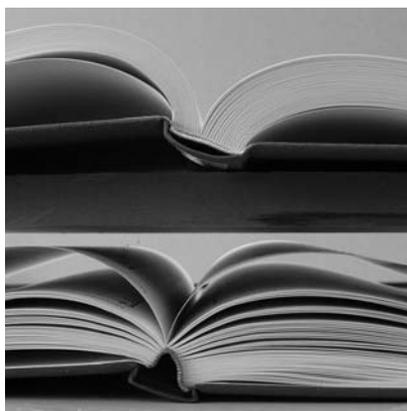


Figure 1.5. The headband on the upper volume partly obscures the glue board, but its effect on spine flexibility is very clear.

chance to adhere deeply to (and thereafter support) sound paper before the acid has weakened it.

A variation on double-fan adhesive binding used by LBC binders, especially for scores with thick or glossy paper, involves cutting small v-shaped notches into the spine edge before fanning and gluing, in order to create a little more surface for the glue to stick to. The original trademark process for this, which may be offered by name by LBC binders, is called “Mekanotch.” So if you see such notches, seen at left in Figure 1.6, they are not a matter to complain about. A final type of adhesive bind that is used for text volumes is called “burst binding” or sometimes “single notch binding.” At first glance burst bindings can look like signature bindings, since they are in fact made using book blocks created in the time-honored fashion of printing the text onto very large sheets of paper organized in such a way that when the paper is folded in half, quarters or eighths (the origin of the terms “**folio**,” “**quarto**,” and “**octavo**”) the page numbers proceed in the proper order and all that is needed is to trim the three outer edges. Thus, there is a nice fold to sew through on the binding edge. In burst bindings that fold is instead slit, as shown on the right in Figure 1.6, and glue is forced into the spaces. Burst binds are especially prone to overgluing because the space between the signatures needs to be filled, but the fact that the pages in each signature are still attached to one another between the slits helps to lessen the risk of pages breaking free. These texts can be shelved as is, though they are less sturdy and openable than sewn volumes, and it is good that the process is not used for scores.