Deceptive Covers:

Armenian Bindings of 18th-Century Imprints from Constantinople

INTRODUCTION

While surveying early Armenian printed books at the Library of Congress (LC), the authors came across an endband on a book printed in Constantinople that appeared to be a hybrid of the traditional Armenian endband (fig. 1a) and the European frontbead endband. Like the former, it had a raised profile because the boards were cut flush with the text block and the endband sat on top of both, but, like the latter, the endband was worked in two colors on one support with a front bead, and not over three or more supports in a chevron pattern (fig. 1b). The goatskin cover was blind tooled with European rolls and gouges and did not have the traditional Armenian fore-edge flap. Similar endbands were found on four other books printed in Constantinople in the 18th century, but not all were identical.

At first glance, these books appeared to be 16th-century European bindings (fig. 2), but closer inspection revealed that the binders had retained many of the aspects of traditional Armenian book structure (fig. 3). The LC survey underscored the findings of Armenian book historians (Kouymijian 2008): Armenian printed books retained manuscript structures well into the 19th century, when there was an apparent abrupt shift to contemporary European binding styles. Unfortunately, the peripatetic nature of the Armenian diaspora and the destruction of Armenian communities in Ottoman Turkey make it difficult to localize the books by binding style or print information alone, and provenance of individual volumes is difficult to establish.

The authors decided to see if there was a discernible style unique to bindings that were printed in Constantinople. They expanded the sample set and went to the Mashtots Institute of Ancient Manuscripts in Armenia, also known as the Matenadaran, to survey one of the largest cataloged collections of early printed books from Constantinople. A brief discussion of the findings follows an abbreviated history of Armenian printing as it pertains to this paper.

Fig. 1a. Traditional Armenian raised endband. *Dzayn Ar Baghdzalin"Grigor Tat'ewats'i" Kiwregh Aghek'sandrats'i* (Constantinople: 1717), Library of Congress Collection. Courtesy of Tamara Ohanyan



Fig. 1b. Raised Armeno-European front-bead endband or "Western Armenian endband" *Girk Grkuks Ays Patmē* (Constantinople: 1710), Matenadaran Collection. Courtesy of Tamara Ohanyan

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Fig. 2. Front cover of a printed book with a manuscript binding and European-style tooling. *Meknutiwn Srboy Awetaranin Orě Hohannu* (Constantinople: 1717), Matenadaran Collection. Courtesy of Tamara Ohanyan

ARMENIAN PRINTING IN CONSTANTINOPLE

The potential for print was recognized early on in the Armenian community. By the 16th century, extended wars between the Ottoman Turks and Persian Safavids resulted in the destruction of Armenian communities and the Armenians' dispersal from their homelands. Printing presented the possibility of creating an accessible and normative body of knowledge for far-flung communities, and was acknowledged as such by both the Armenian Apostolic church and Armenian merchants dispersed through Europe and Asia (Bairboutian 2004). The formerly rich Armenian manuscript traditions had been centered on monastery scriptoria, where manuscripts were produced for a sedentary population of the wealthy, comprised mainly of the church and nobility. With the definitive dispersal of the communities in the 14th through 16th centuries (depending on their location), systems for the transfer of knowledge were far removed from traditional centers of learning, such as the Patriarchates of Echmiasin, Sis, and Jerusalem (Hovanissian 2004). Against this backdrop, the first Armenian book, Urbatagirk (Book of Fridays), a compendium of religious and Armenian secular texts, was printed in 1512 in Venice.

Subsequently, printing in Armenian—financed mostly by Armenian mercantile communities and undertaken by lay priests—began in Constantinople in 1578, Isfahan in 1636, and Amsterdam in 1658. In the 18th century it reached the seat of the patriarchate, Echmiazin (Avdoyan 2012). The list continues, as wherever there was a significant Armenian population, print houses were established.

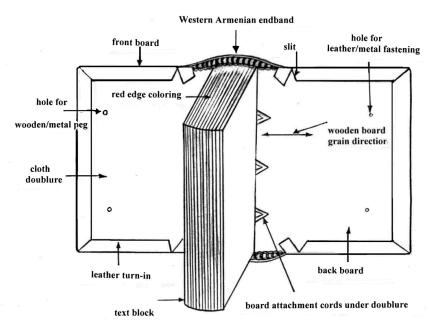


Fig. 3. Elements of traditional manuscript binding retained in the binding of a printed book. *Meknutiwn Srboy Awetaranin Orě Hohannu* (Constantinople: 1717), Matenadaran Collection. Courtesy of Tamara Ohanyan

Printed works included church liturgies, the gospels, and key works of Armenian history and literature, as well as instructional books on trading and mathematics. Between 1512 and 1800, 950 titles were published by diaspora communities. The largest number, 325, were printed in Constantinople (Korkotyan 1964, Avdoyan 2012).

Printing in Armenian in the Ottoman Empire began after Sultan Selim II passed an edict legalizing printing in scripts other than those based on Arabic letters. By the 1700s at least six Armenian printing houses were producing books, mainly in octavo and quarto sizes, for local and diaspora communities. Constantinople was well placed for the production and distribution of these works. Armenian traders imported paper for printing from France and Italy. The same trade routes carried printed books to coreligionists around the Mediterranean and Northern Europe, while overland silk caravans took them east to communities in Iran and beyond (Bairboutian 2004).

THE SURVEY

The main question that the survey wanted to answer was whether documenting changes in binding techniques—especially endband construction—would be useful in providing dates and locations for the bindings of books printed in Constantinople, and in illustrating the evolution of Armenian bindings and tastes from the manuscript period to the 19th century. With these issues in mind, only books that were in fairly poor condition—with their inner construction visible—were surveyed, making it possible to record changes in workshop practice. Of the sample of 52 books at the Matenadaran, two of the earliest were in contemporary Dutch limp vellum bindings and will not be discussed here. Of the remaining bindings, one was dated 1691, 44 had 18th-century dates, two were dated 1812, and three were undated. Books rebound in 19th-century publishers' bindings were not surveyed.

All the findings will be discussed in apposition to the medieval exemplar, addressing details such as the sewing holes, style of sewing, board attachment, board shape, edge decoration, doublures or pastedowns, and endbands. Paper stock will not be discussed, although watermarks (mostly French and Northern Italian) were photographed. Further research is also required on the tooled decoration, as there appears to be a repetition of design among some volumes. The discussion illustrates a range of changes in binding details, and documents a simplification of structure over time.

SEWING

The first step in the binding of a text after it was written or printed on leaves was preparing it for sewing by folding the sections and making the holes. In the manuscript tradition, W- and V-shaped notches (figs. 4a, 4b) were cut into the folded edge of the section to accommodate the two-cord sewing supports. In the surveyed books, V-shaped notches



Fig. 4a. W-shaped notch in manuscript spine. Verin Noravank Gospel manuscript (1487 ACE), Library of Congress Collection. Courtesy of Tamara Ohanyan



Fig. 4b. V-shaped notch in printed book spine. *Girk Srboyn Mashtots'ats' Vardapeti* (Constantinople: 1704), Matenadaran Collection. Courtesy of Tamara Ohanyan

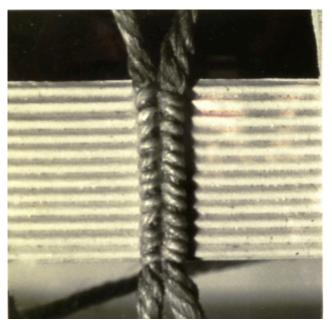


Fig. 5a. Example of herringbone sewing used in Armenian manuscript bindings. Courtesy of Tamara Ohanyan



Fig. 5b. Example of two cords sewn as one, found in most printed books surveyed. Courtesy of Tamara Ohanyan

were present in six of the ten earliest printed books, which also had more traditional bindings (i.e., ties and Armenian endbands). Regular punched sewing holes were the most common in later books, and one book (printed in 1729) had sawn-in holes from later rebinding.

In manuscript bindings, herringbone sewing was used to connect the sections together to create the text block. The thread came out of the section between the two cords of the support, wrapped around one cord, hooked around the sewing of the section below, wrapped the second cord, and then returned to the inside of the section through the initial hole (fig. 5a). Anchoring the sewing to the section below created the herringbone pattern, and nestling the cords into notches cut for sewing made for a flat spine. In Armenian manuscripts, all sewing holes—including the kettle or end stitches—were supported in this manner.

The majority of the printed books surveyed were sewn with two cord supports used as a single cord: the thread came out on one side of the sewing supports, was wrapped around both cords on the same level, and returned back to the center of the gathering from the opposite side (fig. 5b). These supports were raised above the level of the spine. Despite a move toward simplified construction, all sewing holes, including kettle stitches, continued to be supported with cords. Only books with later European bindings had unsupported kettle stitches.

BOARDS AND BOARD ATTACHMENT

The boards followed the Armenian manuscript tradition and were made of wood (mainly oak and walnut) with the grain perpendicular to the spine; the edges were cut flush with the text block (fig. 6). In general, the wooden boards were 0.3-0.5 mm thick for the largest quarto-sized books. Holes for fastening the cords were drilled in a straight line parallel to the spine, with additional small holes at the top and bottom edges to anchor the endbands to the boards. As the holes were aligned with the grain direction of the wood, the boards were thinner than those on European wooden-board bindings of the same size. In the few volumes where the wood grain was parallel with the spine, the boards were broken along the holes; most appeared to be later rebindings. Wooden boards continued to be used for printed books well into the 18th century; pasteboards started appearing towards the end of the century. With one exception, the latter did not have the Armenian method of board attachment (described below).

Subtle changes were also found in the shaping of the board edges (fig. 7). Boards whose edges are beveled on the inner surface are one of the defining characteristics of Armenian manuscripts, and this type of board shaping was the most prevalent in the survey. Square-cut edges were also previously found in manuscript bindings. A third type of shaping, in which the wood was worked from both the inner and outer surfaces without a clear line for the start of the bevel—accentuating the thinness of the board—had not been previously documented in manuscript bindings. Finally, rounded board edges were found on the seven books with pasteboards; the shape was the result of the thickness of leather covering soft boards.



Fig. 6. Inner front board of a printed book shows the grain direction, holes for attaching the text block, primary endbands, and pins. Note the raised profile of the endband. *Meknutiwn Srboy Awetaranin Orě Hohannu* (Constantinople: 1717), Matenadaran Collection. Courtesy of Tamara Ohanyan

manuscript	textblock	20
manuscript	textblock	15
	textblock	7
	textblock	6

Fig. 7. Board edge shapes as seen in Armenian printed books at the Matenadaran. The top two are also found in manuscript bindings. Courtesy of Yasmeen Khan

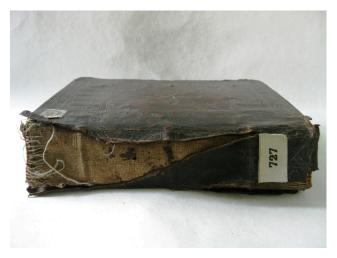


Fig. 8. Book printed in 1705 shows spine lining with primary endband sewing. *Astuatsashunch Hnoy Ew Norots' Ktakaranats'ner Parunakōgh* (Constantinople: 1705), Matenadaran Collection. Courtesy of Tamara Ohanyan

In the surveyed collection of books, the manuscript method of board attachment continued in a majority of cases (45 of 52 books). The two sewing support cords for each sewing station were laced through the hole in the board from the outside to the inside, looped around themselves in the joint, tied off, and pasted down (fig. 6). After the text block had been sewn, using two cords as one support, the cords were divided again to attach the second board to the text block in the same manner. In a few non-contemporary bindings, the books were cased in.

Traditionally a rough, woven fabric spine lining was adhered to the back of the text block after attaching the boards. This spine lining usually overlapped the outer faces of both front and back boards by approximately 3 cm. The primary endband was sewn through the lining, which reinforced it and provided overall support to the binding by distributing the tension resulting from the laced-on boards (fig. 8). As the 18th century progressed, there was a move towards simplification, with full fabric linings replaced by partial ones at the head and tail, supporting the endbands. Finally, a volume from 1812 has no spine lining at all, as well as a front-bead European endband with four tie-downs.

ENDBANDS

Four distinct styles of endbands were found in the surveyed books, starting with the Armenian endband and ending with the type of European front-bead endband found on late-19th-century English books.

As stated in the introduction, the traditional Armenian endband had a raised profile because the board was cut flush with the text block and the endband sat on top of both the boards and the spine of the book. In the primary sewing, binders used thin thread to anchor the primary endband support, a cord, to the boards of the book, passing the thread through multiple holes drilled into the wood (fig. 6). The sewing then passed through each section of the text block, ending on the opposite board. A secondary endband was worked in two or three colors over the primary support, with additional supports added on in rows to build up the chevron pattern (fig. 1a). These endbands reinforced the attachment of the text block to the boards. On printed books, traditional Armenian endbands were worked in the same manner. Twenty-one printed books, mainly dating from 1691 to 1725, had traditional Armenian endbands; one outlier from the set, dated 1790, had a badly-executed endband.

Nine of the surveyed books, dating from 1709 onward, have a specific hybrid Armeno-European endband. Most of them showed evidence of early rebinding or repair, possibly in the mid-1700s. This hybrid endband was similar to the traditional endband in that it was worked from one board through the text block and onto the other board. The differences were fewer anchor holes in the boards, fewer tie-downs in the text block, and a European front-bead endband—often in two colors—worked over a single cord support. The endband sat on top of the boards (fig.1b). The most pristine of these endbands were found on volumes from 1724 to 1735.

In another type of hybrid endband (hybrid A), the corner of the board was excised to accommodate the cords and create a flat profile (fig. 9). This European front-bead endband was



Fig. 9. In the hybrid A style, the excised board edge accommodates the thickness of the endband support and a hole anchors the primary endband sewing. Constantinople Imprints #251 (ca. 1725), Matenadaran Collection. Courtesy of Tamara Ohanyan



Fig. 10a. Hybrid B style endband on a book with an excised board edge but no anchoring holes for the primary sewing. *Girk Kochets'eal Vēm Hawatoy* (Constantinople: 1733), Library of Congress Collection. Courtesy of Tamara Ohanyan



Fig. 10b. English-style front-bead endband with four tie-downs on a rebound printed book with gilt edges. *Koch'umn Ěntsayut'ean" Kiwregh Erusaghēmatsi* (Constantinople: 1727–1728), Matenadaran Collection. Courtesy of Tamara Ohanyan

worked over both the text block and the boards, as there were primary endband sewing holes on the top and bottom spine edges of the boards. A further simplification of the endband was found in books from the same time period: a European front-bead endband was worked over an extended cord that was not anchored to the boards (hybrid B, fig.10a). This endband was set into the excised space on the board and worked only on the text block, unlike its hybrid A counterpart.

Towards the end of the 18th century, the bindings consistently had European front-bead endbands, worked through four or five sections, and attached only to the spine (fig. 10b). The supports were cut to the width of the text block and did not extend onto the boards; the sewing supports might or might not be laced onto the boards. These endbands usually accompanied books with sprinkled or gilt edges.

EDGE TREATMENT

In manuscripts, the edges of the text block were painted red, with the top and bottom edges ending in a characteristic horseshoe pattern approximately 1 cm before the endband (fig. 1a). The painting was done after the endband was sewn, and often after the book was covered in leather, as occasionally paint stains are found on the leather turn-ins. These books were shelved flat with the bottom edge facing out. This survey showed that the horseshoe-shaped edge was occasionally embellished with black line decoration (fig. 11a). Full red painted edges were also found in both the manuscript and print traditions, colored after the endband was made, as the paint does not extend under it (fig 11b). Gauffered gilt edges, like sprinkled edges, appear on bindings that show signs of later repair or rebinding (fig. 10b).

DOUBLURES

The doublures or pastedowns in manuscript bindings were made of cloth, from mundane textiles to luxury silks. They were adhered to the boards, extending approximately 2 cm onto the first and last leaves to cover the joint area. The books were then covered in leather, and the turn-ins were set down over the doublures. Two of the surveyed books in which the manuscript tradition was clearly maintained were bound in this manner (fig. 12a). In the rest, the doublures were pasted down after the cover was covered in leather (fig. 12b). The earliest printed books used manuscript or printed waste as doublures: reuse of textual material was considered a sign of respect in Armenian manuscript and print culture. Plain sheets were the next most common. Finally, various European decorative papers, including Dutch marbled papers, appear in the bound volumes.

EXTERIOR

The profile of the spine was affected by the manner in which the book was sewn. The sewing recessed into the W-shaped notches in manuscript bindings led to a flat spine, which was



Fig. 11a. Edge treatment of the text block commonly found in bound manuscripts: while the fore-edge is painted overall, the head and tail end in a horseshoe or arched pattern. *Meknutiwn Srboy Awetaranin Orě Hohannu* (Constantinople: 1717), Matenadaran Collection. Courtesy of Tamara Ohanyan



Fig. 11b. Most of the surveyed books had colored edges that stopped at the endband. *Girk Kochets'eal Vēm Hawatoy* (Constantinople: 1733), Matenadaran Collection. Courtesy of Tamara Ohanyan

either tooled with vertical lines to increase the flexibility of the leather-covered spine or left blank. More than half of the printed books, without a raised endband profile and heavily weighted towards the second half of the 18th century, are tooled on the spine with horizontal lines to accentuate the cords, clearly showing the development of a taste for shelving books vertically, as was the practice in Europe at the time.

Although a fore-edge flap did not appear more than once in the survey—on a traditionally bound 1709 book—evidence for fore-edge leather fastenings did appear: mainly pins and ties on more than 20 bindings with different types of endbands and doublures. The Armenian method of attaching the boards to the text block left no shoulder along the spine, and the front and back boards of the bindings gaped open if no ties were used. This gaping was accentuated by the horizontal grain of the boards and was found in books of all sizes.



Fig. 12a. Cloth doublure under leather turn-ins, as in Armenian bound manuscripts. *Girk Ssahmanats' Dawr'i Anyaght' P'ilisop'ayi Ew Astuatsatsaban Vardapeti* (Constantinople: unknown date), Matenadaran Collection. Courtesy of Tamara Ohanyan

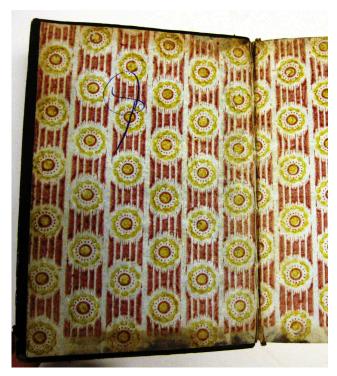


Fig. 12b. Paste paper over leather turn-ins, commonly found in Armenian printed books. *Meknutiwn Srboy Awetaranin Vor Ēst Ghukasu* (Constantinople: 1824), Library of Congress Collection. Courtesy of Tamara Ohanyan

CONCLUSION

Based on a timeline of the books surveyed (fig. 13), different endband styles overlapped, although some were made as repairs for earlier imprints. A general trend was the movement from the traditional Armenian endband to the contemporary European front-bead endband.

To check the trend, 44 books printed in the late 17th and 18th centuries in other centers of the diaspora—namely Echmiazin, Amsterdam, Nor Julfa, Nor Nachijevan, Madras, and Calcutta—were checked for comparison. Three of the four endbands were represented, but not a single book had the hybrid Armeno-European front-bead endband with the raised profile.

The authors speculate that this particular endband, which they call the "Western Armenian endband," was produced in Constantinople during a 25-year period by one or more binding establishments. Along with endband hybrids A and B, they represent an interim phase in the Armenian movement from traditional to European attitudes toward books, both in terms of bookmaking and of use. The survey has led to more questions and speculation; to find answers, the authors plan to expand the survey to include other large collections of Armenian books printed in the 18th century.

Armenians in Constantinople were intermediaries between the Western European community of traders and diplomats and the Ottoman authorities. From the early 19th century onwards, this role expanded as community members moved to the forefront of the modernization of Ottoman Turkey, heading banks and publishing houses and spreading the ideas of the Enlightenment in Western Asia. This outward, syncretic attitude is epitomized by the manner in which the books were printed and bound: there appeared to be open movement of ideas and materials in the diaspora community from Amsterdam to Calcutta.

It is ironic that much more was written about bookmaking by its practitioners during the manuscript era, and that much more is known about it due to the information scribes

Endband Timeline

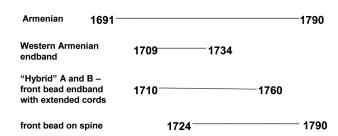


Fig. 13. Timeline of endband styles found in the survey of books printed in Armenian in Constantinople from the Matenadaran Collection

provided in colophons and commentaries. By contrast, Armenian printers wrote only about printing and its politics in their colophons. At present, there is little known literature on Armenian bookbinders practicing in Constantinople, but other sources of information may come to light with the resurgence of interest in the Armenian community in Ottoman Turkey within the academic community.

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REFERENCES

- Avdoyan, L. 2012. To know wisdom and instruction: A visual survey of the Armenian literary tradition from the Library of Congress. Washington, DC: Library of Congress.
- Bairboutian, V. 2004. International trade and the Armenian merchants in the seventeenth century. New Delhi: Sterling Publishers.
- Hovannisian, R. 2004. Armenian people from ancient to modern times. New York: St. Martin's Press.
- Korkotyan, K. A. 1964. *Hay t'pagir girk'ĕ Konstandnupolsum:* 1567–1850 t't'. (Armenian printed book in Constantinople: 1567-1850) Yerevan: s.n.
- Kouymijian, D. 2008. From manuscript to printed book: Armenian bookbinding from the sixteenth to the nineteenth century. *Journal of Semitic Studies Supplement 24*, ed. P. Sadgrove. Oxford: Oxford University Press. 13–21, 276–297 (plates).

FURTHER READING

- Hille, J., and S. Merian. The Armenian endband: history and technique. *The New Bookbinder* 31: 45–60.
- Kouymijian, D. 2005. Post-Byzantine Armenian bookbinding and its relationship to the Greek tradition. In Vivlioamphiasts 3. The book in Byzantium: Byzantine and post-Byzantine bookbinding, ed. N. Tsironis. Athens: s.n. 163–176.
- Merian, S. 1993. The structure of Armenian bookbinding and its relation to Near Eastern bookmaking traditions. Ph.D. dissertation (unpub.). New York: Columbia University.
- Szirmai, J. A. 1999. *Archaeology of medieval bookbinding*. Aldershot: Ashgate Publishing.

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