## From Manuscript to Printed Book: Armenian Bookbinding from the Sixteenth to the Nineteenth Century

paper presented at the
2nd International Symposium
Printing and Publishing in the Languages and Countries of the Middle East

2-4 November 2005 Bibliothèque nationale de France, Paris

## Dickran Kouymjian Haig & Isabel Berberian Professor of Armenian Studies California State University, Fresno, and Paris

Even though the printing of books in Armenian began in Venice in1511/12, just six decades after Gutenberg's invention, the hand copying of texts continued into the nineteenth century.<sup>1</sup> This traditional method of creating books was carried out in monasteries where the free labor of the monk as scribe was still considered more economical than the purchased of the mass-produced printed book. The fear often expressed in the West that printing presses would put scribes and copyist out of work was also felt among Armenians.<sup>2</sup> Nevertheless, Armenian printing spread from Venice to Rome and Amsterdam and other European centers, while rapidly moving east to

Verlag Skulima, 2002, pp. 53-92.

<sup>&</sup>lt;sup>1</sup> A general survey of Armenian printing was presented at the first International Symposium on the History of Printing and Publishing in the Languages and Countries of the Middle East: Meliné Pehlivanian, "Mesrop's Heirs: The Early Armenian Book Printers," Eva Hanebutt-Benz, Dagmar Glass, Geoffrey Roper, *Middle Eastern Languages and the Print Revolution. A cross-cultural encounter*, Westhofen: WVA-

<sup>&</sup>lt;sup>2</sup> The French traveler Jean-Baptiste Tavernier in his *Les Six Voyages...en Turquie*, *en Perse*, *et aux Indes*, edition of Paris, 1692, book I, p. 672, quoted by J.-P. Mahé in the preface to Raymond Kévorkian, *Catalogue des "Incunable" arméniens (1511/1695) ou chronique de l'imprimerie arménienne*, Geneva, 1986, p. xx, comments on the failed attempt to print the Armenian Bible in New Julfa, the Armenian suburb of Isfahan in 1650, "il fallut tout romper pour éviter les fâcheuses suites que cette nouvelle invention allait causer. Car d'un côté les enfants ne voulaient plus apprendre à écrire,...de l'autre cette imprimerie ôtait le pain à bien des gens qui vivaient de l'écriture."

Constantinople, Iran, and India. The print revolution, however, did not have a parallel development of an innovative, mechanically driven process for binding the "new" books. The codex, whether a manuscript on parchment or paper or a printed volume, needed a protective cover. This was true no matter what the language of the text or geography of its fabrication, Europe or the Near East. Armenian printed books were often bound in the same traditional technique used for manuscripts; this was so into the seventeenth and eighteenth century and in isolated cases into the nineteenth century.<sup>3</sup> This has to be true for the print tradition of other languages as well. This paper will examine the phenomenon and present a few representative, sometimes anomalous, examples.

Due to the Safavid-Ottoman wars, which began at the inception of the sixteenth century and continued intermittently until 1639,<sup>4</sup> the sixteenth century shows a net regression in Armenian manuscript production, especially in its first decades. It is precisely in the midst of this crisis that the first Armenian books were printed. The progression in manuscript production, however, was regular after 1550,<sup>5</sup> followed by a

<sup>&</sup>lt;sup>3</sup> For instance, manuscripts of Ritual books copied and bound in New Julfa in 1814 and 1817; Los Angeles, UCLA nos. 28-29; Avedis K. Sanjian with contributions by Alice Taylor and Sylvie L. Merian and S. Peter Cowe, *Medieval Armenian Manuscripts at the University of California*, Los Angeles, Berkeley-Los Angles-London, 1999, pp. 156-7.

<sup>&</sup>lt;sup>4</sup> Details can be found in Dickran Kouymjian, "Sous le joug des Turcomans et des Turcs ottomans (XVe-XVIe siècles)," *Histoire des Arméniens*, Gérard Dédéyan, editor (Toulouse: Privat, 1982), pp. 341-376, and *idem*, "Armenia from the Fall of the Cilician Kingdom (1375) to the Forced Emigration under Shah Abas (1604)," *The Armenian People from Ancient to Modern Times*, Richard Hovannisian, editor (New York: St. Martin Press, 1997), vol. 2, pp. 1-50, reprinted as a booklet, Fresno, 1998, see especially pp. 8-20.

<sup>&</sup>lt;sup>5</sup> There was a slight dip from 1600-1610 as a result of the Jelali movement in the Ottoman Empire. On the Jelali movement's impact on Armenia, see Kouymjian, "Armenia from the Fall of the Cilician Kingdom (1375)," pp. 19-21.

dramatic rise in the hand copying of books until the end of the seventeenth century after which there was a rapid decline.<sup>6</sup>

Armenian manuscript production finally gave way to the printed book, but only in the early eighteenth century, some 300 years after Armenian books were first issued. The final realization of printing the Armenian Bible occurred in Amsterdam in 1666, but it had little impact on manuscript copying because it was simply too expensive an item, with some 160 engravings, to be bought by anyone but rich merchants. Furthermore, it was not the Bible that was the essential liturgical book, but the Gospels, the most used and sought after text among the clergy. When Gospel books were printed in large quantities and successive editions, first in Venice starting in the 1680s and then in Constantinople in 1710 and after, their copying by the clergy dramatically dropped until by 1760 production by scribes of Gospels, Hymnals, and Bibles had virtually stopped.<sup>8</sup> If manuscripts were still copied in the late eighteenth and early nineteenth century, it was not so much out of necessity, but rather either as a pious act, an attribute associated with the work of the monk-scribe, or in the case of Gospels and ritual books for the aesthetic quality and luxury of multicolored illuminations absent in the printed volumes. Nevertheless, the hand written book tradition continued everywhere until the first world war; thousands of Armenian manuscripts from the eighteenth, the nineteenth, and the

<sup>&</sup>lt;sup>6</sup> For statistics on Armenian manuscript production see Dickran Kouymjian, "Dated Armenian Manuscripts as a Statistical Tool for Armenian History," *Medieval Armenian Culture*, T. Samuelian and M. Stone, eds., University of Pennsylvania Armenian Texts and Studies, vol. 6, Chico, CA, 1983, pp. 425-439.

<sup>&</sup>lt;sup>7</sup> There was an abortive attempt to print the Bible in the short-lived (1636-1650) press established by the bishop Khatchatur Kesarec'i in New Julfa; details in Kévorkian, *Catalogue des "Incunable" arméniens* (1511/1695), pp. 114-119; see note 2 *supra*.

<sup>8</sup> See the graph comparing the number of titles of printed books year by year plotted

against the number of Gospels, Bibles, New Testaments, Psalters copied, Kouymjian, "Dated Armenian Manuscripts as a Statistical Tool," p. 434, fig. II.

early twentieth centuries are kept in the most important repositories in Armenia and elsewhere. These are not the standard texts copied by the professional scribes of the past, but generally one of a kind items: dictionaries, grammars, glossaries, travel accounts, contemporary histories, commercial registers, journals, practical guides, biographies, and copies of older texts as yet unpublished made by hand for or by scholars for their own research.<sup>9</sup> The scribal profession was dead, that of the binder dying.

Bookbinding in Armenia (fig. 1) began 1600 years ago with the invention of the alphabet, officially in 405, and the translation of the Bible, which immediately followed. Though we have no surviving examples of any Armenian bindings before the eleventh century, perhaps even the thirteenth century, <sup>10</sup> it is evident that like the Greek tradition it was strongly influenced by the Coptic manner of binding leather codices, Armenia perhaps through the intermediary of Syria and Byzantium. Leather covered boards were the standard for Armenian and Greek covers, rather than leather over a papyrus filling as in early Coptic bindings or over carton as in the Islam world or the vellum covers of some western books. Like Byzantine manuscripts, the text block and the size of the

<sup>&</sup>lt;sup>9</sup> As an examples, among the 91 manuscripts in the UCLA collection, 35 date after 1700; none of these are Gospels, Bibles, New Testaments, or Psalters even though more than half of them are religious in nature, Sanjian, *Medieval Armenian Manuscripts*, pp. xix-xxi; of the 348 Armenian manuscripts in the Bibliothèque nationale de France, 124 date after 1700 and of these none are of biblical texts, thought there are three lectionaries, Raymond H. Kévorkian and Armèn Ter-Stépanian avec le concours de Bernard Outtier et de Guévorg Ter-Vardanian, *Manuscrits arméniens de la Bibliothèque nationale de France*, Paris, 1998, table pp. 993-95.

<sup>&</sup>lt;sup>10</sup> Babgen Arak'elyan, "Kazmeri zardarman arveste mijnadaryan Hayastanum," (The Art of Bookbinding Decoration in Medieval Armenia), *Banber Matenadarani*, vol. 4 (1958), pp.183-203; Arak'elyan lists three manuscripts from the Matenadaran in Erevan which he claims have eleventh century bindings: M4804, Gospels of 1018, but the binding is much later, M3793, Gospels of 1053, but with a later binder's colophon of 1587, M275, Gospels of 1071-1079, but with a colophon of restoration of 1220, yet even a thirteenth century date is hard to accept for this binding. The famous sixth century ivory bindings on the Etchmiadzin Gospels, Erevan, M2374, are of Greek manufacture.

boards are the same; there is no overlapping or "squares" as in European bindings. Both traditions used a raised, embroidered headband at the two ends, which required that manuscripts be stored lying flat rather than upright. Yet, among Near Eastern binding traditions, Armenian craftsmen employed some different techniques as has been pointed out by Berthe Van Regemorter and more thoroughly Sylvia Merian. 11 Armenian binders always, or at least from the twelfth century on, used supported stitching to sew together the quires of a manuscript, perhaps because of European influence, <sup>12</sup> whereas in the Greek or other Middle East traditions, the guires were sewn to each other without supports. The boards of Armenian bindings were usually much thinner (2-5 millimeters) than Byzantine or Syrian ones; they were also placed with the grain running horizontally, while other east Mediterranean binders placed them with the grain running vertically. The method of attaching the textblock to the boards was also different. Armenians always covered the inside front and back boards with a cloth doublure of some distinction (fig. 2); Byzantine binders left the wood naked showing the holes and strings used to fasten the binding to the textblock; while Islamic bindings used a thin piece of leather as

<sup>&</sup>lt;sup>11</sup> Berthe van Regemorter, "La reliure arménienne," *Bazmavép* (1953), nos. 8-10, pp. 200-204; a few of her observations were in part corrected in *eadem*, "La reliure byzantine," *Revue Belge d'Archéologie et d'Histoire de l'Art*, XXXVI/1-4 (1967), pp.99-162; Sylvie M. Merian, "The Structure of Armenian Bookbinding and its Relation to Near Eastern Bookmaking Traditions, Ph.D. dissertation., Columbia University, 1993;" Sylvie Merian, "From Venice to Isfahan and Back: The Making of an Armenian Manuscript in Early 18th-Century Persia," *The Compleat Binder: Studies in Book Making and Conservation in Honour of Roger Powell*, ed. John L. Sharpe, Brepols, pp. 1996, 280-291.

<sup>12</sup> Sylvie Merian suggestions this happened through Crusader influence during the Armenian kingdom of Cilicia, "Cilicia as the Locus of European Influence on Armenian Medieval Book Production," *Armenian Review*, vol. 45, no.4/180 (1992, issued 1995), pp. 61-72, illus.

doublure.<sup>13</sup> As in all medieval European and East Christian leather binding traditions, Armenians decorated the leather with blind tooling, using a variety of stamping tools, though never ones with bird, animal, or heraldic designs as the Byzantines did. Stamps were usually not applied, however, to the spine, which was only decorated with thin vertical fillets. Gold stamping was never practiced.<sup>14</sup> Furthermore, Armenian leather bindings usually had a flap precisely the size of the fore-edge attached to the lower cover forming a box-like container (fig. 3); unlike the Islamic envelop flap, it never reached over the upper cover. On some covers from the fifteenth to the first years of the seventeenth century, binders reinforced the designs of the tooled decoration with rounded metallic studs (fig. 4); these also probably served to protect the covers of books, which were stored lying flat.<sup>15</sup>

The basic design of Armenian bindings differed dramatically and consistently from those of Byzantium or Europe. Perhaps this is in part due to the rarity of secular manuscripts and the prevalence of the Gospel Book and other biblical texts, which account for the majority of surviving Armenian manuscripts up to 1500. The principal decorations on Gospel bindings are a braided cross on a stepped pedestal (fig. 5), sometimes called a Calvary cross, enclosed in a braided or guilloche frame on the upper

<sup>&</sup>lt;sup>13</sup> I know of a single Armenian manuscript with a leather doublure, M5617, a miscellany of religious texts copied in 1176 but with a much later sixteenth or seventeenth century binding. A number of Armenian binding show naked boards, but it si not clear is this is intentional or by neglect or if the cloth doublures simply became detached.

<sup>&</sup>lt;sup>14</sup> I have only noted two or three traditional bindings with gold stamping, for instance Erevan, M2843, a Gospels copied at Aght'amar in 1354 and restored in 1730, late enough to show that this non-Armenian technique was borrowed from elsewhere, and the binding commission by Alexander Vartapet discussed in this paper, M2673, Missal copied in 1679 and bound in 1680; see fig. 15.

<sup>&</sup>lt;sup>15</sup> The technical questions are nicely summarized by Sylvie Merian in Thomas F. Mathews and Roger S. Wieck, editors, *Treasures from Heaven, Armenian Illuminated Manuscripts*, New York, 1994, "Bindings," pp. 130-134.

cover; on the lower cover a vertical rectangle made of dense braided or rope work was placed within the same guilloche frame. <sup>16</sup> These designs underline the central theme of the Gospel narrative, Crucifixion on the upper cover and Resurrection on the lower. I have discussed elsewhere the interpretation of this abstract rectangle on the lower cover as the Resurrection, representing the empty tomb of the risen Christ. <sup>17</sup> Often on bindings (fig. 6) other than the Gospels - hymnals, rituals, and secular texts – one or both of these motifs is replaced by an elaborate geometric rosette composed of intersecting triangles or squares in the central field. <sup>18</sup>

Though the physical technique of traditional Armenian bookbinding -- the sewing of quires and headbands, the method of attaching the boards, the application of leather

\_

photographed are Gospels.

18 Similar designs, ultimately of Coptic origin, but reinforced by Islamic decoration, are

<sup>&</sup>lt;sup>16</sup> There are some variants of these motifs, which are made entirely with stamping tools rather than the rope braid, for example, M4214, works of Gregory of Skevra of 1298 with a rebinding of 1604; M979, Lectionary of Het'um II, 1286 with rebinding of 1694, using rosette stamps; M355, Gospels of 1280, rebound in the late seventeenth century by Bishop P'ilipos; M5708, a Gospels of 1325, but with a later rebinding. For the abandonment of the braided cross and rectangle design in certain regions in the seventeenth century see below.

Dickran Kouymjian, "The Decoration of Medieval Armenian Manuscript Bindings," Colloque international "La reliure médiévale," Paris, Institut de France, 22-24 mai 2003 (in press). See also D. Kouymjian, "Inscribed Armenian Manuscript Bindings: A Preliminary General Survey," *Armenian Texts, Tasks and Tools*, Papers of an Association Internationale des Etudes Arméniennes Workshop on Priorities, Problems and Techniques of Text Editions, edited by Henning J. Lehmann and J. J. S. Weitenberg, Aarhus, 1993, p. 103, note 13. The braided cross—braided rectangle motifs have a long life on Armenian Gospels bindings. The paired motifs seem to be the oldest decoration found on surviving Armenian manuscript covers, going back perhaps to as early as the eleventh and twelfth centuries, but almost certainly from the thirteenth century to at least 1694. All but a handful of the 60 or so bindings with this combination I have photographed are Gospels.

found in Mudejar and other traditions. For example, a seven lobbed or petalled geometric figure on a fifteenth century Spanish binding, Paris, Bibliothèque Mazarine, Inc. 1228, printed book of 1480, *Les reliuires médiévale de la Bibliothèque Mazarine*, exposition catalogue, Paris, 2003, no. 17. Armenian examples are always with an even number of petals or lobs, 8, 6, or 4.

covers, and the use of doublures – continued unchanged until very late, eventually to be replaced at the end of the eighteenth century and after by western binding fashions, the decoration of leather bindings from specific regions underwent a radical change or changes in the seventeenth century. For instance (fig. 7) in the very characteristic covers from New Julfa-Isfahan, binders stopped using the braided cross and rectangle motifs substituting in their place a Crucifixion in a sunburst and the Virgin in what I call a starburst on the upper and lower covers respectively. Stamping tools, often of European inspiration, were used for these motifs.<sup>19</sup>

In the eighteenth century, the scenes of Crucifixion and Resurrection get translated onto silver binding plaques (fig. 8) used on both manuscripts and printed books, but the rectangle representing Resurrection, is by then probably misunderstood by many binders. It disappears on silver works and is replaced by a European influenced iconography of the Resurrection, usually Christ bearing a staff and ascending from above the tomb. In these silver bindings, the braided cross also gives way to a Crucifixion proper: Christ on the cross.

A copy of the first Armenian printed book of 1511-12 in the Mekhitarist Library in Venice has a traditional binding of an uncertain date, but probably of the sixteenth century. Interestingly the volume is arranged among the manuscripts rather than the printed books.<sup>20</sup> Beside the traditional way the board was attached to the textblock and

1

<sup>&</sup>lt;sup>19</sup> Dickran Kouymjian, "The New Julfa Style of Armenian Manuscript Binding," *Journal of the Society for Armenian Studies*, vol. 8 (1995, pub. 1997), pp. 13-36.

Venice, Mekhitarist Library, V2225. I have not been able to examine the item personally. Sylvie Merian published a photo of the lower cover, "From Venice to Isfahan and Back," p. 284, fig. 5. Though the book was printed in Venice and is now in the Armenian monastery there, it is hazardous to guess when and where it was bound since

headbands, the binding included the use of a guard leaf, a page from a recycle older parchment manuscript written in small *erkat'agir* (uncial) probably of the eleventh-twelfth century. This was an integral part of traditional Armenian bindings, symbolically attaching the newly copied work to the centuries old tradition of manuscript production. The practice, however, seems to have been greatly diminished in the seventeenth century and after.

A second example (fig. 9) from Venice is a *Lives of the Fathers* published in New Julfa in 1641 and bound there in 1700. The binding commissioned by a certain Movses Vardapet is traditional with a fine printed striped fabric for doublures (fig. 10). As was often the custom in New Julfa, it was inscribed and dated: "This is a souvenir for Movses Vardapet, 1700."<sup>21</sup>

Another example, a Hymnal printed in Amsterdam in 1664, (fig. 11) because of its poor condition, shows clearly the supported sewing technique employed by Armenian binders where the support cords are recessed. The result is a binding without ribs on its spine and as stated above with no decoration except vertical fillets now cracked along the line of impression. These cords also served to fasten the boards to the textblock; they are recessed because Armenian binders used a technique known as "grecquage" for sewing the gatherings (fig. 12), a method common to Byzantine manuscripts by which three V-

\_

the Mekhitarist Brotherhood was not establish on the island of San Lazzaro until the early eighteenth century.

Venice, Mekhitarist Library, V1527, *Lives of the Fathers*, New Julfa, 1641; see Dickran Kouymjian, "Dated Armenian Manuscript Bindings from the Mekhitarist Library, Venice," *Atti del Quinto Simposio Internazionale di Arte Armena - 1988*, Venice: San Lazzaro, 1992, no. 4, p. 407; *idem*, "Les reliures de manuscrits arméniens à inscriptions," *Recherches de codicologie comparée. La composition du* codex *au Moyen Âge, en Orient et en Occident*, edited by Philippe Hoffman, Paris: Presses de l'École normale supérieure, 1998, no. 6, p. 269.

shaped notches are cut into each quire to allow the sewing needle to pass easily and at the same time bury the support cord into the spine. As is evident this technique was used to bind the Hymnal of 1664. Furthermore, the insides of the covers have printed, striped doublures of the same type one would expect in a seventeenth century Armenian manuscript binding (fig. 13). Both covers are decorated by the same simple design consisting of a frame stamped with a floral frieze and within the field double diagonal fillets forming an X design (fig. 14). The stamping and ruling is very casually and very weakly executed. The book, in a private collection, lacks both the title and last pages. The cloth of the doublures points to Iran, specifically New Julfa, and though the customary stamping irons are lacking the border design was used there in the seventeenth and early eighteenth centuries. Because we have an Amsterdam imprint of the third quarter of the seventeenth century, when the printing establish in Holland was in the hands of Armenians from New Julfa as were the merchant patrons, it is safe to suggest a binding of the late seventeenth century in New Julfa.<sup>22</sup>

One of the most interesting examples of the permanence of the Armenian binding tradition and its use for books produced by the new invention of printing is a volume from the personal library of Alexander Vardapet, later archbishop and prelate of New Julfa (1697-1706), and later still Catholicos and Supreme Patriarch of All Armenians at Holy Etchmiadzin (1706-1714). An erudite author of a number of works, one published in 1687 in New Julfa, another after his death, and several others in manuscript, he was a champion of Armenian orthodoxy against the proselytizing of Catholic missionaries in

<sup>&</sup>lt;sup>22</sup> Such striped and printed cloth in red, black, and brown are common for the late seventeenth and eighteenth century in Iran and also in Persian controlled territory of Armenia, such as Etchmiadzin and Erevan. For some comparative examples see Lydia Dournovo, *Armjanskaja naboïka*, Moscow, 1953 nos. 63, 65, 68.

Safavid Iran and even wrote a strong letter about their activities in Isfahan-New Julfa to Pope Clement XI. <sup>23</sup> At least six bound manuscripts from his personal library have survived with inscribed and dated bindings. All but the oldest were clearly bound in New Julfa; that one is a rather handsome volume far removed from traditional Armenian binding by its red leather and gold stamping. (fig. 15) It is inscribed: "Remember Aghek'sandr Vardapet and his parents, 1680." Four other volumes including a Miscellany and a three volume set of Commentaries were commissioned by Alexander in New Julfa, where they were copied and bound in 1701-1704 with inscriptions on the upper covers: (fig. 16) "Aghek'sandr Vardapet, 1703 (or 1704)." But most pertinent to our discussion is another Miscellany with among other texts, a number of church calendars copied in 1697-8, probably in New Julfa at the behest of Alexander. Of great interest for our inquiry, the manuscript is bound together with a Church Calendar (*Tonac'oyc'*) printed in Amsterdam in 1669. The binding (fig. 17) is inscribed "Aghek'sandr Vardapet, 1698." Though rare, this is not a unique phenomenon: a

<sup>&</sup>lt;sup>23</sup> A short biography of Alexander can be found in the *Encyclopedia of Christian Armenia* (in Armenian), Erevan, 2002, pp. 35-6.

<sup>&</sup>lt;sup>24</sup> Erevan, Matenadaran, M2673, Missal copied in 1679 with binding of 1680; scribe, place of copy, place of binding, uncertain.

Respectively, M6096, Miscellany, copied in 1701, probably in New Julfa, with binding inscription on upper cover of 1703; NJ382, 383, 384, *Commentary on the Catholic Epistles* by Sargis Shnorhali (twelfth century), copied and bound for Alexander by Mkrtich' the priest in New Julfa in 1703-4. Full details on the New Julfa manuscripts can be found in Smpat Ter-Avetisian, *Katalogue der Armenischen handschriften in der Bibliothek des Klosters in Neu-Djoulfa*, vol. I (in Armenian with German title), Vienna: Mekhitarist Press, 1970, pp. 583-586.

<sup>&</sup>lt;sup>26</sup> Antelias, Armenian Catholicosate of Cilicia, the Cilician Museum, Ant151, details in Anushavan Danielian, *Master Catalogue of Armenian Manuscript in the Catholicosate of the Great House of Cilicia* (in Armenian), Antelias, Lebanon, 1984, pp. 438-440.

manuscript, the old technology of making books, bound together with a product of the new technology of printing.<sup>27</sup>

This anomalous object invokes reflection on the nature of the "Gutenberg Revolution" as it is call. In the eyes of a learned clergyman like Alexander, was printing really a dramatic revolution? Two and a half centuries after the German innovation, an important erudite author and collector of books seemed to have no problem binding together texts produced by two seemingly different methods. Yet, the items were related in their subject matter, and both were fabricated with ink applied to paper. The lines were arranged quite similarly on the page and the script of the hand-copied part was as regular and legible as the printed one. It is not at all clear that the printed text was less expensive for the Prelate than paying the scribe to copy the manuscript. By then Archbishop Alexander was head of a major monastery and could count on free or very cheap labor from the monks, making manuscript production in the East, in Persia, competitive with seventeenth century Armenian printing in Europe. The price of a mass produced book<sup>28</sup> included not just the cost of paper, ink, type font, presses, rent, and labor, but also shipping, customs duties, the middlemen charges from Smyrna, where most Armenian printed books were first sent for dissemination, and the transport to a final destination in the Ottoman Empire or Safavid Iran.<sup>29</sup> In daily practice among those who used books or just read them, the so-called revolution must have seemed to some as

<sup>&</sup>lt;sup>27</sup> Another hybrid is in the same collection in Lebanon, Ant168, a small Ritual bound together with a Missal printed in Constantinople in 1706; Danielian, *Master Catalogue*, p. 476.

p. 476. <sup>28</sup> Titles printed at the Holy Etchmiadzin and Saint Sargis Zoravar Press in Amsterdam were regularly produced in editions of 1500 to 3000 or more; see the next note.

<sup>&</sup>lt;sup>29</sup> Kévorkian, *Catalogue des "Incunable" arméniens (1511/1695)*, pp. 1-17, discusses all these matters, bring together information from colophons and earlier publications.

merely another, somewhat more reliable, way of duplicating books. It does not seem to have had the same revolutionary impact as for instance the third-fourth century transition from the papyrus or parchment roll to the parchment codex with numbered pages, or even the dramatic transformations offered in the past quarter of a century by the computer and digital texts.

Be that as it may, Alexander's hybrid volume poses many other questions, as do any of the printed texts bound with traditional bindings. One of these is about the bindings themselves. Did the books issued during the first wave of Armenian printing in the sixteenth and seventeenth centuries, almost exclusively accomplished in Europe, reach potential clients in the Middle East, for the most part clergy for liturgical texts and merchants for practical ones, bound or unbound? Raymond Kévorkian implies that they were bound at the source, 30 but the few examples we have examined seem to suggest the contrary. A binding would of course add to the size and weight of the book and raise the cost of shipping it. Why would the Church Calendar printed in 1669 need to be rebound twenty-nine years later, unless it was not bound when Bishop Alexander acquired it? How to explain the traditional Armenian binding, with features of leather stamping and the cloth doublure used in New Julfa bindings on the Hymnal of 1664 (figs. 11-14), if in fact it was bound before shipping? The *Lives of the Fathers* published in New Julfa in

<sup>&</sup>lt;sup>30</sup> Kévorkian, *Catalogue des "Incunable" arméniens (1511/1695)*, p. 7, "La dépendance technologique de l'impremerie arménienne des XVIe et XVIIe siècles est quasi totale. Les caractères, décors et illustrations employés par les imprmeurs arméniens sont en effet l'oeuvre d'artisans ou d'artistes d'Europe, auxquels on faisait également appel dans les domains specializes, - pour fonder les caractères, construite des presses à bras, relier les livres, etc.," and in calculating the relative price of a book, including production and transport, "les 8300 tropologia [i.e., Hymnal] represent un poids de 6178 kilos (c'est-àdire marges rognées, et relies, chaque volume pesant 750 grammes)," p.10.

1641 (figs. 9-10), but bound 60 years later in 1700 in the same place, demonstrates that at least some printed books remained unbounded until needed.<sup>31</sup>

In the eighteenth century, however, Armenian books were certainly bound at the source in Venice for the Mekhitarist publications and in Constantinople for the various Armenian establishments operating there. But bindings were no longer fashioned in the traditional manner: they were made by European binders or imitated European techniques. The traditional Armenian binding, whether on book or manuscript, became an archaic relic kept in specials collections and museums.

<sup>&</sup>lt;sup>31</sup> From personal experience, I know for instance that the Mekhitarist Fathers of Venice kept their imprints in the sheets as they came off the press for as long as 200 years having received myself a volume printed in the 1770s in 1964, freshly bound in Venice.