Saint Petersburg, National Library of Russia, evr. I B 112, fol. 9r

Ilona Steimann

From La Rochelle to Würzburg and Beyond: Four Bibles from the Hand of the Migrating Scribe-Masorete Ḥayyim ben Isaac

Ilona Steimann

From La Rochelle to Würzburg and Beyond: Four Bibles from the Hand of the Migrating Scribe-Masorete Ḥayyim ben Isaac

Ilona Steimann, Heidelberg University of Jewish Studies

Summary

Building on the established corpus of the French scribe-masorete Ḥayyim ben Isaac—the two La Rochelle Bibles of 1215 and 1216(?)—this article identifies a third, previously unattributed Bible now split between Cincinnati and Saint Petersburg, as his work. Further, Sarit Shalev Eyni's re-examination of the 1238 Ambrosian Bible, produced in Würzburg, revealed a crucial link to Ḥayyim ben Isaac's codices. The Cincinnati-Petersburg Bible confirms his hand in the Masorah of the Ambrosian Bible's second and third volumes, suggesting that he had migrated to Würzburg by that time. By comparing these Bibles, this article traces Ḥayyim ben Isaac's career from La Rochelle (Poitou) to Würzburg (Franconia) and considers the effects of migration on both his own scribal output and the prevailing local practices. Finally, it discusses the subsequent histories of the La Rochelle Bibles, which offer further insights into Jewish migration patterns from Poitou.

1 Introduction

The two Bibles produced by the scribe-masorete Ḥayyim ben Isaac in La Rochelle, Poitou, in 1215 and 1216(?), now in the Vatican Library, are the earliest known dated and localized examples of French Masoretic codices.[1] Their early date has made them a focal point for scholarly inquiries into scribal practices, philological features, and the textual transmission of the Hebrew Bible in medieval France.[2] A third, less-known manuscript—a Bible now split between Cincinnati and Saint Petersburg—also comes from this cultural background, and, as shown in this study, it was copied by the same vocalizer-masorete as the Vatican codices.[3] Since it is the latest of these three manuscripts, the Cincinnati-Petersburg Bible acts as a crucial link to a fourth codex associated with Ḥayyim ben Isaac's work: a well-known Bible from 1238, produced in Würzburg and now housed in the Biblioteca Ambrosiana in Milan.[4] Sarit Shalev-Eyni's previous analysis of the Ambrosian Bible established a connection between it and the La Rochelle codices.[5] The newly identified Cincinnati-Petersburg Bible provides the missing piece that confirms Ḥayyim ben Isaac's hand across all four manuscripts, connecting his early work to his later creations. Building on Shalev-Eyni's findings, this research further traces the evolution of his scribal career.

Ḥayyim ben Isaac's Bibles are the earliest evidence of a Jewish presence in La Rochelle, a prominent Atlantic port, and hint at a possibly flourishing community there in the early

1   Vatican, Biblioteca Apostolica (henceforth BAV), ebr. 468 and ebr. 482. Malachi Beit-Arié and Benjamin Richler, *Hebrew Manuscripts in the Vatican Library: Catalogue* (Vatican City: Biblioteca Apostolica Vaticana, 2008), 406–407, 417–18. The manuscripts are accessible online at https://t1p.de/ilndl and https://t1p.de/sq29c, respectively [accessed 08/2025].

2   Among the vast scholarly literature, see, for example, Elodie Attia, *The Masorah of Elijah ha-Naqdan. An Edition of. Ashkenazic Micrographical Notes* (Berlin: De Gruyter, 2015), 21; Judith Olszowy-Schlanger, "Hebrew Books," in: *The European Book in the Twelfth Century*, ed. Erik Kwakkel and Rodney Thomson (Philadelphia: University of Pennsylvania Press, 2018), 164–65; Judith Olszowy-Schlanger, *Des juifs, des chrétiens et des livres. Manuscrits hébreux médiévaux de la France du Nord* (Paris: Éditions de la Bibliothèque nationale de France, 2023), 32–33.

3   Cincinnati, Hebrew Union College Library (henceforth HUC), Ms. 12 and Saint Petersburg, National Library of Russia, evr. I B 112. Sheldon H. Blank, "A Hebrew Bible MS. in the Hebrew Union College Library," *Hebrew Union College Annual* 8/9 (1931–1932): 229–55; Abraham Harkavi and Hermann L. Strack, *Katalog der hebräischen und samaritanischen Handschriften der Kaiserlichen öffentlichen Bibliothek in St. Petersburg* (St. Petersburg: C. Ricker, 1875), 150–51. The manuscripts are accessible online at https://t1p.de/fehdq and https://t1p.de/pwcfr, respectively [accessed 08/2025].

4   Milan, Biblioteca Ambrosiana B 30–32 inf. Carlo Bernheimer, *Codices hebraici Bybliothecae Ambrosianae* (Florence: Leon S. Olschki, 1933), 2–6; Aldo Luzzatto and Luisa Mortara Ottolenghi, *Hebraica Ambrosiana: Catalogue of Undescribed Hebrew Manuscripts in the Ambrosiana Library. Description of Decorated and Illuminated Hebrew Manuscripts in the Ambrosiana Library* (Milan: Edizioni Il Polifilo, 1972), 119–25. Sarit Shalev-Eyni, "Ambrosian Bible" (2018), in: *Grove Art Online*, https://t1p.de/vh3qw [accessed 08/2025]. The manuscript is accessible online at https://t1p.de/wrxty; https://t1p.de/6154c; https://t1p.de/9qsom [accessed 08/2025].

5   Sarit Shalev-Eyni, "The Making of the Ambrosian Bible and the Emergence of the German-Ashkenazi Variant of the Masoretic Biblical Codex," *Corpus Masoreticum Working Papers* 11 (2025): 80–103.

thirteenth century.[6] In the absence of any other surviving information about La Rochelle's Jews from that time, these manuscripts are our sole witnesses to their lives and tribulations. Together with the Cincinnati-Petersburg and Ambrosian Bibles, they offer a rare opportunity to follow the 23-year-long career of a scribe-masorete and to explore the impact that migration from France to the German lands had on his professional life. In a broader sense, the migration narratives embedded within these Bibles, encompassing not only Ḥayyim's relocation to Würzburg but also the subsequent journeys of his manuscripts, contribute to reconstructing previously undocumented trajectories of La Rochelle Jews. The present discussion is limited to book production aspects, but Sebastian Seemann further explores the Masoretic tradition of Ḥayyim ben Isaac's four Bibles in a forthcoming contribution to the *Corpus Masoreticum Working Papers*.

2 Ḥayyim ben Isaac's Three Bibles

Two Masoretic Bibles, now held in the Vatican, were produced by the scribe-masorete Ḥayyim ben Isaac around the same time. As noted in the colophon, the earlier of the two was copied in La Rochelle in 1215 for Solomon ben Joseph ha-Kohen:

> אני חיים ב"ר יצחק כתבתי ומסרתי זה העשרים וארבע למורי ר' שלמה ב"ר יוסף הכהן וסימתיו בשלישי בשבת בששה ימים לירח תשרי | שנת ארבעת אלפים ותשע מאות ושבעים וששה לבריאת עולם למנין שאנו מונין כאן בלרוקילא ...[7]

(I Ḥayyim bar Isaac have written these Twenty-Four [books; i.e., the Bible] and added the Masorah for my master Rabbi Solomon bar Joseph ha-Kohen and I finished it on Tuesday 6 Tishri of the year 4976 of the Creation of the World [1 September 1215] according to the reckoning we use here in La Rochelle ...).[8]

In the second Vatican Bible, which Hayyim copied for David ben Meshulam, the colophon features large letters outlined by *masora magna* in the upper and lower margins of several consecutive folios:

> אני חיים ב"ר | יצחק כתבתי | ומסרתי זה | הנביאים ו|הכתובים ל|מורי ר' דוד | בן הנדיב ר' מש' | משלם וסימתיו | בששי בשבת | בעשרים וש|[...] | מונין כאן בלר' | בלרוקילא

(I Ḥayyim bar Isaac have written these Prophets and Writings and added the Masorah for my master Rabbi David son of the generous Rabbi Meshulam and I finished it on

---

6   For Jewish presence in the region of La Rochelle, see Dr Vincent, "Les Juifs du Poitou au bas Moyen Age," *Revue d'histoire économique et sociale* 18/3 (1930): 274–77; Gérard Nahon, "Les Juifs dans les domaines d'Alfonse de Poitiers, 1241–1271," *Revue des études juives* 125/1–3 (1966): 172.

7   For additional examples of the spelling of La Rochelle in Hebrew, see Isidore Loeb, "Deux livres de commerce du commencement du XIVe siècle," *Revue des études juives* 8/16 (1884): 179; Heinrich Gross, *Gallia Judaica, dictionnaire géographique de la France* (Paris: Cerf, 1897), 312–13.

8   BAV, ebr. 468, fol. 481r. Cf. Colette Sirat, *Hebrew Manuscripts of the Middle Ages* (Cambridge: Cambridge University Press, 2002), 50. In addition to the colophon, Ḥayyim noted his name on fols. 4v, 201v, 159v.

Friday [23/26/27/28 ...] according to the reckoning we use here in La Rochelle).[9]

Although the folios bearing Ḥayyim's colophon that noted the date of production were later replaced, a late Latin hand recorded the date 1216 at the end of the manuscript.[10] Another peculiarity in that colophon is that Ḥayyim did not mention the Pentateuch, which may indicate a chronological order of copying where the Prophets and Writings preceded the Pentateuch.[11]

The third manuscript that can be attributed to Ḥayyim ben Isaac, the Cincinnati-Petersburg Bible, has survived in a fragmented state. The larger part of this codex, housed in the Hebrew Union College in Cincinnati, includes the Latter Prophets (except for Jeremiah) and incomplete Writings. Twenty-six of the folios that are missing from the Cincinnati segment can be found in the National Library of Russia in St. Petersburg.[12] Despite the absence of the Pentateuch, it is reasonable to assume that, like the Vatican codices, this manuscript originally contained the entire Bible.[13] If there was a colophon, it has not come down to us.[14] In the absence of a colophon, the script itself—specifically, the striking palaeographic similarities between the main text and the Masorah in the Cincinnati-Petersburg and the Vatican Bibles—serve as the sole identifiers of Ḥayyim ben Isaac as the scribe.

The three Bibles share the same letter morphology and style of writing, although the letters in the second Vatican Bible are larger and thus more articulated than in the other two manuscripts. Ḥayyim's letters are wider than they are high, with relatively short descenders of the *kof* and the *sofit* (figs. 1, 2). The top bars of the *bet*, *kaf*, *peh*, and similar letters are traced with the full width of the quill, usually straight but sometimes slightly concave, and are parallel to the headline. The bases of these letters, as well as the feet of the *tav*, are slanted (Table 1). Slanted right-hand downstrokes in the *he*, *ḥet*, and *tav*, which are shorter than the left-hand downstrokes, further contribute to a 'wavering,' uneven rhythm of a written line. Heavy shading created by contrasting wide horizontal strokes and thin verticals, drop-shaped elements, pronounced bifurcations, and elongated serifs—all hallmarks of later French square script—are not yet fully developed in these early examples.[15]

---

9   BAV, ebr. 482, fols. 551v–555r. In addition to the colophon, Ḥayyim noted his name on folio 205v (in the Masorah).

10   "Scriptus est Codex anno minoris Judaeos supplationis 976, Christi 1216" (BAV, ebr. 468, fol. 555v). See Beit-Arié and Richler 2008, 418.

11   Cf. Élodie Attia, "On Some Variants in Ashkenazic Biblical Manuscripts from the Twelfth and Thirteenth Centuries," in: *Studies in Semitic Vocalisation and Reading Traditions*, ed. Aaron D. Hornkohl and Geoffrey Khan (Cambridge: Cambridge University Press, 2020), 601 and note 21. While we usually assume a direct correlation between the order of copying and the final arrangement of texts, this presumption lacks evidentiary support, which opens the door to alternative scenarios. However, a systematic investigation of the copying order is beyond the scope of the present study.

12   For detailed contents, see Blank 1931–1932, 229 and Harkavi and Strack 1875, 150, respectively.

13   Blank 1931–1932, 231.

14   For a colophon in HUC, Ms. 12 that was later fabricated by Abraham Firkowicz, see below.

15   Edna Engel, "Between France and Germany: Gothic Characteristics in Ashkenazic Script," in: *Manuscrits hébreux et arabes: Mélanges en l'honneur de Colette Sirat*, ed. Nicholas de Lange and Judith Olszowy-Schlanger (Turnhout: Brepols, 2014), 203–205; Judith Olszowy-Schlanger, "The Early Developments of Hebrew Scripts in North-Western Europe," *Gazette du livre médiéval* 63 (2017): 14–15.
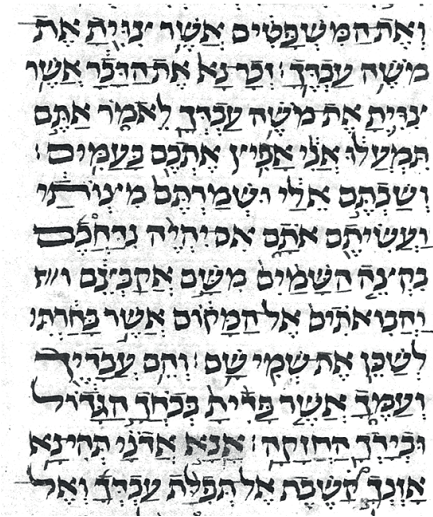
Fig. 1. Ḥayyim's script in the first Vatican Bible (Vatican, Biblioteca Apostolica, ebr. 468, fol. 423r).

Fig. 2. Ḥayyim's script in the Cincinnati-Petersburg Bible (Saint Petersburg, National Library of Russia, evr. I B 112, fol. 20r).

The above characteristics are typical of contemporary French script, but Ḥayyim's individual style is marked by an *alef* with a heavy foot descending under the line and a short arm featuring a delicate, outward-turning roof, both of which are consistent across the three Bibles (Table 1). The *mem* in these Bibles exhibits a *kaf*-like lobe with a short top bar and a longer slanted base, a thin slanted downstroke attached to the lobe's top left (sometimes descending below the line), and a pronounced hook-shaped horn (Table 1). The arm of the *ayin* and the left arm of the *shin/sin* are slanted and slightly curved, each topped with an inward-turning roof (Table 1). Whereas the *ayin*'s left downstroke is mostly vertical, the *shin/sin*'s middle arm is slanted, often detached from the base, and features a smaller, rightward-turning roof. The juncture where the *shin/sin*'s slanted right and vertical left arms meet is often pointed. The consistent presence of these features, alongside the shared graphic devices for left-hand margin justification found in the three Bibles—such as extended or squeezed letters, adding the first few letters of the next word at the end of a line and then starting the next line with the whole word, and similarly shaped broken letters that serve as space-fillers—strongly imply the work of a single scribe, Ḥayyim.

Table 1: Comparison of selected letters in Ḥayyim ben Isaac's Bibles

Manuscripts	alef	mem	ayin	peh	shin	tav
Cincinnati-Petersburg Bible	א	מ	ע	פ	ש	ת
First Vatican Bible	א	מ	ע	פ	ש	ת
Second Vatican Bible	א	מ	ע	פ	ש	ת

Ḥayyim's Masoretic script exhibits the same morphological and stylistic features as his square script (figs. 3, 4).[16] Although Masoretic scripts have not yet been studied in depth, scholars generally agree that the Masorah was typically written in a smaller, non-calligraphic square script.[17] The reduction in size resulted in the loss of such calligraphic features as shading, serifs, and often angularity. The inherent complexity of certain letters, such as the *alef*, *shin*/*sin*, and *mem* (whose lobe can be quite prominent in Ḥayyim's Bibles) cause them to appear somewhat larger than other letters within the reduced scale. These peculiarities of the Masoretic script as well as the graphic devices are identical in the three Bibles: the abbreviation for the Tetragrammaton, formed by two *yods* and a hook-like top, and the graphic separator for Masoretic lists—a small circle with two diagonally radiating dots on each side (figs. 3, 4).
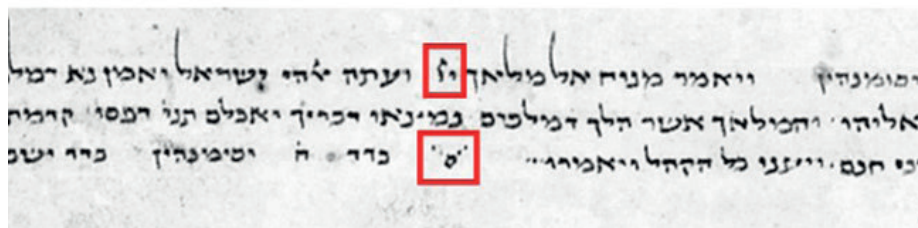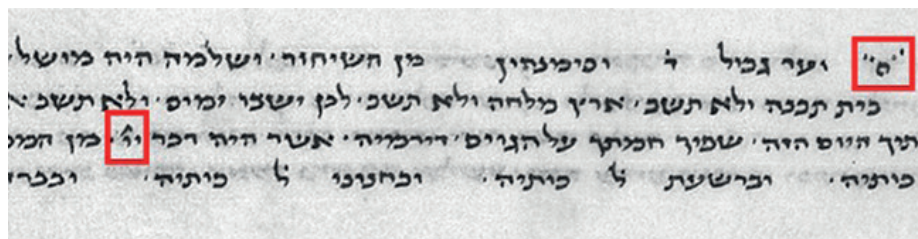

Fig. 3 (above). Ḥayyim's Masoretic script in the first Vatican Bible (Vatican, Biblioteca Apostolica, ebr. 468, fol. 309r).
Fig. 4 (below). Ḥayyim's Masoretic script in the Cincinnati-Petersburg Bible (Saint Petersburg, National Library of Russia, evr. I B 112, fol. 14r).

Finally, micrographic decoration provides conclusive evidence for linking the two Vatican and the Cincinnati-Petersburg Bibles to a single scribe-masorete. Across all three manuscripts, we often find the identical motif of stylized animal heads (possibly canine) in profile on the left of the lower *masora magna* on recto folios (figs. 5, 6, 7). Outlined by the Masorah, these heads feature one pointed ear, a rounded nose curving upwards, an open mouth, and a diagonal, elongated eye with a pupil dot. Another recurring motif is a covered goblet (figs. 8, 9, 10). Its cup with a curled rim and a pointed lid is supported by

---

16   Sheldon H. Blank suggested that the vowels and Masorah were added by another hand, pointing to the numerous alterations the masorete introduced to the text's plene and defective spelling. Blank 1931–1932, 236–37. Nevertheless, the common medieval practice of copying the main text from one manuscript and then emending it based on more accurate versions offers a better explanation, which is supported by palaeographic evidence. Thus, the masorete-proofreader need not have been someone other than the scribe of the main text.

17   Olszowy-Schlanger 2017, 16.

a stem with a rounded node that rests on a triangular base. The striking similarity of these micrographic images in the three Bibles leaves no doubt that they must have been executed by the same hand.

Ḥayyim's micrographic animal head:
Fig. 5. Cincinnati, Hebrew Union College Library, Ms. 12, fol. 33r.
Fig. 6. Vatican, Biblioteca Apostolica, ebr. 468, fol. 155r.
Fig. 7. Vatican, Biblioteca Apostolica, ebr. 482, fol. 178r.

Ḥayyim's micrographic goblet:
Fig. 8. Cincinnati, Hebrew Union College Library, Ms. 12, fol. 26r.
Fig. 9. Vatican, Biblioteca Apostolica, ebr. 468, fol. 310r.
Fig. 10. Vatican, Biblioteca Apostolica, ebr. 482, fol. 178v.

In contrast to the Vatican Bibles, where micrographic decoration is restricted to these small-scale images, the Cincinnati-Petersburg Bible showcases a significantly broader use of micrography, possibly at the request of its patron. Consistent with the French micrographic tradition, the micrography in the Cincinnati-Petersburg Bible is confined to the margins and its place in the manuscript is not governed by a pre-defined decorative programme. In contrast to German Ashkenaz, where micrographic decoration primarily served to emphasize the beginnings and endings of biblical books, sometimes the beginning of *parashot*, and occasionally quire transitions, French micrography generally lacked such a textual or codicological rationale for its placement.[18] French masoretes, including Ḥayyim ben Isaac, demonstrated flexibility in their use of micrographic forms, extending or replacing the linear Masorah with images on any folio of their choice. In the Cincinnati-Petersburg Bible, geometrical interlaces adorn mainly the lower margins of facing pages within the Writings (fig. 11). These designs often mirror each other, a feature sometimes observed in later German codices to indicate the transition between quires.[19] However, in the Cincinnati-Petersburg Bible, the mirrored designs are not correlated with quire divisions and frequently appear on several consecutive pairs of facing pages.

---

18   Ilona Steimann, "'Masorah for Embroidery': Regional Approaches to Micrography in Medieval Germany and France," [2026, forthcoming].
19   Dalia-Ruth Halperin, "Decorated Masorah on the Openings between Quires," *Journal of Jewish Studies* 65/2 (2014): 324.
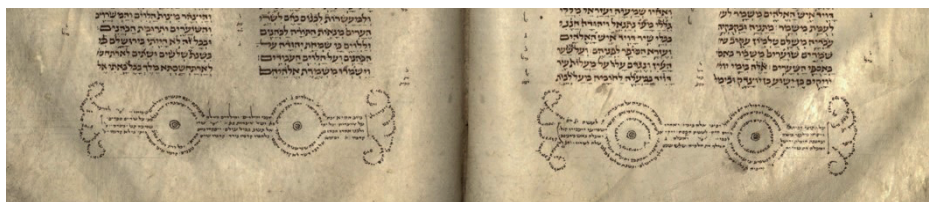
Fig. 11. Ḥayyim's micrographic decoration (Cincinnati, Hebrew Union College Library, Ms. 12, fols. 194v–195r).

Ḥayyim ben Isaac's micrography exhibits striking parallels to that in other French manuscripts, both in its artistic approach and its particular decorative motifs. The micrographic snake, for example, was a common element in French manuscript decoration. A comparable snake appears in the upper margin of a French Bible produced by the scribe-masorete Mattetiah ben Jedidiah around the mid-thirteenth century.[20] In both instances, the snake meanders through the lines of the linear Masorah, disrupting them at several points (figs. 12, 13).

Fig. 12 (above). Ḥayyim's micrographic snake (Cincinnati, Hebrew Union College Library, Ms. 12, fol. 147v).
Fig. 13 (below). Micrographic snake in a French Bible, 1250–1270 (Zurich, Braginsky Collection, BCB 430, fol. 65v).

Despite variations in the quantity of micrography, the Vatican and Cincinnati-Petersburg Bibles reflect the same production scheme, which supports their attribution to Ḥayyim ben Isaac. In accord with the tradition established in the oldest Near Eastern Bibles, early European Bibles and liturgical Pentateuchs typically feature the core biblical text in two

---

20   Zurich, Braginsky Collection, BCB 430. Sotheby's, Lot 165, https://t1p.de/syxex [accessed 08/2025]. The manuscript is accessible online at https://t1p.de/qze9o [accessed 08/2025].

or three columns on a page. Whereas German Masoretic codices are consistently arranged in a three-column layout, French Bibles and liturgical Pentateuchs exhibit greater variability.[21] By the thirteenth century, the two-column layout was as popular in France as the three-column format, with Ḥayyim ben Isaac's three Bibles serving as the earliest dated examples. The generally smaller, portable format of French codices (Table 2) likely explains their frequent preference for a two-column layout, a contrast to the German Masoretic manuscripts. The latter, as seen in such early examples as the 1238 Wroclaw Bible (488 × 360 mm after trimming) discussed below, tended to be large, with their size increasing by the late thirteenth century.[22]

Whereas Ḥayyim ben Isaac's first Vatican and Cincinnati-Petersburg Bibles include only the vocalized and accentuated biblical text, the second Vatican Bible, which is the largest of the three (Table 2), also has the Onkelos Targum (translation/paraphrase). The incorporation of the Targum (Onkelos for the Pentateuch and sometimes other Targumim for the Prophets and Writings), a language no longer spoken in Europe, was due to the Talmudic injunction (BT, Berakhot 8a) attributed to the fourth-century Rabbi Huna ben Judah, which mandated the recitation of Mikra twice and Targum once during *parashot* readings.[23] The thirteenth-century rabbinic authorities Isaac ben Moses of Vienna and Meir of Rothenburg confirmed the practice of reciting the Targum in Ashkenaz, both in synagogue settings and private homes.[24] Consequently, German Bibles and liturgical Pentateuchs almost universally integrate the Targum, typically inserted in square script, verse-by-verse into the biblical text, matching the Hebrew verses in size and visual appearance. In contrast, only a third of the thirteenth-century French Masoretic codices incorporate the Targum verse-by-verse. In the remaining instances, it is either absent or relegated to one or two separate, narrow columns flanking the Hebrew text, a development that indicates a gradual decline in the Targum's importance in the French milieu.[25] In Ḥayyim ben Isaac's second Vatican Bible, the oldest dated French manuscript that features the Targum in two columns flanking the two columns of the Pentateuch, it is in a smaller square script than

21   For example, David Stern, *The Jewish Bible: A Material History* (Washington, DC: University of Washington Press, 2017), 106.

22   For German tradition, see David J. D. Kroeze and Eveline van Staalduine-Sulman, "A Giant among Bibles: 'Erfurt 1' or Cod. Or. Fol. 1210–1211 at the Staatsbibliothek zu Berlin," *Aramaic Studies* 4/2 (2006), 197–209; Elodie Attia, "Targum Layouts in Ashkenazi Manuscripts. Preliminary Methodological Observations," in: *A Jewish Targum in a Christian World*, ed. Alberdina Houtman, Eveline van Staalduine-Sulman, and Hans-Martin Kirn (Leiden: Brill, 2014), 101–107. For the French tradition, see Sirat 2002, 53–54; Javier del Barco, "From the Archaeological Turn to 'Codicologie Structurale': The Concept of Codicology and the Material Description of Hebrew Manuscripts," in: *Jewish Manuscript Cultures*, ed. Irina Wandrey (Berlin: De Gruyter, 2017), 23–24. For more on the sizes of Hebrew manuscripts, see Beit-Arié 2022, 278–80.

23   For more on the obligation to recite the verses twice in Hebrew and once in Aramaic, see Hayyim Talbi, "להשתלשלותה של קריאת שניים מקרא ואחד תרגום," *Knishta* 4 (2010): 155–90.

24   See Stern 2017, 109 and the references therein.

25   Cf. Yossi Peretz, "שניים מקרא ואחד תרגום: לאור הממצא בכתבי היד האשכנזיים של התורה בימי הביניים," *Tall-elei orot* 14 (2008), 57. See also Attia 2014, 99–111.

that used for the main text.[26] The distinction in the sizes of the scripts creates clear textual units and visually conveys their hierarchical relationship, thereby aiding reader navigation. An additional aid for navigation, enlarged initial words, which became a standard feature for marking the beginning of biblical books and *parashot* in the Pentateuch in later manuscripts, was not yet used consistently in the early thirteenth century. Some early French codices, including Ḥayyim ben Isaac's Bibles, lack this feature.[27] Instead, in the two Vatican and Cincinnati-Petersburg Bibles the books are separated by the varying numbers of unwritten lines.

The codicology of the three La Rochelle Bibles also reflects the prevailing Hebrew manuscript production methods in France during that period. The first Vatican and Cincinnati-Petersburg manuscripts were copied on parchment with easily distinguishable hair and flesh sides. However, the second Vatican Bible features nearly identical parchment sides, indicating that contemporary scribes in Aquitaine utilized both methods of parchment preparation.[28] The three Bibles contain four bifolios in a quire (quaternions), pricked in the outer margins for horizontal lines and ruled with a hard point.[29] As in the Vatican Bibles, the ruling of the Cincinnati-Petersburg Bible, intended for two columns of the biblical text, includes 2 + 4 + 2 vertical lines, with the two upper, two middle, and three bottom horizontal lines of the text block ruled across the bifolio.[30] The horizontal line count exhibits a minor fluctuation across the three manuscripts, specifically 30, 31, and 32 (Table 2), and does not have a proportional relationship with the size of the text space or the dimensions of the page. The second Vatican Bible, despite its considerably larger format, features a number of lines comparable to those in the smaller codices, which means that Hayyim had to use a larger script.

Table 2: Size and layout of Ḥayyim ben Isaac's Bibles

	First Vatican Bible	**Second Vatican Bible**	**Cincinnati-Petersburg Bible**
Full page	218 × 165 mm	370 × 288 mm	290 × 225 mm
Text space	136 × 102 mm	225 × 135 mm	170 × 120 mm
Ruled lines per page	32	31	30

---

26 An antecedent to this layout is evident in the Liturgical Pentateuch from 1216 (London, British Library [henceforth BL], Arundel Or. 2). This two-column manuscript positions the Targum in a distinct column along the outer margins, and under the main text in the lower margins. Although George Margoliouth identified its script as Italian, its codicological and palaeographic features suggest a French origin. George Margoliouth, *Catalogue of the Hebrew and Samaritan Manuscripts in the British Museum*, vol. 1 (London: British Museum, 1899), 41–42, no. 68. The manuscript is accessible online at https://t1p.de/36mrp [accessed 08/2025].

27 As detailed in the discussion below, large initial words were later added to the first Vatican Bible.

28 SfarData #0E095q and #0E097q. Malachi Beit-Arié, *Historical and Comparative Typology of Medieval Hebrew Codices based on the Documentation of the Extant Dated Manuscripts until 1540 Using a Quantitative Approach*, English version (Jerusalem and Hamburg: Israel Academy of Sciences and Humanities, 2022), 234 note 41; accessible online at https://t1p.de/ze6ki [accessed 08/2025].

29 Beit-Arié 2022, 231–38.

30 In the second Vatican Bible, this ruling scheme was applied in the Prophets and Writings. As the Pentateuch includes two additional columns of the Aramaic Targum, it was ruled differently.

Given its codicological profile and layout, then, the Cincinnati-Petersburg Bible, similar to the two Vatican Bibles, was evidently produced in France, possibly in La Rochelle. To understand the chronological relationship among these three Bibles, we have to consider a fourth manuscript where Ḥayyim ben Isaac was involved in the production.

3 Ḥayyim ben Isaac in Würzburg

Well-known to scholars, another early Bible in three volumes in the Biblioteca Ambrosiana reveals a link to Ḥayyim ben Isaac. This manuscript, copied in Würzburg by Jacob ben Samuel for Joseph ben Moses of Olmena (Ulm in Swabia or Nieder-Olm in the Rhineland),[31] was vocalized, accentuated, and provided with Masorah by Joseph ben Kalonymos.[32] The colophon at the end of the Pentateuch indicates that Jacob ben Samuel completed his copying on 19 January 1236.[33] According to Joseph ben Kalonymos's colophon on the same folio, the Pentateuch's vocalization and Masorah were finished two years later, in 1238.[34] In 1237/38, that is concurrently with the Ambrosian Bible, Joseph ben Kalonymos completed the vocalization, accentuation, and Masorah for another manuscript, a liturgical Pentateuch and Writings now in Wroclaw, collaborating with his cousin, Meshulam ben Joseph, the scribe.[35] As Sarit Shalev-Eyni suggests, likely owing to the simultaneous production

---

31   Joseph Gutmann, "Joseph ben Kalonymos; The Enigma of a Thirteenth-Century Hebrew Scribe," in: *A Crown for a King. Studies in Jewish Art, History and Archaeology in Memory of Stephen S. Kayser*, ed. Shalom Sabar, Steven Fine, and William Kramer (Jerusalem: Gefen, 2000), 149. See also Shalev-Eyni 2025, 82 note 5.

32   For its attribution to Würzburg, see Sarit Shalev-Eyni, *Jews among Christians: Hebrew Book Illumination from Lake Constance* (London: Miller, 2010), 4 and 8, and the discussion below.

33   The Ambrosian Bible, vol. I, fol. 222v: "אני יעקב ב"ר שמואל הסופר כתבתי זה הספר לר' יוסף ב"ר משה מאולמנא וסיימתי אותו באחד בשבט בשנת [ת]תקצ"ו* לפרט והשם יזכהו ללמוד בו הוא ובניו ובני בניו חזק ונתחזק והסופר לא יוזק" ("I, Jacob ben Samuel the scribe copied this book for Rabbi Joseph bar Moses of Olmena and completed it on 10 January 1236, and God will grant him to study it, he and his sons and the sons of his sons, be strong and we will be strengthened, the scribe will not be harmed").

*A later hand erased the first ת and changed the second ת to ק, thereby changing the date to 536.

34   The colophon of the vocalizer-masorete reads: "ואני יוסף בר' קלונימוס כתבתי זה המסורת וניקדתיו וסיימתיו בשנת תתקצ"ח לפרט בשבט, ברוך נ[ותן] ל[יעף] כ[ח] ו[לאין] א[ונים] ע[צמה] י[רבה]" ("And I, Joseph ben Kalonymos, wrote this Masorah and vocalized [the manuscript] and completed it in January/February of 1238, blessed be He who gives power to the faint and strengthens the powerless [Isa. 40:29]").

35   Wroclaw, University Library, M. 1106. Thérèse Metzger, *Die Bibel von Meschullam und Joseph Qalonymos: Ms. M 1106 der Universitätsbibliothek Breslau (Wroclaw)* (Würzburg: Kommissionsverlag Ferdinand Schöningh, 1994). The colophon of the vocalizer-masorete on fol. 456r reads: "אני יוסף ב"ר קלונימוס הסופר נקדתי ומסרתי זה הספר לר' [חיים בר' ישראל ז"ל*] הנעים מעם עשה עשה שמים עזרו ושמרו כרועה עדרו וכתבו ר' משלם בן דודי ר' יוסף הסופר אמרי שפר על הספר בדיו בארץ אשכנז המתורגמת הַדֵּייבַ בשנת תתקצ"ח בעזר דודי צח ברוך זכרו וכבודו לנצח" ("I, Joseph ben Kalonymos, the scribe, wrote the Masorah and vocalized this book for Rabbi [Ḥayyim bar Israel, of blessed memory], the most noble among [his] people; the Creator of heaven will help and protect him as a shepherd his flock [Jer. 31:10]; and it [this manuscript] was written by Meshulam

of two Bibles and possible deadlines set by their patrons, Joseph ben Kalonymos only completed the Masorah in the first volume and the first four quires of the second volume of the Ambrosian Bible (fols. 1v–32v) before another masorete took over.[36] This second masorete wrote the Masorah in the second (beginning from fol. 33r) and third volumes. Sarit Shalev-Eyni was the first to observe a strong resemblance between the script, graphic devices, and micrographic forms of the second masorete in the Ambrosian Bible ("Masorete B") and those of Ḥayyim ben Isaac of La Rochelle. She noted that "the close similarities between the two hands, which cover all aspects of their scribal work, cannot be a coincidence."[37] However, due to a lack of larger square script examples from the Ambrosian Bible's second masorete and a significant time gap between its production and the much earlier Vatican Bible, Shalev-Eyni could not definitively confirm that Ḥayyim ben Isaac directly participated in the production of the Ambrosian Bible. The recent identification of the Cincinnati-Petersburg Bible as part of Ḥayyim's body of work has now bridged this gap. Produced between the Vatican and Ambrosian Bibles, this new find provides the necessary evidence to confirm that a single scribe-masorete—Ḥayyim ben Isaac—was involved in copying of all four manuscripts. The letters in the four Bibles exhibit a strong affinity, reflecting the same morphology as described above (figs. 14, 15, 16 and Table 3, no. 1). The similarities extend to the graphic devices, with the Masoretic list separator and the Tetragrammaton abbreviation being identical across all four codices (Table 3, nos. 2, 3).[38] Although this particular rendering of the Tetragrammaton abbreviation was not exclusive to Ḥayyim ben Isaac and appears similarly in Joseph ben Kalonymos's quires, its variations serve as a specific marker of Ḥayyim's hand. Typically, it consisted of two *yods* and a hook-like top; however, at the end of Masoretic lines, Ḥayyim employed a more stylized variant: two *yods* with a hook extending to the bottom of the line and terminating in a curled foot. This form is evident in each of his four manuscripts (Table 3, no. 4).

---

son of my uncle, Rabbi Joseph, the scribe who gives goodly words [Gen. 49:21], in the book [on parchment] in ink, in the land of Ashkenaz, which is translated as Hadeyv [Targum Jonathan, Jer. 51:27], in the year 1237/38, with the help of my Lord (Song 5:10), blessed be his memory and honour forever"). For a discussion on why "בעזר דודי צח" should be translated as "with the help of my Lord" rather than "with the help of my beloved uncle [Joseph]" (as suggested in Metzger 1994, 17 note 34; Gutmann 2000, 148), see SfarData #0T001; see also Shalev-Eyni 2025, 92.

*The name of the owner is a later addition written over the erased name of the original patron. See also Metzger 1994, 17–18. The manuscript is accessible online at https://t1p.de/coivu [accessed 08/2025].

36   The fact that two masoretes worked on this manuscript was mentioned in Gutmann 2000, 148. For the palaeographical analysis of the two Masoretic hands, see Shalev-Eyni 2025, 85.

37   Shalev-Eyni 2025, 87.

38   Shalev-Eyni 2025, 87.
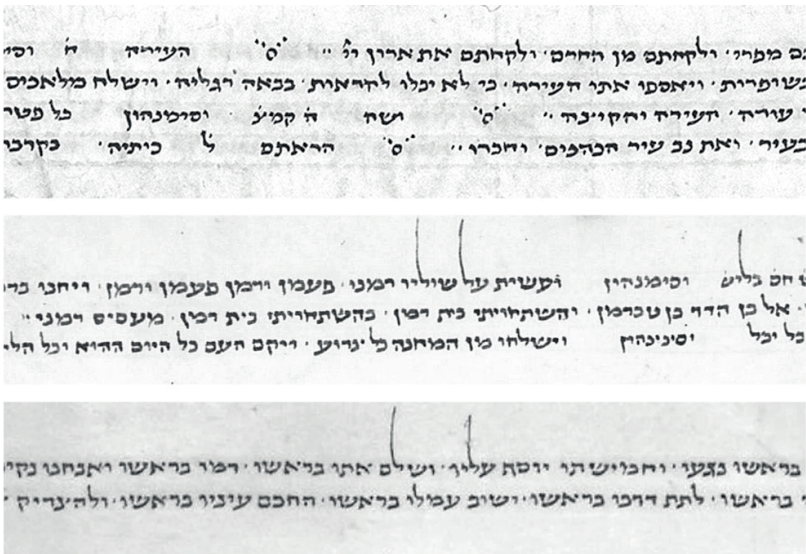
Ḥayyim's Masoretic script:
Fig. 14 (above). Vatican, Biblioteca Apostolica, ebr. 468, fol. 120r.
Fig. 15 (middle). Saint Petersburg, National Library of Russia, evr. I B 112, fol. 2r.
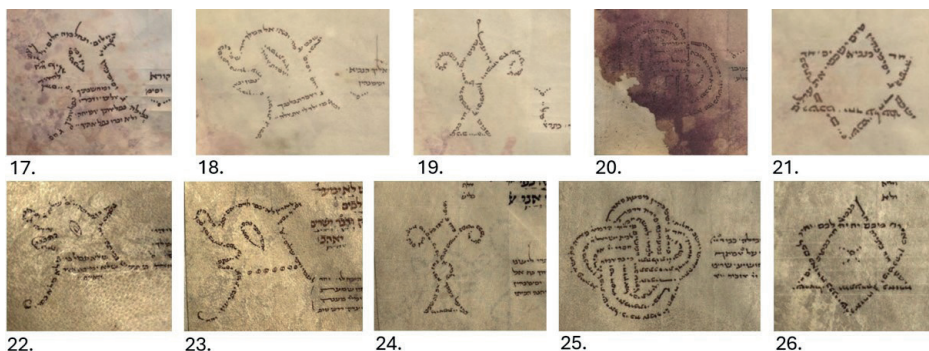Fig. 16 (below). Milan, Biblioteca Ambrosiana, B 32 inf., fol. 62r.

Table 3: Individual graphic features of Ḥayyim ben Isaac's Bibles

	First Vatican Bible	Second Vatican Bible	Cincinnati-Petersburg Bible	Ambrosian Bible
1. וסימניהון ("and their signs")	יסימניהון	יסימנהון	יסימטהיין	יסימנהון
2. Graphic sign between Masoretic lists				
3. Abbreviation for the Tetragrammaton				
4. Abbreviation for the Tetragrammaton at the end of the Masorah line				

Although there is a great morphological resemblance of the script across the four Bibles, the Cincinnati-Petersburg Bible features somewhat squarer letters, a tendency that intensifies in the Ambrosiana Bible (figs. 14, 15, 16). This is especially apparent at the junctures of horizontal and vertical letter components (as in the *he*, *ḥet*, and *tav*), which are more rounded in the Vatican Bibles but become slightly more angular in the Cincinnati-Petersburg and Ambrosiana Bibles. As was common among scribes and masoretes over their long

careers, Ḥayyim's handwriting must have underwent gradual changes. While remaining identifiable, his script evolved from a more rounded writing in the Vatican Bibles to slightly more angular letterforms. Since these changes are particularly evident in the Ambrosiana Bible, they may reflect not only personal development but also an influence from the angular German script he encountered in Würzburg.

Nevertheless, Ḥayyim's micrography remained largely unchanged. The Ambrosian manuscript has the same images, rendered in the same style as in the two Vatican and Cincinnati-Petersburg Bibles, prominently featuring the previously described canine-like heads (figs. 17, 18, 22, 23) and goblets (figs. 19, 24). In the Cincinnati-Petersburg and Ambrosian Bibles, Ḥayyim also introduced several new motifs such as a so-called Solomon's Knot (figs. 20, 25) and a hexagram (figs. 21, 26), integrating them with the earlier designs.[39] This close resemblance in script and micrographic embellishments between the Ambrosian and Cincinnati-Petersburg Bibles strongly implies a narrow chronological gap in their production. Consequently, the Cincinnati-Petersburg Bible was likely one of Ḥayyim's later works from La Rochelle(?), probably dating to the late 1220s or early 1230s, shortly before his move to Würzburg.[40]

17. 18. 19. 20. 21.

22. 23. 24. 25. 26.

Ḥayyim's micrographic images:
Fig. 17. Animal head (Milan, Biblioteca Ambrosiana, B 32 inf., fol. 94r).
Fig. 18. Animal head (Milan, Biblioteca Ambrosiana, B 31 inf., fol. 67r).
Fig. 19. Goblet (Milan, Biblioteca Ambrosiana, B 31 inf., fol. 44r).
Fig. 20. Solomon's Knot (Milan, Biblioteca Ambrosiana, B 32 inf., fol. 19r).
Fig. 21. Hexagram (Milan, Biblioteca Ambrosiana, B 31 inf., fol. 153r).

Fig. 22. Animal head (Cincinnati, Hebrew Union College Library, Ms. 12, fol. 127r).
Fig. 23. Animal head (Cincinnati, Hebrew Union College Library, Ms. 12, fol. 136r).
Fig. 24. Goblet (Cincinnati, Hebrew Union College Library, Ms. 12, fol. 48r).
Fig. 25. Solomon's Knot (Cincinnati, Hebrew Union College Library, Ms. 12, fol. 32r).
Fig. 26. Hexagram (Cincinnati, Hebrew Union College Library, Ms. 12, fol. 69r).

In Würzburg, Ḥayyim found a welcome in the local scribal circle that surrounded the family of Joseph ben Kalonymos, a figure often subject to some misconceptions in scholarly literature. The first scholar to discuss Joseph ben Kalonymos was Leopold Zunz. In his *Zur Geschichte und Literatur*, he mentions him in connection with the 1238 Wroclaw Bible.[41] Zunz also noted Joseph Nakdan, a corrector of Torah scrolls active between 1230

---

39   For the origins of the motif of hexagram and its use in German Ashkenaz, see Shalev-Eyni 2025, 93.
40   Cf. Blank 1931–1932, 246, where this codex is attributed to late thirteenth- or fourteenth-century Spain.
41   Leopold Zunz, *Zur Geschichte und Literatur*, vol. 1 (Berlin: Veit, 1845), 111 and 113.

and 1250. This Joseph Nakdan, also known as Jose *nakdan*, came from Heidelberg and worked in Bohemia. There, he instructed Abraham ben Azriel, a scholar of liturgy, on linguistic and liturgical matters, as documented in Abraham ben Azriel's *Arugat ha-bosem*.[42] In his 1865 work, Zunz suggested identifying the Wroclaw Bible's vocalizer-masorete, Joseph ben Kalonymos, with Jose *nakdan*, to whom he attributed the authorship of *piyyutim* (liturgical poems), *kinot* (lamentations), and *seliḥot* (penitential poems).[43] Although the chronological and geographic proximity of the *seliḥah* for the 1235 Lauda martyrs—which is attributed to Joseph ben Kalonymos—and his Bibles is suggestive, definitive proof remains elusive. The titles of these poems offer no information other than the author's name, either "Joseph ben Kalonymos *ha-nakdan*" or simply "Joseph." Within the same passage, Zunz further distinguished a later Joseph ben Kalonymos II, whom he identified as the scribe-masorete of the 1294 Xanten Bible.[44]

Another work, attributed to Joseph ben Kalonymos and his uncle, a poem on the biblical accents "אשיש באמרות אל אהגה בתורתו," was described by Moriz Steinschneider in 1866.[45] The poem's title state "בשם ר[בי] יוסף נקדן" ("in the name of Rabbi Joseph") and the acrostic formed by the initial letters (marked with dots) of consecutive lines reads: "יוסף ברבי קלונימוס הנקדן והסופר אמרי שפר דו[דו?] חזק ואמץ" ("Joseph ben Rabbi Kalonymos, the vocalizer, [his uncle?], the scribe 'who gives goodly words,' be strong and courageous").[46] The epithet "הסופר אמרי שפר" ("the scribe who gives goodly words," from Gen. 49:21), which

---

42   See Efraim Urbach, ed. Abraham bar Azriel's *Sefer Arugat ha-Bosem* [Hebrew], vol. 1 (Jerusalem: Mekitzei nirdamim, 1939), 281 and references there.

43   Leopold Zunz, *Literaturgeschichte der synagogalen Poesie* (Berlin: Gerschel, 1865), 335: A *piyyut* for Rosh ha-Shanah, מלך עליון אדיר במרום (Israel Davidson, *Thesaurus of Mediaeval Hebrew Poetry* [Hebrew], vol. 3 [New York: Jewish Theological Seminary of America, 1930], 51, no. 1071 and 145, no. 1652); a *kinah* for Tish'a b'Av, אמרר בבכי (Davidson 1930, vol. 1, 271, no. 5947); and a *seliḥah* commemorating the Lauda martyrs of 1235, אזעק חמס קורותיי (Davidson 1930, vol. 1, 112, no. 2367). The same three liturgical compositions are listed in Gutmann 2000, 148, no. 4 as evidence of the poetry written by Joseph ben Kalonymos, the vocalizer-masorete of the Ambrosian and Wroclaw Bibles. Whereas Zunz was careful with this identification, Urbach took it for granted and wrote that there is no doubt that this Jose *nakdan* is Joseph ben Kalonymos, the masorete of the Ambrosian and Wroclaw Bibles. Efraim Urbach, ed. Abraham bar Azriel's *Sefer Arugat ha-Bosem* [Hebrew], vol. 4 (Jerusalem: Mekitzei nirdamim, 1962), 121.

44   New York, Public Library, Spencer 1/I–II. This codex copied by Joseph of Xanten ben Kalonymos of Neuss is discussed in Ilona Steimann, "The Arundel and Xanten Bibles: A Model and a Copy?" The Arundel and Xanten Bibles: A Model and a Copy?," *Corpus Masoreticum Working Papers* 10 (2025): 48–79. Gutmann's work presents a different numeration for the Josephs. Assuming that Joseph, the uncle of Joseph ben Kalonymos of Würzburg, might also have been named Joseph ben Kalonymos(?), Gutmann numbered him as Joseph ben Kalonymos I, his nephew as Joseph ben Kalonymos II, and Joseph of Xanten ben Kalonymos as III. See Gutmann 2000, 147–48, nos. 1–2.

45   Berlin, Staatsbibliothek, Preußischer Kulturbesitz, Ms. Or. Qu. 647, pp. 119–121. See Moriz Steinschneider, "מזכרת המזכיר. רשימות והודעות מתוך כתבי יד פעם בארוכה ופעם בקצרה"," *Jeschurun: Zeitschrift für die Wissenschaft des Judenthums* 5 (1866): 146–52.

46   The manuscript was copied in Italy (Trino) in 1470 in Ashkenazi semi-cursive script. Moriz Steinschneider, *Verzeichniss der Hebraeischen Handschriften*, vol. 1, Die Handschriften-Verzeichnisse der Königlichen Bibliothek zu Berlin 2 (Berlin: Vogt, 1878), 99–102, no. 118. The manuscript is accessible online at https://t1p.de/0r2sg [accessed 08/2025]. See also the discussion in Nehemias Brüll, "Recensionen," *Jahrbücher für jüdische Geschichte und Litteratur* 8 (1887): 118–21.

appears alongside the name of Joseph ben Kalonymos's homonymous uncle, Joseph, in the colophon of the Wroclaw Bible,[47] may suggest that the poem was a collaborative effort by Joseph ben Kalonymos and his uncle Joseph—the producers of the Wroclaw and Ambrosian Bibles. The expression "הסופר אמרי שפר" is associated with writing Torah scrolls, as suggested in the Babylonian Talmud (Sotah 13a).[48] The phrase also appears on a damaged tombstone in Würzburg, dated 1261–1280, which refers to the deceased as "וסופר מהיר אמרי שפר וצדק" ("Expert scribe who gives goodly and just words").[49] Because the name of the deceased did not survive, it is uncertain whether the tombstone belongs to the uncle of Joseph ben Kalonymos, another family member, as Rami Reiner has suggested, or a different Würzburg scribe.[50]

In 1886, Abraham Berliner published another didactic poem on the accents of the EMeT books (Job, Proverbs, and Psalms), which he attributed to Joseph ben Kalonymos. Discovered in a now-lost handwritten appendix to a printed Maḥzor according to the Roman rite (Casal Maggiore, 1485–1486), this poem also featured an acrostic identifying its author as "Joseph ben Kalonymos, be strong," similar to the work published by Steinschneider.[51] In his analysis, Berliner referenced liturgical compositions that Zunz attributed to Joseph ben Kalonymos I and mentioned Joseph ben Kalonymos II, the scribe-masorete of the Xanten Bible. He then questioned, "Ich weiss nicht, welcher ausreichende Grund vorhanden ist, diese beiden deutschen gleichnamigen Schreiber auseinander zu halten" ("I do not know of any sufficient reason to distinguish between these two homonymous German scribes").[52] Berliner further argued that if Joseph began his career as a grammarian around 1236, he could have copied the Xanten Bible later in life. However, the distinction between the two Josephs rests not only on the chronological gap, but more significantly on their distinct scripts. The Masorah of the Wroclaw and Xanten Bibles exhibit fundamentally different handwriting, which precludes any possibility that they are the work of a single individual. Abraham David assumed that Joseph ben Kalonymos II was the grandson of the first but that contention is equally unsupported.[53]

---

47   For the colophon, see above, note 35.

48   Rami Reiner, "'A Tombstone Inscribed': Titles Used to Describe the Deceased on Tombstones from Würzburg between 1148–1147 and 1346," [Hebrew], *Tarbitz* 78 (2009): 134 note 54.

49   Karlheinz Müller, Simon Schwarzfuchs, and Rami Reiner, ed., *Die Grabsteine vom jüdischen Friedhof Würzburg aus der Zeit vor dem Schwarzen Tod (1147–1346)* (Würzburg: Gesellschaft für fränkische Geschichte, 2011), vol. 1, 244 and vol. 2.2, no. 894.

50   Reiner 2009, 134–35. See also the tombstone of Joseph ben Kalonymos ha-Kohen *ha-parnas* (1255), Karlheinz Müller, Simon Schwarzfuchs, and Rami Reiner, vol. 2.1, no. 149. It is, however, unlikely that he was related to Joseph ben Kalonymos's family, as there is no evidence indicating that they were *kohanim*.

51   Abraham Berliner, *Lehrgedicht über die Accente der biblischen Bücher* אמ"ת, *nebst Commentar von Joseph b. Kalonymos (in der 2. Hälfte des 13 Säculums)* (Berlin: Rosenstein & Hildesheimer, 1886). Listed in Davidson 1930, vol. 1, 291, no. 6375. The maḥzor (without the appendix) is housed today in Frankfurt am Main, Universitätsbibliothek, Inc. hebr. 30. See Isaac Merzbacher, *Ohel Abraham* (Catalogue of the Library of Abraham Merzbacher) (Munich: Huber, 1888), 77, no. 1735.

52   Berliner 1886, 4.

53   Abraham David, "Joseph ben Kalonymous Ha-Nakdan I," *Encyclopedia Judaica*, ed. Fred Skolnik, vol. 11 (Farmington Hills: Thomson Gale, 2007), 423.

A close analysis of the sources thus highlights the difficulty. Given the widespread use of the names Joseph and Kalonymos in medieval Ashkenazi communities, definitively identifying individuals with these names becomes virtually impossible without additional information. Therefore, Joseph Gutmann's suggestion about connecting our Joseph to the distinguished Kalonymos family is also problematic, as no evidence beyond shared names and scholarly profiles substantiates such a link.[54] What is clear, then, is that Joseph ben Kalonymos, the vocalizer-masorete of the Ambrosian and Wroclaw Bibles, worked in the Würzburg area during the first half of the thirteenth century. Art historians have established the Würzburg provenance of his Bibles through their extensive imagery. The visual repertoire and decorative style are consistent with Würzburg Christian manuscript illumination of the time.[55] Further reinforcing this connection is the fact that two volumes of biblical commentaries in Munich from 1232/33 were copied by Solomon ben Samuel, who clearly stated in his colophon that he is "of Würzburg."[56] This codex was commissioned by Joseph ben Moses of Olmena, the patron of the Ambrosian Bible, and in an unprecedented move was illuminated in a Würzburg Christian workshop.[57]

When Ḥayyim ben Isaac arrived in Würzburg from La Rochelle, he found a flourishing book industry there, one that could ensure him a stable income. However, the transition from French to German book culture, especially in connection with Masoretic manuscript production, likely necessitated adaptation as there were several differences. Although the shift from a two-column layout in his La Rochelle codices to the three-column format of German Bibles would not have directly impacted his Masoretic work, manuscript size and format might well have presented challenges. In accord with a trend common in German Ashkenaz, the Würzburg codices are substantially larger than Ḥayyim's La Rochelle Bibles, with the Ambrosian Bible measuring 452 × 345 mm and the Wroclaw Bible 488 × 360 mm. Despite their larger physical dimensions, the Masoretic script in the Würzburg codices is smaller and less articulated than that found in the La Rochelle Bibles. In all likelihood, Hayyim reduced his script size to match the script of Joseph ben Kalonymos, which obviously had a slight effect on his writing style. Further, the Würzburg codices contain less Masoretic material. Whereas Ḥayyim's three La Rochelle Bibles consistently feature three lines of upper and four lines of lower *masora magna*, the two Würzburg Bibles reflect a reduced Masoretic apparatus comprising one or two upper and three lower lines. Consequently, Ḥayyim was likely compelled to curtail his usual Masoretic repertoire.

---

54   Gutmann 2000, 149.

55   Shalev-Eyni 2025, 95-97.

56   Munich, Bayerische Staatsbibliothek (henceforth BSB), Cod. hebr. 5/I–II (colophons: Cod. hebr. 5/II, fols. 252v–256r). The manuscript is accessible online at https://t1p.de/yurvw (BSB, Cod. hebr. 5/I); https://t1p.de/on70b (BSB, Cod. hebr. 5/II) [accessed 08/2025].

57   Robert Suckale, "Über den Anteil christlicher Maler an der Ausmalung hebräischer Handschriften der Gotik in Bayern," in: *Geschichte und Kultur der Juden in Bayern*, ed. Manfred Treml and Wolf Weigand, with Evamaria Brockhoff (Munich: K. G. Saur, 1988), 123–34; see also Eva Frojmovic, "Jewish Scribes and Christian Illuminators. Interstitial Encounters and Cultural Negotiation," in: *Between Judaism and Christianity: Art Historical Essays in Honor of Elisheva (Elisabeth) Revel-Neher*, ed. Katrin Kogman-Appel and Mati Meyer (Leiden: Brill, 2008), 281–306. For a description of this manuscript, see Aliza Cohen-Mushlin et al., ed., *Selected Hebrew Manuscripts from the Bavarian State Library* (Wiesbaden: Harrassowitz Verlag, 2020), 41–80.

In this context, the micrography presents a particularly intriguing aspect. Despite Ḥayyim's evident ability to create *masora figurata*, the only micrography he was able to introduce into the Masorah he copied in the Ambrosian Bible was limited to the small images at the end of Masoretic lines discussed earlier. The final folio of the Book of Malachi in the second volume of the Ambrosian Bible is particularly revealing. While Ḥayyim penned the Masorah for most of this volume (except for the initial thirty-two folios), including the upper linear *masora magna* on folio 208r, the lower micrographic Masorah on that same folio was executed by Joseph ben Kalonymos, as Sarit Shalev-Eyni has shown. According to Shalev-Eyni, who has studied the production process and the division of labour between the two masoretes, complex micrographic designs were carried out independently from the linear Masorah copying process and were entrusted to Joseph to ensure a uniform appearance for the entire manuscript despite the change of hands.[58]

Comparing Ḥayyim ben Isaac's "French" micrography in the Cincinnati-Petersburg Bible—which was far more ornate than the Vatican Bibles—with Joseph ben Kalonymos's "German" micrography may reveal an additional reason for limiting Hayyim's contribution to the micrographic Masorah of the Ambrosian Bible. His micrographic *masora magna* in the Cincinnati-Petersburg Bible features simple, predominantly geometrical patterns, where relatively large elements such as circles, triangles, and stars are inserted into the otherwise linear Masorah. In contrast, Joseph ben Kalonymos transformed entire lines of Masorah into intricate interlaces of undulating and bent forms.[59] His micrography exhibits a more elaborate and flowing style, a marked departure from Ḥayyim's comparatively rudimentary designs. These stylistic differences, reflecting the distinct trends and fashions in French and German micrography, may have been key reasons why Ḥayyim ben Isaac was not engaged for large-scale *masora figurata* of the Ambrosian Bible.

Fig. 27 (above). Ḥayyim's micrographic decoration (Cincinnati, Hebrew Union College Library, Ms. 12, fol. 141v).
Fig. 28 (below). Joseph ben Kalonymos's micrographic decoration (Milan, Biblioteca Ambrosiana, B 31 inf., fol. 208r).

---

58   Shalev-Eyni 2025, 88–89.

59   See also Shalev-Eyni 2025, 85.

Ḥayyim ben Isaac's migration from France to Würzburg was not an isolated case. Shemaiah the Frenchman (*ha-tzarfati*), who was involved in the production of the Worms Maḥzor in Würzburg in 1272 possibly as an illuminator, provides another example.[60] The medieval Jewish cemetery in Würzburg attests to other French Jews who undertook similar journeys.[61] Furthermore, Edna Engel's analysis of the Würzburg tombstone inscriptions reveals both German and French scripts. Notably, those in French script, which she finds similar to the script in the second Vatican Bible, date predominantly to the 1230s, coinciding with Ḥayyim ben Isaac's presence in Würzburg:[62]

> It is not surprising that inscriptions on the Würzburg tombstones present the same German style manifest in [German] Ashkenazic manuscripts, as demonstrated on the three stones dated from the 1240s. However, the presence of the French style on Würzburg tombstones from the 1230s raises a question. A comparison of these three inscriptions [tombstones from 1236, 1236/37, and 1239[63]] with a French manuscript [Ḥayyim ben Isaac's second Vatican Bible] demonstrates letters in the distinctive French style, with their small size and weighty appearance (as a result of small interior spaces relative to their wide contours). Horizontal lines are soft and undulated. Vertical lines are inclined, either short or curved, providing a curved appearance to the whole letter.[64]

Engel's analysis indirectly raises a question as to how substantial the migration of French Jewish scribes to Würzburg might have been as it led to the French writing style dominating tombstone inscriptions for an entire decade. In light of the findings presented above, we must also consider whether Ḥayyim ben Isaac could have been one of the French links and whether he himself might have been involved in the preparation of some of the epitaphs. Creating stone inscriptions involved three main stages: first, a community official composed the text based on the patron's requirements; second, an epitaph specialist transferred the text to the stone using crayon or a similar material; third, a stonecutter (carver) incised

---

60   Jerusalem, National Library of Isreal, heb. 4°781/I. Malachi Beit-Arié, "The Worms Mahzor: Its History and its Palaeographic and Codicological Characteristics," in: *Worms Mahzor: Introductory Volume*, ed. Malachi Beit-Arié (Jerusalem: Jewish National and University Library, 1985), 15–16. Solomon ben Samuel of Würzburg, the main scribe of the Munich Commentaries, was also long thought to have French roots. See, for example, Israel Ta-Shma, "משהו על ביקורת המקרא באשכנז בימי הביניים," in: *The Bible in the Light of Its Interpreters: Sarah Kamin Memorial Volume*, ed. Sara Japhet (Jerusalem: Magnes Press, 1994), 453–62. However, a recent study by Jacob Israel Stal suggests he was more likely a German-Ashkenazi scholar who was later mistakenly identified with Solomon ben Samuel *ha-tzarfati*, the author of the biblical commentary *Seder Te'amim*. Jacob Israel Stal, "תולדות רבי שלמה ב''ר שמואל מווירצבורג ומהדורה חדשה לתוספותיו על פירוש התפילה המיוחס לראב''ן," *Yerushatenu* 12 (2023): 17–28.

61   Simon Schwarzfuchs, "The Tombstones from the Würzburg Cemetery. A Detailed Survey," in: *Die Grabsteine vom jüdischen Friedhof Würzburg aus der Zeit vor dem Schwarzen Tod (1147–1346)*, ed. Karlheinz Müller, Simon Schwarzfuchs, and Rami Reiner, vol. 1 (Würzburg: Gesellschaft für fränkische Geschichte, 2011), 233.

62   Edna Engel, "Palaeographic Analysis of the Würzburg Inscriptions," in: *Die Grabsteine vom jüdischen Friedhof Würzburg aus der Zeit vor dem Schwarzen Tod (1147–1346)*, ed. Karlheinz Müller, Simon Schwarzfuchs, and Rami Reiner, vol. 1 (Würzburg: Gesellschaft für fränkische Geschichte, 2011), 90 and 124.

63   Karlheinz Müller, Simon Schwarzfuchs, and Rami Reiner 2011, vol. 2.1, nos. 51, 53, and 60, respectively.

64   Edna Engel, "Calamus or Chisel: On the History of the Ashkenazic Script," in: *Genizat Germania: Hebrew and Aramaic Binding Fragments from Germany in Context*, ed. Andreas Lehnardt (Leiden: Brill, 2010), 190–91.

the letters with a chisel. Engel details the techniques used in this final stage, which was most probably performed by a professional Christian stonecutter.[65] This multi-step procedure significantly altered letter shapes, making direct palaeographic comparison between carved and ink-written letters impossible. However, the general visual similarity between Ḥayyim's script in his Vatican Bibles and some Würzburg stone inscriptions leaves open the possibility of his direct participation.[66] If this assumption holds, his involvement in preparing funerary inscriptions and his limited, anonymized role in the Ambrosian Bible's production might suggest that as a newcomer, Ḥayyim struggled to find his own clientele and was compelled to assist local scribes and masoretes, possibly supplementing his income by writing tombstone texts.

The confluence of manuscript evidence and epigraphy thus provides informative insights into an otherwise undocumented chapter in the history of La Rochelle Jews. Medieval France and Germany were strongly interconnected through extensive economic and scholarly networks, which promoted a vibrant cultural exchange. The decision of Jewish migrants from France to settle in German towns surely contributed to this dynamic interaction between the two regions.[67] For French Jewish bookmakers, Würzburg, a major centre for Jewish book production in the thirteenth century, offered a particularly attractive economic opportunity, which was likely the main reason for their choice to settle there. The specific motivations for Ḥayyim ben Isaac's departure from La Rochelle remain uncertain, but the worsening situation for Jews in Poitou during the reign of Louis IX may well have provided a strong impetus.[68]

4 Ḥayyim ben Isaac's Bibles: From La Rochelle to Navarre

In the years after Ḥayyim ben Isaac's departure from La Rochelle, hostility towards Jews in France intensified, leading to further anti-Jewish measures, which culminated in an attempted expulsion in 1249. That particular expulsion mandate was not implemented, but the Jewish population of Poitou, including the community in La Rochelle, was ultimately expelled in 1291.[69] Whether owing to the expulsion or other factors, Ḥayyim ben Isaac's Bibles left La Rochelle with their owners. While their precise routes remain uncertain, what we do know reveals a migration trajectory that differed from Ḥayyim's travels.

---

65   Engel 2011, 81–82.

66   See the comparisons, Engel 2011, 121–24.

67   For example, Rainer Barzen, "Zur Siedlungsgeschichte der Juden im mittleren Rheingebiet bis zum Beginn des 16. Jahrhunderts," in: *Geschichte der Juden im Mittelalter von der Nordsee bis zu den Südalpen*, ed. Alfred Haverkamp, vol. 1 (Hannover: Hahn, 2002), 67–69; Abraham (Rami) Reiner, "Ashkenaz and France in the Middle Ages – Were They One Cultural Entity? R. Hayim Ha-Kohen as a Test Case," *The Journal of Jewish Studies* 69 (2018): 303–18. See also Ephraim Kanarfogel, *The Intellectual History and Rabbinic Culture of Medieval Ashkenaz* (Detroit: Wayne State University Press, 2013), 2–9.

68   Vincent 1930, 270–73.

69   Gross 1897, 312; Dorin Rowan, *No Return: Jews, Christian Usurers, and the Spread of Mass Expulsion in Medieval Europe* (Princeton: Princeton University Press, 2023), 163–64.

A lengthy bill of sale in the first Vatican Bible, written in Franco-Ashkenazi semi-cursive, records its sale in אשטלא מגדול in 1348 for sixteen gold florins (fol. 481v).[70] This place name most likely refers to Estella in Navarre, a town known to have had two castles, Zalatambor and Belmecher (the מגדול mentioned). An alternative identification as Étoile-sur-Rhône in Provence is less probable owing to the fact that there is no evidence of castles having been there.[71] It was in Navarre that the manuscript received its crude decorations: colourful panels around initial words, decorative signs for *parashot*, and various marginal scrolls and zoomorphic images.[72] The decoration, which often interferes with the text and Masoretic annotations, indicates that the manuscript was not originally intended for illumination, so no space was left for it. The script employed in the decoration reveals the Sephardi type of writing. A key example is the letter *peh* marking the *parashot*; the *peh* has a pointed top typical of the Sephardi square script, a feature that distinguishes it from the flat-topped *peh* common in French/Ashkenazi scripts (fig. 29). Later, having been moved from Estella to Venice, the first Vatican Bible was acquired there in 1464 by the printer Meshulam Cusi ben Moses Jacob Rappa of Piove di Sacco.[73]

Fig. 29. Later added decorative sign for a *parashah* (Vatican, Biblioteca Apostolica, ebr. 468, fol. 10v).

The widespread persecutions and expulsions in the fourteenth century led to Navarre being overwhelmed by Jews who arrived from different regions of France, including Poitou.[74] Thus, it is hardly surprising that the second Vatican Bible appears to have followed a similar

70   Beit-Arié and Richler 2008, 407.

71   Olszowy-Schlanger 2023, 33 note 12 mentions both. Cf. Gross 1897, 52–55.

72   The decoration is described in Luisa Mortara Ottolenghi, "La Bibbia di La Rochelle," in: *Les Juifs au regard de l'histoire. Mélanges en l'honneur de Bernard Blumenkranz*, ed. Gilbert Dahan (Paris: Picard, 1985), 149–56.

73   Beit-Arié and Richler 2008, 406–407.

74   Béatrice Leroy, "Entre deux mondes politiques: les Juifs du royaume de Navarre à la fin du Moyen Age," *Revue Historique*, T. 275, Fasc. 1, 557 (1986): 34–36; William C. Jordan, *The French Monarchy and the Jews* (Philadelphia: University of Pennsylvania Press, 1989), 234.

trajectory. The manuscript was in Navarre in the second half of the fourteenth century, as the property of one Ezmel Azemel, who inscribed a list of his books in Sephardi semi-cursive script at the end of the manuscript (fol. 558r). Likely a notable figure in the Jewish community of Tudela whose name appears in contemporary documents, this Ezmel Azemel may or may not have been the same Ezmel Azemel of Tarazona who was active in Borja and is mentioned in other sources.[75] The second Vatican Bible remained in the Azemel family before it was taken to Avignon and eventually Italy, where it was sold in 1580 to Giovanni Battista Eliano, grandson of the grammarian Elia Levita.[76]

Similar to the Vatican Bibles, the Cincinnati-Petersburg Bible likely circulated within a Sephardi milieu during the fourteenth or fifteenth century. A front flyleaf added there features Sephardi script and decoration (figs. 30, 31). Its recto is adorned with a central double arch enclosing *masora magna*, framed by Joshua 1:8 in display script. The inclusion of this verse ("לא ימוש ספר התורה הזה...") hints that this folio might have originally been the last page of a Sephardi Bible. The space surrounding the arch is filled with micrographic interlaces of *masora magna*, bordered by verses from Psalms in display script. On the verso, a micrographic rosette is similarly framed by verses from Psalms. As Dalia-Ruth Halperin notes, the "clockwise" reading direction of such frames is a common characteristic of Catalan Bibles.[77] However, further research will be necessary to date and localize this added folio with greater precision.

Fig. 30. Later added flyleaf, recto (Cincinnati, Hebrew Union College Library, Ms. 12, front flyleaf recto [fol. 1r]).

Fig. 31. Later added flyleaf, verso (Cincinnati, Hebrew Union College Library, MS 12, front flyleaf verso [fol. 1v]).

---

75   See Béatrice Leroy, "Les Comptes d'Abraham Enxoep au début du XVe siècle," *Príncipe de Viana* 38 (1977): 186; Béatrice Leroy, *The Jews of Navarre in the Late Middle Age* (Jerusalem: Magnes, 1985), 28. For Ezmel Azemel of Tarazona, see Joaquín Vispe Martínez, *Los libros de la pecha de Borja (años 1377–1397)* (Zaragoza: Institución Fernando el Católico, 2022), e.g., 20, 30, 38.

76   Beit-Arié and Richler 2008, 418.

77   Dalia-Ruth Halperin, "Clockwise–Counterclockwise: Calligraphic Frames in Sephardic Hebrew Bibles and Their Roots in Mediterranean Culture," *Manuscript Studies* 4/2 (2019): 231–69.

Another possibility is that this Sephardi leaf was added to Ḥayyim ben Isaac's manuscript not in Spain but much later in Crimea by Abraham Firkowicz (1787–1874), a Karaite leader infamous for forging manuscript and tombstone inscriptions.[78] Firkowicz's ownership of the Cincinnati-Petersburg Bible is attested by his personal copy of Ephraim Pinner's *Prospectus*, which describes two folios from this codex.[79] In his handwritten note there, Firkowicz claimed to have found the Cincinnati-Petersburg Bible in Kaffa (Theodosia).[80] Just as he did with his other Hebrew manuscripts, Firkowicz manipulated the summary of the verses at the end of Jeremiah, transforming it into a colophon that falsely dates the manuscript to a significantly earlier time: "סליק בשנ[ה] ארבעת אלפי[ם] ושמנה מאות וששים [ליציר]ה" ("completed in the year 4860 [1100] of the Creation").[81] By fabricating evidence, Firkowicz intended to provide spurious support for an early Karaite settlement on the Crimean Peninsula.[82] It was likely at the hands of Firkowicz that the Cincinnati-Petersburg Bible was disassembled with twenty-six folios ending up in St. Petersburg (the First Firkowicz Collection) and the rest of the manuscript sold to book dealers in Germany and later England, from where it was eventually acquired by the Hebrew Union College in Cincinnati.[83]

5 Conclusions

During the Middle Ages, the constant movement of Jews and their books between France, Ashkenaz, and other more distant locations was a fundamental aspect of Jewish life. This migration helped spread scribal and decorative traditions beyond their native regions, inevitably impacting manuscript production in new areas. Traditionally, scholars have relied on textual clues—such as scribes' self-references as "Tzarfati" or "Ashkenazi" or explicit mentions of their origins in a manuscript's colophon—to trace these movements. However, it is far more challenging when scribes are silent about their origins, leaving only their script and decorative styles as clues. While non-verbal evidence can seem less certain, the more manuscripts that survive from a single scribe, the more definitive our conclusions can be.

78   Malachi Beit-Arié, "Supplement: The Forgery of Colophons and Ownership of Hebrew Codices and Scrolls by Abraham Firkowicz," in: *Fakes and Forgeries of Written Artefacts from Ancient Mesopotamia to Modern China*, ed. Cécile Michel and Michael Friedrich (Berlin: De Gruyter, 2020), 196–205; Dan Shapira, "*Et tout le reste est littérature*, or: Abraham Firkowicz, the Writer with a Chisel," in: *Fakes and Forgeries of Written Artefacts from Ancient Mesopotamia to Modern China*, ed. Cécile Michel and Michael Friedrich (Berlin: De Gruyter, 2020), 173–94.

79   Ephraim M. Pinner, *Prospectus der der Odessaer Gesellschaft für Geschichte und Alterthümer gehörenden ältesten hebräischen und rabbinischen Manuscripte: ein Beitrag zur biblischen Exegese* (Odessa: Die Gesellschaft für Geschichte und Alterthümer, 1845), 49–50, no. 19.

80   Harkavy and Strack 1875, 150.

81   HUC, Ms. 12, fol. 2r. Blank 1931–1932, 232–33.

82   For more on this subject, see Golda Akhiezer, "Historical Research and Forgeries in the Age of Nationalism: The Case of the Russian Empire Between Jews and Russians," *East European Jewish Affairs* 48/2 (2018): 101–17.

83   Blank 1931–1932, 232.

The chronological and geographical gaps between Ḥayyim ben Isaac's manuscripts—the two Vatican and Ambrosian Bibles—would have been difficult to bridge without the Cincinnati-Petersburg Bible. This codex provides a tangible link, illustrating the subtle transformation of Ḥayyim ben Isaac's script and decorative repertoire in comparison with his earlier La Rochelle manuscripts. At this point, it is crucial to note once again the contribution of Sarit Shalev-Eyni, who, even without a linking manuscript, was still able to establish the striking similarities between Ḥayyim ben Isaac's work in the La Rochelle codices and the Ambrosian Bible. The transition from one scribal tradition to another was not always seamless, even when the traditions were similar. By following Ḥayyim ben Isaac's 23-year career, we could highlight the difficulties a newly arrived scribe from France may have faced integrating into an Ashkenazi book culture and finding his own clientele. More broadly, his individual migration narrative reflects a larger phenomenon: the presence of French Jews, including bookmakers, in Würzburg, which left a clear imprint on the local cultural output of the time.

6 Bibliography

Akhiezer, Golda. 2018. "Historical Research and Forgeries in the Age of Nationalism: The Case of the Russian Empire Between Jews and Russians," *East European Jewish Affairs* 48/2: 101–17.

Attia, Elodie. 2014. "Targum Layouts in Ashkenazi Manuscripts. Preliminary Methodological Observations," in: *A Jewish Targum in a Christian World*, ed. Alberdina Houtman, Eveline van Staalduine-Sulman, and Hans-Martin Kirn (Leiden: Brill), 99–122.

Attia, Elodie. 2015. *The Masorah of Elijah ha-Naqdan. An Edition of. Ashkenazic Micrographical Notes* (Berlin: De Gruyter).

Attia, Élodie. 2020. "On Some Variants in Ashkenazic Biblical Manuscripts from the Twelfth and Thirteenth Centuries," in: *Studies in Semitic Vocalisation and Reading Traditions*, ed. Aaron D. Hornkohl and Geoffrey Khan (Cambridge: Cambridge University Press), 593–616.

Barzen, Rainer. 2002. "Zur Siedlungsgeschichte der Juden im mittleren Rheingebiet bis zum Beginn des 16. Jahrhunderts," in: *Geschichte der Juden im Mittelalter von der Nordsee bis zu den Südalpen*, ed. Alfred Haverkamp, vol. 1 (Hannover: Hahn), 55–74.

Beit-Arié, Malachi and Benjamin Richler. 2008. *Hebrew Manuscripts in the Vatican Library: Catalogue* (Vatican City: Biblioteca Apostolica Vaticana).

Beit-Arié, Malachi. 1985. "The Worms Mahzor: Its History and its Palaeographic and Codicological Characteristics," in: *Worms Mahzor: Introductory Volume*, ed. Malachi Beit-Arié (Jerusalem: Jewish National and University Library), 13–35.

Beit-Arié, Malachi. 2020. "Supplement: The Forgery of Colophons and Ownership of Hebrew Codices and Scrolls by Abraham Firkowicz," in: *Fakes and Forgeries of Written Artefacts from Ancient Mesopotamia to Modern China*, ed. Cécile Michel and Michael Friedrich (Berlin: De Gruyter), 196–205.

Beit-Arié, Malachi. 2022. *Historical and Comparative Typology of Medieval Hebrew Codices based on the Documentation of the Extant Dated Manuscripts until 1540 Using a Quantitative Approach*, English version (Jerusalem and Hamburg: Israel Academy of Sciences and Humanities), accessible online at https://t1p.de/ze6ki.

Berliner, Abraham. 1886. *Lehrgedicht über die Accente der biblischen Bücher* אמ"ת, *nebst Commentar von Joseph b. Kalonymos (in der 2. Hälfte des 13 Säculums)* (Berlin: Rosenstein & Hildesheimer).

Bernheimer, Carlo. 1933. *Codices hebraici Bybliothecae Ambrosianae* (Florence: Leon S. Olschki).

Blank, Sheldon H. 1931–1932. "A Hebrew Bible MS. in the Hebrew Union College Library," *Hebrew Union College Annual* 8/9: 229–55.

Brüll, Nehemias. 1887. "Recensionen," *Jahrbücher für jüdische Geschichte und Litteratur* 8: 118–21.

Cohen-Mushlin, Aliza, et al., ed. 2020. *Selected Hebrew Manuscripts from the Bavarian State Library*, ed. 2020. (Wiesbaden: Harrassowitz Verlag).

David, Abraham. 2007. "Joseph ben Kalonymous Ha-Nakdan I," in: *Encyclopedia Judaica*, ed. Fred Skolnik, vol. 11 (Farmington Hills: Thomson Gale), 423–24.

Davidson, Israel. 1930. *Thesaurus of Mediaeval Hebrew Poetry* [Hebrew], vols. 1 and 3 (New York: Jewish Theological Seminary of America).

Del Barco, Javier. 2017. "From the Archaeological Turn to 'Codicologie Structurale': The Concept of Codicology and the Material Description of Hebrew Manuscripts," in: *Jewish Manuscript Cultures*, ed. Irina Wandrey (Berlin: De Gruyter), 3–28.

Engel, Edna. 2010. "Calamus or Chisel: On the History of the Ashkenazic Script," in: *Genizat Germania*: *Hebrew and Aramaic Binding Fragments from Germany in Context*, ed. Andreas Lehnardt (Leiden: Brill), 183–97.

Engel, Edna. 2011. "Palaeographic Analysis of the Würzburg Inscriptions," in: *Die Grabsteine vom jüdischen Friedhof Würzburg aus der Zeit vor dem Schwarzen Tod (1147–1346)*, ed. Karlheinz Müller, Simon Schwarzfuchs, and Rami Reiner, vol. 1 (Würzburg: Gesellschaft für fränkische Geschichte), 81–143.

Engel, Edna. 2014. "Between France and Germany: Gothic Characteristics in Ashkenazic Script," in: *Manuscrits hébreux et arabes: Mélanges en l'honneur de Colette Sirat*, ed. Nicholas de Lange and Judith Olszowy-Schlanger (Turnhout: Brepols), 197–219.

Frojmovic, Eva. 2008. "Jewish Scribes and Christian Illuminators. Interstitial Encounters and Cultural Negotiation," in: *Between Judaism and Christianity: Art Historical Essays in Honor of Elisheva (Elisabeth) Revel-Neher*, ed. Katrin Kogman-Appel and Mati Meyer (Leiden: Brill), 281–306.

Gross, Heinrich. 1897. *Gallia Judaica, dictionnaire géographique de la France* (Paris: Cerf).

Gutmann, Joseph. 2000. "Joseph ben Kalonymos; The Enigma of a Thirteenth-Century Hebrew Scribe," in: *A Crown for a King. Studies in Jewish Art, History and Archaeology in Memory of Stephen S. Kayser*, ed. Shalom Sabar, Steven Fine, and William Kramer (Jerusalem: Gefen), 147–51.

Halperin, Dalia-Ruth. 2014. "Decorated Masorah on the Openings between Quires," *Journal of Jewish Studies* 65/2: 323–48.

Halperin, Dalia-Ruth. 2019. "Clockwise–Counterclockwise: Calligraphic Frames in Sephardic Hebrew Bibles and Their Roots in Mediterranean Culture," *Manuscript Studies* 4/2: 231–436.

Harkavi, Abraham and Hermann L. Strack. 1875. *Katalog der hebräischen und samaritanischen Handschriften der Kaiserlichen öffentlichen Bibliothek in St. Petersburg* (St. Petersburg: C. Ricker).

Jordan, William C. 1989. *The French Monarchy and the Jews* (Philadelphia: University of Pennsylvania Press).

Kanarfogel, Ephraim. 2013. *The Intellectual History and Rabbinic Culture of Medieval Ashkenaz* (Detroit: Wayne State University Press).

Kroeze, David J. D. and Eveline van Staalduine-Sulman. 2006. "A Giant among Bibles: 'Erfurt 1' or Cod. Or. Fol. 1210–1211 at the Staatsbibliothek zu Berlin," *Aramaic Studies* 4/2, 197–209.

Leroy, Béatrice. 1977. "Les Comptes d'Abraham Enxoep au début du XVe siècle," *Príncipe de Viana* 38: 177–205.

Leroy, Béatrice. 1985. *The Jews of Navarre in the Late Middle Age* (Jerusalem: Magnes).

Leroy, Béatrice. 1986. "Entre deux mondes politiques: les Juifs du royaume de Navarre à la fin du Moyen Age," *Revue Historique*, T. 275, Fasc. 1, 557: 29–37.

Loeb, Isidore. 1884. "Deux livres de commerce du commencement du XIVe siècle," *Revue des études juives* 8/16: 161–96.

Luzzatto, Aldo and Luisa Mortara Ottolenghi. 1972. *Hebraica Ambrosiana: Catalogue of Undescribed Hebrew Manuscripts in the Ambrosiana Library. Description of Decorated and Illuminated Hebrew Manuscripts in the Ambrosiana Library* (Milan: Edizioni Il Polifilo).

Margoliouth, George. 1899. *Catalogue of the Hebrew and Samaritan Manuscripts in the British Museum*, vol. 1 (London: British Museum).

Martínez, Joaquín Vispe. 2022. *Los libros de la pecha de Borja (años 1377–1397)* (Zaragoza: Institución Fernando el Católico, 2022).

Merzbacher, Isaac. 1888. *Ohel Abraham* (Catalogue of the Library of Abraham Merzbacher) (Munich: Huber).

Metzger, Thérèse. 1994. *Die Bibel von Meschullam und Joseph Qalonymos*: *Ms. M 1106 der Universitätsbibliothek Breslau (Wroclaw)* (Würzburg: Kommissionsverlag Ferdinand Schöningh).

Müller, Karlheinz, Simon Schwarzfuchs, and Rami Reiner, ed. 2011. *Die Grabsteine vom jüdischen Friedhof Würzburg aus der Zeit vor dem Schwarzen Tod (1147–1346)*, 3 vols. (Würzburg: Gesellschaft für fränkische Geschichte).

Nahon, Gérard. 1966. "Les Juifs dans les domaines d'Alfonse de Poitiers, 1241–1271," *Revue des études juives* 125/1–3: 167–211.

Olszowy-Schlanger, Judith. 2017. "The Early Developments of Hebrew Scripts in North-Western Europe," *Gazette du livre médiéval* 63: 1–19.

Olszowy-Schlanger, Judith. 2018. "Hebrew Books," in: *The European Book in the Twelfth Century*, ed. Erik Kwakkel and Rodney Thomson (Philadelphia: University of Pennsylvania Press,), 164–65.

Olszowy-Schlanger, Judith. 2023. *Des juifs, des chrétiens et des livres. Manuscrits hébreux médiévaux de la France du Nord* (Paris: Éditions de la Bibliothèque nationale de France).

Ottolenghi, Luisa Mortara. 1985. "La Bibbia di La Rochelle," in: *Les Juifs au regard de l'histoire. Mélanges en l'honneur de Bernard Blumenkranz*, ed. Gilbert Dahan (Paris: Picard), 149–56.

Peretz, Yossi. 2008. "שניים מקרא ואחד תרגום: לאור הממצא בכתבי היד האשכנזיים של התורה בימי הביניים," *Tallelei orot* 14 (2008), 53–61.

Pinner, Ephraim M. 1845. *Prospectus der der Odessaer Gesellschaft für Geschichte und Alterthümer gehörenden ältesten hebräischen und rabbinischen Manuscripte: ein Beitrag zur biblischen Exegese* (Odessa: Die Gesellschaft für Geschichte und Alterthümer).

Reiner, Abraham (Rami). 2009. "'A Tombstone Inscribed': Titles Used to Describe the Deceased on Tombstones from Würzburg between 1148–1147 and 1346," [Hebrew], *Tarbitz* 78: 123–52.

Reiner, Abraham (Rami). 2018. "Ashkenaz and France in the Middle Ages – Were They One Cultural Entity? R. Hayim Ha-Kohen as a Test Case," *The Journal of Jewish Studies* 69: 303–18.

Rowan, Dorin. 2023. *No Return: Jews, Christian Usurers, and the Spread of Mass Expulsion in Medieval Europe* (Princeton: Princeton University Press).

Schwarzfuchs, Simon. 2011. "The Tombstones from the Würzburg Cemetery. A Detailed Survey," in: *Die Grabsteine vom jüdischen Friedhof Würzburg aus der Zeit vor dem Schwarzen Tod (1147–1346)*, ed. Karlheinz Müller, Simon Schwarzfuchs, and Rami Reiner, vol. 1 (Würzburg: Gesellschaft für fränkische Geschichte), 213–34.

Shalev-Eyni, Sarit. 2010. *Jews among Christians: Hebrew Book Illumination from Lake Constance* (London: Miller, 2010).

Shalev-Eyni, Sarit. 2018. "Ambrosian Bible", in: *Grove Art Online*, https://t1p.de/vh3qw.

Shalev-Eyni, Sarit. 2025. "The Making of the Ambrosian Bible and the Emergence of the German-Ashkenazi Variant of the Masoretic Biblical Codex," *Corpus Masoreticum Working Papers* 11 (2025): 80-103.

Shapira, Dan. 2020. "*Et tout le reste est littérature*, or: Abraham Firkowicz, the Writer with a Chisel," in: *Fakes and Forgeries of Written Artefacts from Ancient Mesopotamia to Modern China*, ed. Cécile Michel and Michael Friedrich (Berlin: De Gruyter), 173–94.

Sirat, Colette. 2002. *Hebrew Manuscripts of the Middle Ages* (Cambridge: Cambridge University Press).

Stal, Jacob Israel. 2023. תולדות רבי שלמה ב"ר שמואל מווירצבורג ומהדורה חדשה לתוספותיו על פירוש התפילה המיוחס לראב"ן," *Yerushatenu* 12: 17–49.

Steimann, Ilona. 2025. "The Arundel and Xanten Bibles: A Model and a Copy?" The Arundel and Xanten Bibles: A Model and a Copy?," *Corpus Masoreticum Working Papers* 10: 48–79.

Steimann, Ilona. [2026]. "'Masorah for Embroidery': Regional Approaches to Micrography in Medieval Germany and France" [forthcoming].

Steinschneider, Moriz. 1866. "מזכרת המזכיר. רשימות והודעות מתוך כתבי יד פעם בארוכה ופעם בקצרה," *Jeschurun*: *Zeitschrift für die Wissenschaft des Judenthums* 5: 146–52.

Steinschneider, Moriz. 1878. *Verzeichniss der Hebraeischen Handschriften*, vol. 1, Die Handschriften-Verzeichnisse der Königlichen Bibliothek zu Berlin 2 (Berlin: Vogt).

Stern, David. 2017. *The Jewish Bible: A Material History* (Washington, DC: University of Washington Press).

Suckale, Robert. 1988. "Über den Anteil christlicher Maler an der Ausmalung hebräischer Handschriften der Gotik in Bayern," in: *Geschichte und Kultur der Juden in Bayern*, ed. Manfred Treml and Wolf Weigand, with Evamaria Brockhoff (Munich: K. G. Saur), 123–34.

Talbi, Hayyim. 2010. "להשתלשלותה של קריאת שניים מקרא ואחד תרגום," *Knishta* 4: 155–90.

Ta-Shma, Israel. 1994. "משהו על ביקורת המקרא באשכנז בימי הביניים," in: *The Bible in the Light of Its Interpreters: Sarah Kamin Memorial Volume*, ed. Sara Japhet (Jerusalem: Magnes Press), 453–62.

Urbach, Efraim, ed. 1939 and 1962. Abraham bar Azriel's *Sefer Arugat ha-Bosem* [Hebrew], vols. 1 and 4 (Jerusalem: Mekitzei nirdamim).

Vincent, Dr. 1930. "Les Juifs du Poitou au bas Moyen Age," *Revue d'histoire économique et sociale* 18/3: 265–313.

Zunz, Leopold. 1845. *Literaturgeschichte der synagogalen Poesie* (Berlin: Gerschel).

Zunz, Leopold. 1845. *Zur Geschichte und Literatur* (Berlin: Veit).