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## The Arundel and Xanten Bibles: A Model and a Copy?

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## The Arundel and Xanten Bibles: A Model and a Copy?

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### Summary

Based on a newly established attribution of two Bibles to a single scribe-masorete, Joseph of Xanten ben Kalonymos of Neuss, this paper discusses their model-copy relationship. It analyzes the copying process and identifies additional hands involved, which contributed to the complex dynamics between models and copied texts. The discussion also reveals how Ashkenazi scribes perceived their own Masoretic tradition compared to the “original” tradition that governed ancient Near Eastern Masoretic codices.

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# 1 Introduction

In the introduction to his *Massoretico-Critical Edition of the Hebrew Bible*, Christian Ginsburg highlighted a particularly significant manuscript housed in the British Library in London: MS Arundel Oriental 16 (henceforth, the Arundel Bible).<sup>1</sup> According to Ginsburg:

This magnificent MS. in huge and broad folio is manifestly a Model Codex. It is written in a beautiful German hand, *circa* A. D. 1120. It consists of 389 folios and contains the Prophets and the Hagiographa, with vowel-points, accents, and both the Massorah Parva and the Massorah Magna. ... the Massorah in this MS. is most copious.<sup>2</sup>

While Ginsburg was engaged with his edition of the Masorah in London, a parallel discovery was unfolding in another part of Europe. In Frankfurt am Main, Meir ben Shalom Judah ha-Levi Goldschmidt, a Jewish book collector, identified another important treasure trove of Masoretic material: a Bible now housed in the New York Public Library in two volumes, MS Spencer 1/I–II (henceforth, the Xanten Bible).<sup>3</sup> An inscription at the beginning of the Xanten Bible recounts its significance:

זה ספר תנ"ך כ"י בב' חלקים כתב הדר בתכלית היופי ... ויראהו שם המדקדק הגדול מהור"ר  
וואלף היידענהיים ז"ל וימצא בו מסורת הרבה אשר לא נמצאו בספרי תנ"ך הנדפסים עד הלום  
וישען עליו ברוב הגהותיו.<sup>4</sup>

(This is a Bible in two volumes, exceptionally beautifully written ... and our teacher, the great grammarian Rabbi Wolf Heidenheim, of blessed memory, examined it there [in Frankfurt] and identified within it a considerable amount of Masorah not yet found in printed Bibles, upon which he relied extensively in his scholarly work).

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1 George Margoliouth, *Catalogue of the Hebrew and Samaritan Manuscripts in the British Museum*, vol. 1 (London: British Museum, 1899), 85–86, no. 118. The manuscript is accessible online at <https://t1p.de/6u8iu> [accessed 05/2025].

2 Christian D. Ginsburg, *Introduction of the Massoretico-Critical Edition of the Hebrew Bible* (London: Trinitarian Bible Society, 1897), 500 and 512.

3 The manuscript was briefly described in Joshua Bloch, *The People and the Book: The Background of Three Hundred Years of Jewish Life in America* (New York: New York Public Library, 1954), 31, no. 3; David Sandler Berkowitz, ed., *In Remembrance of Creation: Evolution of Art and Scholarship in the Medieval and Renaissance Bible* (Waltham: Brandeis University, 1968), no. 15 and further references there. See also Sfar-Data Questionnaire #D151. The manuscript is accessible online at <https://t1p.de/1jxaf> (vol. I); <https://t1p.de/f9kvf> (vol. II) [accessed 05/2025].

4 This inscription appears in the beginning of the Xanten Bible (third front flyleaf, recto) and mentions its former owners, Jacob Shemesh and Shalom Seligman. In the lower part of the inscription, Meir Goldschmidt quoted the words of Wolf Heidenheim verbatim.

Despite the individual scholarly efforts of Ginsburg and Heidenheim, who studied these remarkable Bibles for their extensive Masoretic apparatus, they both remained unaware of a parallel manuscript elsewhere in Europe. Today, however, advancements in digital technologies allow us to bridge these historical gaps. We can now connect fragmented remnants of what was once a flourishing trade in Masoretic manuscripts in Ashkenaz and construct a more complete picture of their origins and relationships.

In this essay, I demonstrate that these two Bibles were, in fact, produced by the same scribe-masorete, Joseph of Xanten ben Kalonymos Neuss. His identity in connection with the Arundel Bible can be established through the Xanten Bible, which contains a colophon. Despite sharing the same scribe-masorete, these Bibles diverge in many ways, primarily owing to their distinct purposes: the Arundel Bible was created as a personal copy to serve as a model for other manuscripts Joseph produced on demand, whereas the Xanten Bible was a commissioned codex partly copied from the Arundel Bible. The focus of this essay is on the intricate relationship between a model (the Arundel Bible) and a subsequent copy (the Xanten Bible) and on illuminating the complex dynamics between them.

## 2 The Hands Behind the Arundel and Xanten Bibles

The Arundel Bible, a large (413 × 312 mm) vocalized and accentuated codex, was written in a formal, square Ashkenazi script. The text is laid out in three columns, each page having thirty lines. Although only the Prophets and Writings have survived, we can reasonably assume that this was once a complete Bible.<sup>5</sup> Copied on parchment with nearly indistinguishable hair and flesh sides, the manuscript features pricking in the inner and outer margins for horizontal lines, plummet ruling, and quires of eight folios, as was typical of Ashkenazi codices produced ca. 1300. There is no extant colophon in the Arundel Bible, but its scribe-masorete embellished the name Joseph in the *masora magna* on folios 385r and 386r (fig. 1).

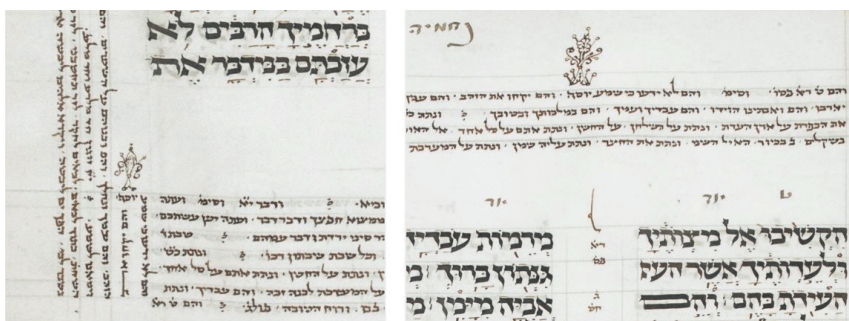


Fig. 1. The Arundel Bible, Joseph, the scribe-masorete (London, British Library, Arundel Or. 16, fols. 385r and 386r).

<sup>5</sup> For the content, see Table 7 below. The manuscript is incomplete; for missing folios, see Ginsburg 1897, 501; Margoliouth 1899, 85.



The unique features of Joseph’s hand in terms of its style, letter morphology, and graphic devices in both the main text and the Masorah identify him as Joseph of Xanten ben Kalonymos of Neuss, the scribe-masorete of the Xanten Bible, which is of comparable size (410 × 310 mm) and shares a layout as well as a codicological profile with the Arundel manuscript. Joseph’s script in both Bibles is characterized by elongated letters that lean slightly to the left owing to slanted verticals (figs. 2, 3). The use of straight, parallel top bars on letters such as *bet* and *kaf*, along with elongated, parallel roofs on the letters *alef*, *ayin*, *shin*, and others creates a distinct rectangular appearance, which contributes to the steady rhythm of the written line. The delicate shading, achieved by contrasting wide horizontal strokes with thin verticals, and subtle drop-shaped elements and bifurcations are associated with the Ashkenazi script of the period. Serif placement is consistent across both codices: tiny hairlines often embellish the edges of upper bars, while more prominent serifs adorn the tops of the *alef*, *het*, and *peh*. This remarkable consistency in style and letter morphology, as shown in Table 1, unequivocally confirms that the same hand was responsible for copying both the Arundel and Xanten Bibles.



Fig. 2. The Arundel Bible, script of Joseph of Xanten ben Kalonymos (London, British Library, Arundel Or. 16, fol. 3v).



Fig. 3. The Xanten Bible, script of Joseph of Xanten ben Kalonymos (New York, Public Library, Spencer 1, vol. I, fol. 248v).

**Table 1:** The letters formed by Joseph of Xanten ben Kalonymos

	<i>alef</i>	<i>gimel</i>	<i>mem</i>	<i>ayin</i>	<i>peh</i>	<i>shin</i>
The Arundel Bible	א	ג	מ	ע	פ	ש
The Xanten Bible	א	ג	מ	ע	פ	ש

Joseph’s Masoretic script, though featuring letters wider than they are high, mirrors the stylistic and morphological traits found in his square script in both Bibles. A prime exam-

ple is his *alef*: despite being significantly reduced in size and thus more schematic, it still retains a pronounced serif attached to its diagonal. The graphic devices and abbreviations for the Tetragrammaton and the introductory word for Masoretic signs (וסימן [ניהון]) are identical in the Masorah of both the Arundel and Xanten Bibles (figs. 4, 5), which supports the attribution of both Bibles to Joseph's hand.

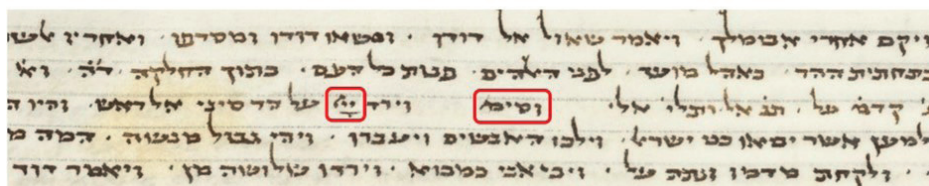
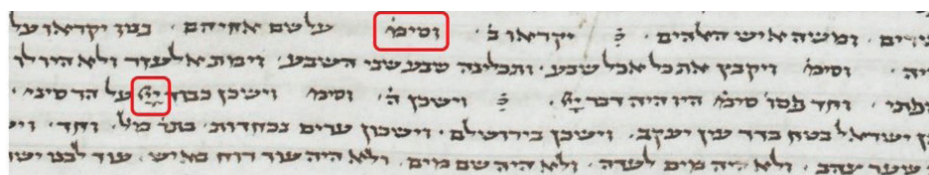


Fig. 4 (above). The Arundel Bible, Masorah of Joseph of Xanten ben Kalonymos (London, British Library, Arundel Or. 16, fol. 252v).

Fig. 5 (below). The Xanten Bible, Masorah of Joseph of Xanten ben Kalonymos (New York, Public Library, Spencer 1, vol. I, fol. 224r).

In contrast to the Arundel Bible, the Xanten Bible provides explicit information about its production (vol. I, fol. 253r):

אני יוסף מזנטא בר' קלונימוס מנושא כתבתי ומסרתי אילו עשרים וארבעה ספרים לקרובי ר' משה בר' יעקב וסימתי ביום ב' ב"א בחדש סיון שנת חמשת אלפים וארבע וחמשים שנה לבריאת עולם והבורא יזכהו להגות בו הוא ובניו ובני בניו עד סוף כל הימים אמן ואמן סלה.

(I, Joseph of Xanten ben Kalonymos of Neuss, wrote [the consonantal text] and furnished with the Masorah these Twenty-Four Books [the Bible] for my relative, Rabbi Moses bar Jacob, and I completed it on Monday, the 11<sup>th</sup> of Sivan, in the year 5054 of the creation of the world [7 June 1294], and may the Creator grant him [the ability] to recite it, him, his children, and his children's children, until the end of days, *amen* and *amen sela*).

To avoid any historical confusion, we have to distinguish our Joseph ben Kalonymos from an earlier masorete of the same name who was active in Würzburg in the 1230s.<sup>6</sup> By referencing Neuss and Xanten—towns in the Lower Rhine region<sup>7</sup>—Joseph identified his

6 For detailed discussion on the distinctions between this and the earlier Joseph ben Kalonymos and his manuscripts, see Ilona Steimann, "From La Rochelle to Würzburg and Beyond: Four Bibles from the Hand of the Migrating Scribe-Masorete, Ḥayyim ben Isaac" (forthcoming) and references there.

7 For Jewish communities of Neuss and Xanten, see Zvi Avineri, ed., *Germania Judaica*, vol. 2/2 (Tübingen: Mohr Siebeck, 1968), 581–82 and 936–37, respectively. See also Jakob Freimann, "Zur Geschichte der Juden in Xanten," in: *Festschrift zu Simon Dubnows 70. Geburtstag*, ed. Arndt Engelhardt (Berlin: Jüdischer Verlag, 1930), 163–71.

and his father's origins, but not the place of production of the Xanten Bible. As there is no reason to assume that he moved far away, Joseph of Xanten ben Kalonymos likely resided in another Lower Rhine town when he copied the Xanten and Arundel Bibles. Both Bibles were most probably produced within the same decade, with the Arundel Bible preceding the Xanten Bible, as detailed below.

Joseph of Xanten ben Kalonymos created the Arundel and Xanten Bibles, but we can discern the contributions of other hands in both as well. One contributor was Jacob, who served as the vocalizer and proofreader for the Arundel Bible. Jacob marked his name on many folios, notably decorating its vocalization rather than the letters themselves (fig. 6).<sup>8</sup> His marginal notes reveal three instances where sections of the Arundel Bible's text had already been vocalized by someone else, possibly by Joseph himself: "כבר ננקד דף זה" ("This folio was already vocalized"; fol. 248v); "ד' שורות כבר ננקדו" ("Four lines have already been vocalized"; 321v); "עמוד זה לא נקד יעק" ("This column was not vocalized [by me], Jacob"; fol. 348v). Having completed the vocalization and accentuation, Jacob compared his work to one or another authoritative textual version(s), documenting any discrepancies in the margins. His notes, penned in a minute semi-cursive script, typically begin with "כן לפני" ("so is [in the codex that I had] before me") or its abbreviation כ"ל (*ken lefanai*), often followed by יעק' (abbreviated "Jacob").<sup>9</sup> Jacob's annotations, indicative of his exceptional grammatical expertise, led Ginsburg to identify him as Rabbi Jacob Nakdan, who flourished around 1130.<sup>10</sup> Consequently, Ginsburg erroneously dated the Arundel Bible to ca. 1120, significantly earlier than its actual production.



Fig. 6. The Arundel Bible, Jacob, the vocalizer (London, British Library, Arundel Or. 16, fol. 93r).

Just as with the Arundel Bible, Joseph of Xanten ben Kalonymos wrote the main text and the Masorah of the Xanten Bible but did not vocalize or accentuate it. This is evident from his colophon, which omits any mention of vocalization ("כתבתי ומסרתי"). Palaeographic analysis of the marginalia reveals two additional hands. One belonged to an anonymous vocalizer who also proofread the manuscript and added his annotations, in which he often

8 The Arundel Bible, fols. 17v, 41v, 93r, 111v, 119v, 136r, 138r, 167r, 209r, and 288r.

9 Ginsburg 1897, 504–507 and 509–10 recorded many of Jacob's variants.

10 Ginsburg 1897, 507 and references therein.

cited a book vocalized by his grandfather Samson, generally favouring its spelling and vocalization over other alternatives:

1. Xanten Bible, vol. I, folio 110r, תִּדְרִי (Deut. 12:11): “כִּן מִצָּאתִי רַפֵּי בִסְפֵר שֶׁנִּקְדָּה” (ר’ שֶׁמְשׁוֹן) (“I found *rafeh* in a book that was vocalized by Rabbi Samson”).<sup>11</sup> The Arundel Bible’s Pentateuch is no longer extant.
2. Xanten Bible, vol. II, folio 38r, לִמְשַׁחֲךָ (1 Sam. 15:1): “כִּן עָשָׂה ה’ ר’ שֶׁמְשׁוֹן [וְ] בִנְקוּדוֹ וְלֹא” (“So did Rabbi Samson in his vocalization, and I did not find it so in other books”).<sup>12</sup> In the Arundel Bible, folio 44v: לִמְשַׁחֲךָ.<sup>13</sup>
3. Xanten Bible, vol. II, folio 38v, גְּבֵהָ (Sam. 16:7): “כִּן עָשָׂה ה’ ר’ שֶׁמְשׁוֹן [וְ] בִנְקוּדוֹ אֶךְ [ס] פֶּרֶ” (“So did Rabbi Samson in his vocalization, but in another book [א] חֶר גְּבֵהָ”).<sup>14</sup> In the Arundel Bible, folio 45v: גְּבֵהָ.<sup>15</sup>
4. Xanten Bible, vol. II, folio 84v, וְעֵתָהּ (2 Kings. 5:6): “ס’ אֵתָהּ וְכִן בִּסְפֵר שֶׁנִּקְדָּה מוֹרִי זִקְיָנִי” (“הַר’ ר’ שֶׁמְשׁוֹן מִצָּאתִי [אֵתָהּ] וְכִן הוּא בְּרַב סְפָרִים מְדוּקִים” (“Another book, and I found in the book that was vocalized by my master grandfather Rabbi Samson, and so it is in the most of accurate books”; fig. 9c). In the Arundel Bible, fol. 100v: וְעֵתָהּ.<sup>16</sup>

Comparisons with several Ashkenazi Masoretic manuscripts reveal that Samson’s variants were not unique, but the Arundel Bible shows several differences in the vocalization of these words, suggesting that Jacob, its vocalizer, used another model. We can deduce that the hand that wrote the references to Samson in the Xanten Bible belonged to the vocalizer from Nehemiah 7:68 (vol. I, fol. 213r). His note on this verse reads: “הִרְבָּה שׁוּגִים וְכוּתָב [ים]” (“זה פסוק [ק] כֹּאן וְטוֹעִים כִּי אֵין שִׁיךְ כִּי אִם בִּיחַשׁ הִרְאִשׁוּן וְלֹא בִשְׁנֵי וְכִן הוּא בְּכָל סְפָרִים [ים] מְדוּקִים [ים]”) (“Many err and write this verse here, and they make a mistake, because it does not belong [here] but to the first *yahas* [genealogy, Ezra 2:66] and not to the second [*yahas* in Nehemiah], and so it is in all accurate books”; fig. 7). Thus, he marked the verse with strokes and

11 Snapshot: <https://t1p.de/mojpb>. This contrasts with the Near Eastern Bibles, for example, the Leningrad Codex (St. Petersburg, Russian National Library, Firkovich, Evr. I.B.19a, fol. 107r); the Codex Sassoon (Tel Aviv, Museum of the Jewish People, formerly David Sassoon Collection, MS 1053, p. 167); a Pentateuch in the British Library (London, British Library [henceforth BL], Or. 4445, 169r), all of which spell תִּדְרִי with a *dagesh*. Both variants, *rafeh* and *dagesh*, can be found in other Ashkenazi Masoretic manuscripts. See, for example, Milan, Biblioteca Ambrosiana (henceforth AMBR.), B 30 inf., fol. 197v (Würzburg, 1236–1238): תִּדְרִי; Munich, Bayerische Staatsbibliothek (henceforth BSB), Cod. hebr. 2, fol. 222r: תִּדְרִי (German Ashkenaz, 1280–1300); Nürnberg, Stadtbibliothek (henceforth STN), Solg, 2 fol. 90v (German Ashkenaz, 1291): תִּדְרִי; Vatican, Biblioteca Apostolica (henceforth BAV), Urb. ebr 1, 214r: תִּדְרִי (Franconia, 1294); Paris, Bibliothèque nationale de France (henceforth BnF), hébr. 5, fol. 225r: תִּדְרִי (Würzburg, 1295).

12 Snapshot: <https://t1p.de/k0hx6>.

13 The same as in the Leningrad Codex: לִמְשַׁחֲךָ (fol. 158r); the Codex Sassoon (p. 257). Several other Ashkenazi Masoretic manuscripts vocalize the *het* with a *hataf patah* and evidence additional variations. AMBR. B 31 inf., fol. 39r: לִמְשַׁחֲךָ; STN, Solg, 3, fol. 84r: לִמְשַׁחֲךָ (masorete’s note: “כִּן הוּא בְּחֶטֶף קָמֶץ”); BAV, Urb. ebr. 1, fol. 313v: לִמְשַׁחֲךָ; BnF, hébr. 6, fol. 43v: לִמְשַׁחֲךָ.

14 Snapshot: <https://t1p.de/09u3f>.

15 The same as in the Leningrad Codex: גְּבֵהָ (fol. 158v); the Codex Sassoon (p. 259); and Ashkenazi Bibles. AMBR. B 31 inf., fol. 40r: גְּבֵהָ; STN, Solg, 3, fol. 86r: גְּבֵהָ; BAV, Urb. ebr. 1, fol. 315v: גְּבֵהָ; BnF, hébr. 6, fol. 44v: גְּבֵהָ.

16 The same as in the Leningrad Codex: וְעֵתָהּ (fol. 205r); the Codex Sassoon (p. 345). Both variants are found in other Ashkenazi Masoretic manuscripts. AMBR. B 31 inf., fol. 89r: וְעֵתָהּ; STN, Solg, 4, fol. 27r: וְעֵתָהּ; BAV, Urb. ebr. 1, fol. 408r: וְעֵתָהּ; BnF, hébr. 6, fol. 97r: וְעֵתָהּ.



left it unvocalized.<sup>17</sup> The fact that this verse is not found in the Arundel Bible might suggest that the Arundel Bible was copied from the Xanten Bible rather than the other way around, but all the substantial evidence to date, discussed later, contradicts that notion (fig. 8). In comparison to Joseph of Xanten ben Kalonymos's Masoretic script (fig. 9a and b), that of the anonymous vocalizer is more rounded and less articulated with serifs (fig. 9b and c). The shade of the ink used for his annotations usually matches that of the vocalization and accentuation.

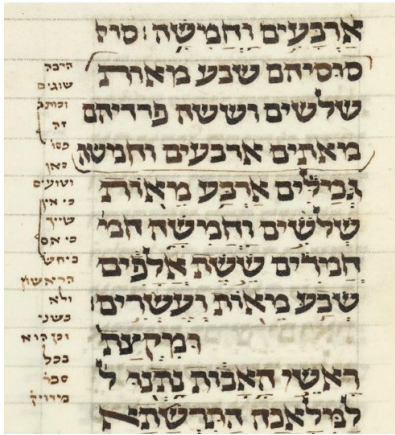


Fig. 7. The Xanten Bible, Nehemiah 7:68 (New York, Public Library, Spencer 1, vol. I, fol. 213r).

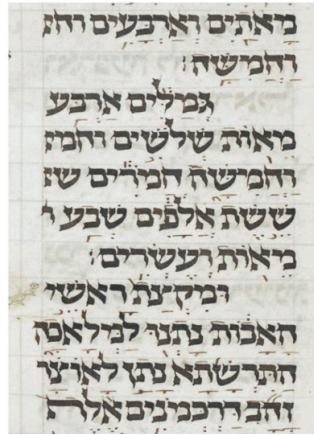


Fig. 8. The Arundel Bible, Nehemiah 7:68 (London, British Library, Arundel Or. 16, fol. 384r).

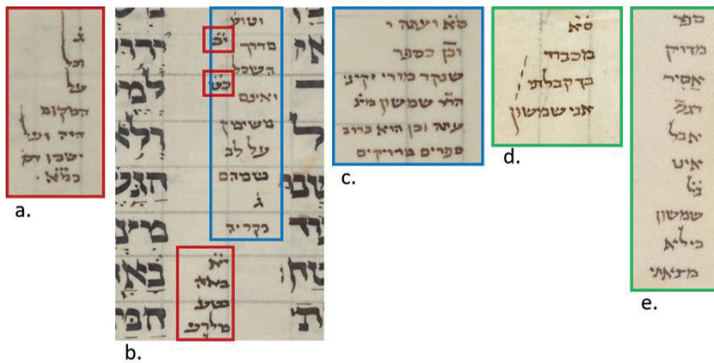


Fig. 9. The Xanten Bible, Masoretic annotations and proofreading (New York, Public Library, Spencer 1):

- a. Joseph of Xanten ben Kalonymos (vol. II, fol. 96v).
- b. Joseph of Xanten ben Kalonymos and Samson's grandson (vol. II, fol. 201r).
- c. Samson's grandson (vol. II, fol. 84v).
- d. Samson (vol. I, fol. 187r).
- e. Samson (vol. II, fol. 145r).

<sup>17</sup> This verse was often omitted in other manuscripts, see Ginsburg 1897, 483, 495, 514, 540, 548, 585, 589, 592, and many others.

In addition to these hands, we can also identify the hand of Samson, the grandfather of the vocalizer, referring to himself in first person and emphasizing his name with dots in the marginalia of the Xanten Bible (fig. 9d):<sup>18</sup>

1. Xanten Bible, vol. I, folio 187r, וּמִכְבֹּד (Eccl. 10:1): “ס”א מכבוד כך קבלתי אני שמשון” (“In another book, מכבוד. So it was transmitted to me, I am Samson”; fig. 9d). In the Arundel Bible, folio 354v: מִכְבֹּד.<sup>19</sup>
2. Xanten Bible, vol. II, folio 145r, אָסִיר (Isa. 42:7): “ס”א ועתה אבל אינו נראה” (“In an accurate book, אָסִיר [is with] a *dagesh*, but it does not seem to me, Samson, [correct], since I did not find it [written] in this way in [other] accurate books”; fig. 9e). In the Arundel Bible, folio 136v: אָסִיר.<sup>20</sup>

Indeed, the script of these and several other notes<sup>21</sup> differs from those of Joseph of Xanten ben Kalonymos and the anonymous vocalizer (fig. 9d and e). The plural pronoun *anahnu* (we) in some of Samson’s and his grandson’s annotations suggests that they viewed their proofreading as a collaborative effort. For instance, in his marginal note on וְאֵתָהּ (1 Kings 1:18), Samson wrote: “ס”א ועתה אבל לא מצאנוהו כן במסורת” (“In another book: ועתה, but we did not find it [written] so in the Masorah”; vol. II, fol. 64r).<sup>22</sup> Commenting on the vocalization of וְתִכְלֶשׁ (Gen. 18:15), which should be vocalized with a *pataḥ* instead of a *kamatz*, the vocalizer (Samson’s grandson) also used the plural: “ואנחנו לא מצאנוהו כן בספ[רים]” (“and we did not find it [*pataḥ*] so in accurate books”; vol. I, fol. 16r).

In his edition of the *ḥumash*, Wolf Heidenheim copied some of the references to Samson from the Xanten Bible, whom he then identified as Samson Nakdan, the author of the grammatical treatise *Sefer ha-shimshoni* (*Ḥibbur ha-konim*) circulated by his student Mordekhai Yair.<sup>23</sup> A scholarly consensus based on evidence from *Ha-shimshoni* places Samson Nakdan in Ashkenaz in the second half of the thirteenth century (d. before 1297) and, following Heidenheim’s view, identifies him as the grandfather of Joseph ben Kalonymos.<sup>24</sup> However, although Samson Nakdan’s Ashkenazi origin and approximate life span are largely un-

18 The *masora parva* for לאסר (Num. 30:3), which was penned by Joseph ben Kalonymos, reads: כָּל חֶסֶם “בָּמָא אַת שמשון” (“All are defective, except for one: ‘et Samson’ [Judg. 15:10]; vol. I, fol. 97v).

19 The same as in the Leningrad Codex: מִכְבֹּד (fol. 429r). Both variants are found in other Ashkenazi Masoretic manuscripts. AMBR. B 32 inf., fol. 65r: וּמִכְבֹּד (*vav* is deleted); BSB, Cod. hebr. 2, fol. 255v: וּמִכְבֹּד (*vav* is deleted); STN, Solg. 7, fol. 31r: וּמִכְבֹּד; BAV, Urb. ebr. 1, fol. 814r: וּמִכְבֹּד; BnF, hébr. 5, fol. 264r: וּמִכְבֹּד.

20 In contrast, the Leningrad Codex reads: אָסִיר (fol. 236v); the Codex Sassoon (p. 402). Both variants are found in other Ashkenazi Masoretic manuscripts. AMBR. B 31 inf., fol. 179r: אָסִיר; STN, Solg. 4, fol. 97r: אָסִיר; BAV, Urb. ebr. 1, fol. 596r: אָסִיר.

21 For additional examples of notes penned by Samson’s hand, see vol. II, fols. 55r (outer margin) and 70v (inner margin).

22 The Arundel Bible: וְאֵתָהּ (fol. 76r), in contrast to the Leningrad Codex: וְעֵתָהּ (fol. 184v). On this issue, see See Gianfranco Miletto, *Textus Babylonicus. Die Textvarianten in den biblischen Handschriften der babylonisch-jemenitischen Tradition*, Judentum und Umwelt 86 (Berlin, Bern u.a.: Peter Lang, 2022), 120.

23 Wolf Heidenheim, ed., חומש מאור עינים (*haftarat Zekhor* in Exodus), vol. 2 (Rödelheim: Heidenheim, 1818), 20 and Idem, חומש מודע לבינה (*haftarat Tazri’a* in Leviticus), vol. 3 (Rödelheim: Heidenheim, 1819), 7. Quoting Heidenheim, Meir Goldschmidt repeated the identification of Rabbi Samson as the author of *Ha-shimshoni* on the recto of the third front flyleaf of the Xanten Bible.

24 Ilan Eldar, “מכתבי אסכולת הדקדוק האשכנזי: ‘השמשוני’ דברי מבוא והפרק על התנועות מתוכו,” *Leshonenu* 35 (1978): 102–105.

controversial, the claim that he was the grandfather of Joseph of Xanten ben Kalonymos appears to be baseless. Not only were the references to Samson not penned by Joseph ben Kalonymos, but the identification of this Samson, grandfather of the Xanten Bible's vocalizer, with the author of *Ha-shimshoni* lacks any support beyond the coincidence of their shared name. There were undoubtedly many capable vocalizers-masoretes named Samson in Ashkenaz around 1300 and any one of them could have been the grandfather of the Xanten Bible's vocalizer, not necessarily the renowned Samson Nakdan.<sup>25</sup>

We also find a reference to Samson *nakdan* in another Ashkenazi manuscript, a liturgical Pentateuch now in Munich, copied by an anonymous scribe-vocalizer-masorete around the same time as the Xanten Bible.<sup>26</sup> A marginal note detailing, מבית ישראל \ מבני ישראל, attached to the lemma מבית ישראל in Leviticus 17:10 concludes with "הר' שמשון" (מפי מור[י] הר' שמשון) ("from the mouth of my master, Rabbi Samson *nakdan*"; fol. 139r).<sup>27</sup> Furthermore, this manuscript includes references to Joseph *nakdan*. For example, at the end of the *masora magna* that lists five occurrences of מניקות and similar forms, written plene (Gen. 32:16; fol. 39r), the scribe-masorete noted: "כך מצאתי במסור[ת] ר' יוסף נקדן" ("This I found in the Masorah of Rabbi Joseph *nakdan*").<sup>28</sup> Another note appears in the list of unique occurrences of words written without a *yod*, linked on this folio to the lemma שתי (Exod. 10:1; fol. 75v): "ל' חס' מצא ר' יוסף הנקדן. פנחס ועלה האיש" ("[1 Sam. 1:3], once [it] is defective, Rabbi Joseph *ha-nakdan* found it").<sup>29</sup> Those lists do not appear in the Arundel and Xanten Bibles. Thus, although the mentions of Samson and Joseph *nakdan* in the Munich Pentateuch naturally suggest a link between its scribe-masorete and the scholarly circle of Joseph ben Kalonymos, such a link will remain conjectural without further corroborating evidence. Owing to the challenges involved in distinguishing homonymous *nakdanim*, the only solid information we have about Joseph of Xanten ben Kalonymos and his colleagues is that they lived and worked in the Lower Rhine region around the close of the thirteenth century.

### 3 From Multiple Models to a Copy

The exact relationship between models and copies in Masoretic studies remains a continuing challenge. Typically, medieval scribes would copy the consonantal text from existing Masoretic manuscripts. Thus, a newly copied codex could have served as a model for

25 See a list of medieval *nakdanim* compiled by Leopold Zunz, *Zur Geschichte und Literatur*, vol. 1 (Berlin: Veit und Comp., 1845), 107–22; Aron Freimann, "Deutsche Abschreiber und Punktatoren des Mittelalters," *Zeitschrift für hebräische Bibliographie* 11 (1907): 86–96.

26 BSB, Cod. hebr. 2. Moritz Steinschneider, *Die Hebräischen Handschriften der K. Hof- und Staatsbibliothek in München* (Munich: Hofbuchhandlung, 1895), 1. The manuscript is accessible online at <https://t1p.de/y3zwm> [accessed 05/2025].

27 The scribe's master without the name is also mentioned on fol. 161v (לבנה in Num. 5:15): "מורי מוסיף על" ("לבנה דסו טה" "המסורת לבנה דסו טה" ("My master adds to the Masorah [mnemonic signs] לבנה דסו טה").

28 The list is not unique; it also appears, for example, in the Jonah Pentateuch (BL, Add. 21160, fol. 8r), attached to the lemma היניקה (Gen. 21:7).

29 Cf. Salomon Frensdorff, *Die Massora magna*, vol. 1 (Hannover-Leipzig: Cohen-Risch, 1875), 364 and n. 3.

subsequent manuscripts, forming a link in a local textual transmission. However, one key unanswered question is how many model codices were used to produce and proofread a single Masoretic manuscript. Scholars suggest that even a manuscript created by a single scribe-vocalizer-masorete was likely based on multiple models.<sup>30</sup> This complexity intensifies when several individuals contributed to a manuscript, as they all might have relied on different source texts. Clearly, then, a Masoretic manuscript that was a direct, one-to-one copy of another codex would have been an exception.

The intricate relationship between models and copied texts is clearly illustrated by the case of the Arundel and Xanten Bibles. Despite differences in their consonantal text, vocalization, and accentuation, these Bibles evidence significant similarities and connections. One crucial link is the extensive use of the now-lost Codex Sinai for their proofreading. This Eastern master codex, known through references in medieval manuscripts, served as a primary source of comparison for both Joseph of Xanten ben Kalonymos and Jacob, the vocalizer.<sup>31</sup> Joseph's references to the Codex Sinai appear primarily in the Pentateuch section of the Xanten Bible and deal with the issue of plene vs. defective spelling.<sup>32</sup> A case in point is the word האפד (*ha-efod*) in Exodus 28:27 and 28 (vol. I, fol. 52r). There are two occurrences of *ha-efod* in Exodus 28:27, both spelled defectively, with a superscript *vav* added to render them plene (fig. 10). In both cases, Joseph's *masora parva* notes: "ט' מל[א]" ("Nine times plene"), but his marginal gloss states: "בסיני כת[יב] חס[ר]" ("In Sinai it is defective"). Similarly, Exodus 28:28 features the same lemma three times in defective form, and Joseph commented in the margin: "אילו ג' האפוד כת[יב] חס[ר] בסיני ובמסור[ת] כת[יב]" ("These three [cases] of *ha-efod* are spelled defectively in Sinai, but the Masorah reads them plene"). The spelling of *ha-efod* in these two verses was a known point of contention among medieval scribes and masoretes. Its plene form in Exodus 28:27, common in most Ashkenazi manuscripts, aligns with the Masorah indicating nine plene occurrences of *efod* in the Pentateuch prefixed with *he*, *vav*, or *lamed*.<sup>33</sup> Thus, it was favoured by the vocalizer of the Xanten Bible, who was likely responsible for adding the superscript *vavs*. However, in Exodus 28:28, the Masorah marks the three occurrences of *ha-efod* as plene, but the Xanten Bible's vocalizer did not add superscript *vavs*. Rendering them defective would have changed the count of the *masora parva* and *magna*. Other Ashkenazi codices from this period typically follow the Ashkenazi Masorah, featuring a plene-plene-plene

30 For example, Rafael Edelmann, "Soferim–Massorettes, 'Massorettes'–Nakdanim," in: *In Memoriam Paul Kahle*, eds. Matthew Black and Georg Fohrer (Berlin: De Gruyter, 1968), 119–21.

31 On the Codex Sinai, see Bernhard Pick, "Lost Hebrew Manuscripts," *Journal of the Society of Biblical Literature* 2 (1882): 126–27; Ginsburg 1897, 433–35. See also Armin Lange, "A Critical Edition of the Hebrew Bible between the Dead Sea Scrolls to the Masoretic Text," in: *The Text of the Hebrew Bible and Its Editions: Studies in Celebration of the Fifth Centennial of the Complutensian Polyglot*, eds. Andrés Piquer, Otero Pablo, and Torijano Morales (Leiden: Brill, 2017), 123–24 and references therein. The references to the Codex Sinai in the Arundel and Xanten Bibles may well be among the earliest medieval explicit notes regarding the use of the material copy of this ancient codex.

32 Since the Arundel Bible lacks the Pentateuch, these references cannot be compared.

33 Christian D. Ginsburg, *Massorah Compiled from Manuscripts: Alphabetically and Lexically Arranged*, vol. 1 (London, 1883), 103, §1034; vol. 4, 123, §1034.

spelling,<sup>34</sup> which is also reflected in some Near Eastern Bibles, such as the Codex Sassoon (p. 67). However, a defective-plene-plene pattern, which aligns with the one in the Lenin-grad Codex (fol. 48r), has also been found in some Ashkenazi codices.<sup>35</sup>

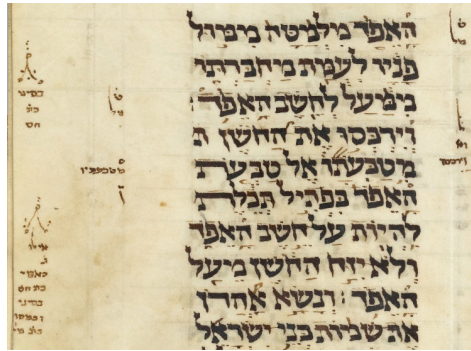


Fig. 10. The Xanten Bible, Exodus 28:27 and 28  
(New York, Public Library, Spencer 1, vol. I, fol. 52r).

The spelling of *ha-efod* in Exodus 28:27 and 28 exemplifies the difficulties faced by medieval vocalizers and masoretes in resolving discrepancies between the consonantal text, which accommodated both intentional alterations and unintentional errors, and the Masoretic apparatus, designed to ensure the text's accurate transmission. According to Yosef Ofer, the masoretes had four options for addressing such discrepancies:

- (1) to leave the conflict as it is, without solving it; (2) to change the text and make it conform to the Masora; (3) to change the number in the *masora parva* or the number and the list of verses in the *masora magna*, making them conform to the version he [the masorete] is using; (4) to try to resolve the conflict totally or partially in different ways (such as to say that two similar verses were counted as one or that the number refers only to the word itself and not to the word when it occurs with a prefix).<sup>36</sup>

Distinguishing the hands of the vocalizers and masoretes introduces another layer to this analysis. The case of *ha-efod* suggests that while Joseph of Xanten ben Kalonymos, the scribe-masorete, favoured the textual variants in the Sinai Codex, seemingly valuing its accuracy over the Ashkenazi Masorah, the Xanten Bible's vocalizer-proofreader tended to emend the spellings to conform with the Masorah, but he did it inconsistently.

Another notable instance in the Arundel Bible is Joseph's marginal note to Joshua 21:36–37 (fol. 15v), where he pointed out that these verses are missing from both the Codex Sinai and the Codex of Rabbi Gershom (Me'or ha-Golah), another Masoretic work known solely

34 See, for example, BL, Add. 21160, fol. 112r (all three times *ha-efod* were initially written defective and the *vav* was added by the masorete in superscript); BL, Add. 15282, fol. 115v (the second *ha-efod* was initially written defective and the *vav* was added by the masorete in superscript); Wroclaw, University Library, M. 1106, fols. 84v–85r; BAV, Urb. ebr. 1, fol. 95v.

35 For example, Berlin, Staatsbibliothek, Preußischer Kulturbesitz, Or. fol. 1212, fol. 95r.

36 Yosef Ofer, *The Masora on Scripture and Its Methods* (Berlin: De Gruyter, 2019), 126–27.



through medieval marginalia (fig. 11).<sup>37</sup> Further, Joseph wrote that he inserted these verses based on other manuscripts, a choice he subsequently regretted, realizing that they belonged in Chronicles.<sup>38</sup> Joseph then marked the two verses with flourishes, thereby telling the vocalizer that they were not to be vocalized nor recited. The absence of the four Levitical cities in Joshua 21 in the oldest Near Eastern codices is a notable textual variant.<sup>39</sup> Later manuscripts filled this lacuna with verses adapted from 1 Chronicles 6:63 (“וממטה ראובן” as Josh. 21:36–37). Other medieval masoretes and vocalizers also frequently questioned the authenticity of these verses, noting their doubts in the margins.<sup>40</sup> In this case, the Xanten Bible follows the Arundel Bible’s lead and omits these two verses (vol. II, fol. 12v).



Fig. 11. The Arundel Bible, Joshua 21:36–37 (London, British Library, Arundel Or. 16, fol. 15v).

37 Jordan Penkower, “בעל התוספות ר’ מנחם מיואני וחבור המסורה ‘אכלה ואכלה’, מהדורת כ”י האל”, in: *Studies in Bible and Exegesis* (עיוני מקרא ופרשנות), vol. 3 (Ramat Gan: Bar-Ilan University Press, 1993), 287–315.

38 אין ב’ פסוקים] הללו כתובים] בספר סיני ובספר רב[נן] גרשם והעתקתם מספרים אחרים. ואני מתחרט בכך. אכן אין” “These two verses are not written in the Codex Sinai or in the book of Rabbenu Gershom, and I copied them from other books. And I regret it. Indeed, this is not their place but it is in Chronicles ...”). See Ginsburg 1897, 179 and 504, who mistakenly attributed this note to Jacob, the vocalizer. As Joseph refers to himself in the first person, he was obviously responsible for adding this note, which, in contrast to the main text, he rendered in a semi-cursive script.

39 For example, the Leningrad Codex, fol. 133v and Codex Sassoon, p. 213. For the controversy in the Masoretic circles about the authenticity of Joshua 21:36–37, with the reference to the Arundel Bible, see Ronald Hendel, *Steps to a New Edition of the Hebrew Bible* (Atlanta: SBL Press, 2016), 7–12.

40 In addition to multiple examples of the omission of these verses provided in Ginsburg 1897, see BAV, Urb. ebr. 1, fol. 263v, whose vocalizer did not vocalize Joshua 21:36–37 and noted in the margins: “פרשה” “צריכה עיון אם כתובה בספרים] מובחנים, ובספרים] מדויקים] לא מצאתי” (“This section needs to be checked whether it is written in corrected books, and I did not find it in accurate books”).

Unlike Joseph of Xanten ben Kalonymos, in comparing the Arundel Bible with the Codex Sinai, Jacob, the vocalizer, focused on the instances of two words written as one and open and closed sections (*parashot petuhot and setumot*),<sup>41</sup> whose appearances were notably inconsistent in medieval Ashkenazi Bibles.<sup>42</sup> For example, Jacob's comment on Judges 8:27 reads: "בסיני [ה] אין כאן פתוח [ה]" ("There is no open [*parashah*] here in Sinai"; fol. 24v). Given that this *parashah* is closed in the Arundel Bible text, Jacob seemingly employed the terminology of *Masekhet sofrim* (1:15), which defines the *parashot* differently than the more common terminology found in the Jerusalem Talmud (Megillah 1:9) and Maimonides.<sup>43</sup> The Xanten Bible does not mark Judges 8:27 with either an open or a closed *parashah* (vol. II, fol. 21r).<sup>44</sup> For Jeremiah 39:1, which contains a closed *parashah* in the Arundel Bible,<sup>45</sup> Jacob noted in the margin: "בסיני אין כאן פסקא לא פתוחה ולא סתומה" ("In Sinai there is no section break here, neither open nor closed"; fol. 173v). The Xanten Bible, in contrast, marks this point with an open *parashah* (vol. II, fol. 120v). These and numerous other textual discrepancies between the Arundel and Xanten Bibles make it hard to discern the precise textual relationship between them. Joseph's explicit reference to using multiple models in his marginal note to Joshua 21:36–37 not only accounts for these variations in both manuscripts but also highlights the fact that each codex was a unique creation, with models re-examined and re-evaluated for every specific case, often leading to distinctly different textual outcomes.

Perhaps unexpectedly, the model-copy relationship between the Arundel and Xanten Bibles becomes evident through frequent "*ken lefanai*" references to vocalization variants noted by Jacob, the vocalizer. Although the particular manuscript behind these references remains unknown, it was clearly a highly valued, accurate codex, as most of the variants Jacob recorded in the margins of the Arundel Bible were also incorporated into the Xanten Bible (figs. 12, 13). Table 2 shows randomly selected examples of the variants added in the Arundel Bible and their subsequent integration into the Xanten Bible's text. It is worth noting that the Xanten Bible's vocalizer did not copy all the vocalization from the Arundel Bible, but only Jacob's "*ken lefanai*" variants. Thus, to understand the model-copy relationships among Masoretic codices, we have to examine each layer separately: the consonantal text, the vocalization and accentuation, and the proofreading and annotations. Each layer represents a distinct stage in the production of a manuscript, and these stages were often dealt with by different individuals. Owing to the flexible working methods, with various models used for the different stages, and the makers of the books exercising individual judgment based on their expertise rather than solely on existing models, we can, at best, identify only specific segments as being shared between the codices.

41 For an incomplete list of Jacob's references to the Codex Sinai, see Ginsburg 1897, 434.

42 Yossi Peretz, "מסורות החלוקה של הפרשיות הפתוחות והסתומות בתורה בכתבי יד אשכנזיים מימי הביניים," *Jewish Studies, an Internet Journal* 14 (2018): 1–16. See also Hanna Liss, "A Pentateuch to Read in? The Secrets of the Regensburg Pentateuch," in: *Jewish Manuscript Cultures. New Perspectives*, Studies in Manuscript Cultures 13, ed. Irina Wandrey (Berlin: De Gruyter, 2017), 104–108.

43 Peretz 2018, 1–3.

44 A closed *parashah* is in Judges 8:29; cf. Ginsburg 1883, vol. 2, 485, where the *parashah* is open.

45 As in the list of open and closed *parashot* compiled by Ginsburg (Ginsburg 1883, vol. 2, 493).

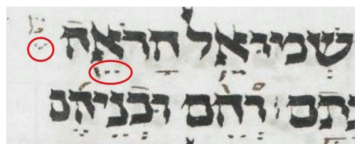


Fig. 12. The Arundel Bible, 1 Chronicles 9:22 (London, British Library, Arundel Or. 16, fol. 244r).



Fig. 13. The Xanten Bible, 1 Chronicles 9:22 (New York, Public Library, Spencer 1, vol. I, fol. 223r).

**Table 2:** Jacob's “*ken lefanai*” variants in the Arundel and Xanten Bibles

Verses	The Arundel Bible	Jacob's Notes	The Xanten Bible
	fol. 135v:		fol. 143r:
Isa. 37:37	וַיִּסַּע	ברור לי פתח	וַיִּסַּע
	fol. 153r:		fol. 103v:
Jer. 8:19	הִיהוּהָ	כ[ו] ל[פני] שבא תחת היוד	הִיהוּהָ
	fol. 238v:		fol. 219r:
1 Chr. 2:34	עֲבָדָה	כ[ו] ל[פני]	עֲבָדָה
	fol. 238v:		fol. 219r:
1 Chr. 2:40	סִסְמִי	כ[ו] ל[פני] יעק[ב]	סִסְמִי
	fol. 239v:		fol. 219v:
1 Chr. 4:10	תִּבְרַכְנִי	כ[ו] ל[פני]	תִּבְרַכְנִי
	fol. 244r:		fol. 223r:
1 Chr. 9:22	הָרֵאָה	כ[ו] ל[פני]	הָרֵאָה
	fol. 244r:		fol. 223r:
1 Chr. 9:24	לְאַרְבַּע	כ[ו] ל[פני]	לְאַרְבַּע
	fol. 247 r:		fol. 225v:
1 Chr. 13:2	אֶחָיו	כ[ו] ל[פני]	אֶחָיו

## 4 The Arundel Bible as a Model for the Masorah

The Masorah was not a static, continuous text; it was rather a collection of isolated notes that varied from one manuscript to another based on such factors as individual choices of masoretes, layout, and patron preferences. As Raimund Edelmann aptly put it, “It is not possible to speak about *the* Masorah, but rather about the Masorah of each single manuscript.”<sup>46</sup> To enable masoretes to tailor the Masoretic lists to each specific manuscript, their models had to be both maximally comprehensive and arranged for easy retrieval of

<sup>46</sup> Edelmann 1968, 122.

individual lists. The Arundel Bible's extensive Masoretic apparatus is a striking feature that makes it an excellent candidate for a codex designed to serve as a model for Masorah. The *masora magna* often fills four top and seven bottom lines, frequently spilling into the side margins (fig. 14), which contrasts sharply with the standard Ashkenazi format of two top and three bottom lines. An additional unusual characteristic is the repetition of the same *masora magna* lists next to multiple occurrences of the relevant lemma. In other codices, the placement of Masoretic lists varies, appearing on some but not all of the folios that contain the lemma. These features—along with extensive Masoretic rubrics concluding biblical books for *pasekim*, *ketiv-kere* variants, distinctions between Eastern and Western traditions, and variations among similar verses (fig. 15)<sup>47</sup>—indicate that Joseph intended to compile the most comprehensive Masoretic collection possible for the Arundel Bible.

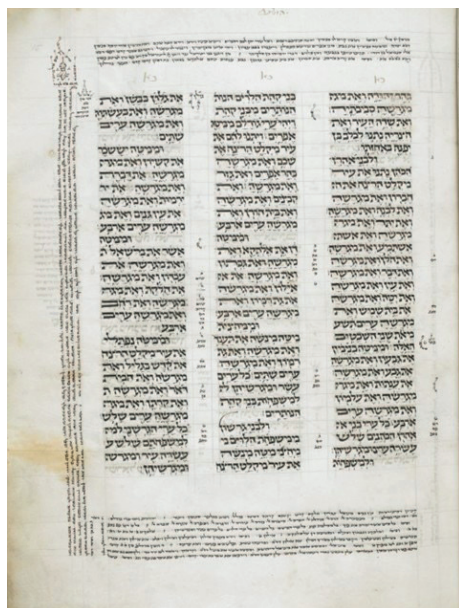


Fig. 14. The Arundel Bible, Masorah (London, British Library, Arundel Or. 16, fol. 15r).

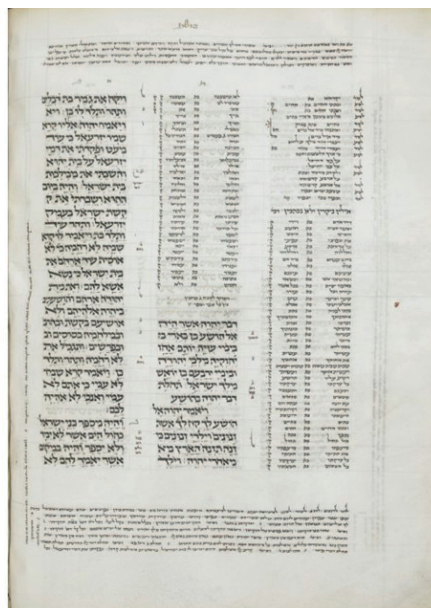


Fig. 15. The Arundel Bible, Masoretic rubrics (London, British Library, Arundel Or. 16, fol. 199v).

The evident replication of the Arundel Bible Masorah in the Xanten Bible establishes another crucial link between these two codices. As a comprehensive Masorah comparison is clearly beyond the scope of the present study, I decided to focus on the initial folios of selected biblical books. In both Bibles, the *masora magna*, carefully synchronized with the main biblical text, links directly to the specific lemmata on each folio. Typically, each book in both Bibles begins with the same Masoretic lists, arranged in the same order and featuring the same sequence of references within each list (figs. 16, 17). However, as the Xanten Bible folios all have fewer lines ruled for the Masorah, some of the Arundel lists were omitted. As the text progressed, it was not always possible to begin each folio of the Xanten

47 See also Ginsburg 1897, 503–504.



Bible with the same list as in the Arundel Bible. Nevertheless, the Xanten Bible's selection of lists was still based on the Arundel manuscript. It is important to note, however, that the *masora parva* in the Xanten Bible was not borrowed from the Arundel Bible. As was often the case with Ashkenazi codices, the *masora parva* was copied during a different stage of manuscript production, one that preceded the *masora magna*, and was based on different models. This often led to discrepancies between the information provided in the *parva* and *magna* of the same codex.

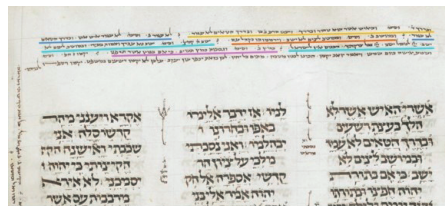


Fig. 16. The Arundel Bible, Psalms (London, British Library, Arundel Or. 16, fol. 284v).

\*The underlines in different colours denote individual *masora magna* lists and their correspondence in the two Bibles.



Fig. 17. The Xanten Bible, Psalms (New York, Public Library, Spencer 1, vol. 1, fol. 124v).

The striking similarity in the selection and arrangement of the *masora magna* lists suggests that the Arundel Bible, which Ginsburg termed a “Model Codex,” was primarily conceived as a model specifically for the *masora magna* and was indeed used as such for the Xanten Bible. Nevertheless, a close examination of the wording of the Masoretic lists reveals that the copying process from the Arundel to the Xanten Bible was not always straightforward. While most compared lists are identical in the two Bibles, there are notable exceptions. For instance, the Arundel Bible has five copies of the *masora magna* list for the twelve occurrences of מוֹסֵר (*musar*) written with a *pataḥ* (Appendix 1a). A comparison with Gérard Weil’s Tiberian Masorah (based on the Leningrad Codex) and Christian Ginsburg’s redaction of this list<sup>48</sup> reveals that none of the five Arundel variations include all twelve references; furthermore, each of the five lists differs slightly from the others. The most complete list (Appendix 1a, no. 1) includes eleven references, omitting Proverbs 15:33, which is also absent from the other four. Moreover, the first list has a corrupted reference to Jeremiah 10:8, where the extraneous word “המה” replaces “עץ הוא”.

The origin of this contamination is unclear, but the same corrupted reference also appears in the fourth and fifth lists (Appendix 1a, nos. 4 and 5), added to the correct Jeremiah

48 Ginsburg 1883, vol. 2, 202, §155; Gérard Weil, *Massorah Gedolah, iuxta codicem leningradensem B 19 a*, vol. 1 (Rome: Pontificium Institutum Biblicum Edition, 1971), 272, §2405.



10:8 reference in the latter. Another error appears in the reference to Proverbs 15:5, where “מוסר אביו” was mistakenly replaced by “מוסר אב”. This likely occurred through conflating it with a similar reference, “שמעו בנים מוסר אב” (Prov. 4:1) or “בן חכם מוסר אב” (Prov. 13:1). The Xanten Bible, which includes the *musar* list three times, evidences the same errors and omits Proverbs 15:33 (Appendix 1b). However, none of these three lists is identical with the five lists found in the Arundel Bible. The closest match is the first *musar* list in the Arundel (Appendix 1a, no. 1) and Xanten Bibles (Appendix 1b, no. 1). Yet, in contrast to the first Arundel list, this Xanten version correctly references Jeremiah 10:8 and omits Proverbs 15:5. The presence of identical errors strongly suggests a connection between the *musar* lists in Joseph’s two Bibles, but the discrepancies indicate that he did not always simply copy the Masoretic lists from the Arundel in the Xanten Bible. Instead, he reworked some of the more problematic lists each time he copied them into either Bible, apparently trying to resolve the issues of missing and confused references.

The underlying causes of errors often rooted deep in antiquity along with the Ashkenazi masoretes’ specific choices for handling them are not always readily apparent, which significantly hinders our ability to offer reasonable explanations. Ultimately, we can identify these problematic Masoretic lists and delineate their shared issues. The *musar* list often appears incomplete in Ashkenazi manuscripts from ca. 1300, although they all note that there are twelve occurrences of *musar* written with a *pataḥ* in the Bible. As in the Arundel and Xanten Bibles, Proverbs 15:33 is one of the commonly omitted references (Table 3). In the Bibles linked to a single Franconian Masoretic workshop, run jointly by a father and son, Ḥayyim ben Senior and Senior ben Ḥayyim,<sup>49</sup> for example, this reference was replaced by Proverbs 22:4, which does not contain the word *musar* (Table 4: MS7 and MS8).<sup>50</sup> The inclusion of Proverbs 22:4, עֵקֶב עֲנוּה יִרְאֵת יְהוָה, was likely a result of its confusion with Proverbs 15:33, יִרְאֵת יְהוָה מוֹסֵר חֲכָמָה וּלְפָנַי כְּבוֹד עֲנוּה, as both verses have the same words (underline mine). It is also possible that in the masoretes’ model, the reference to Proverbs 15:33 was abbreviated to a single word, עֲנוּה, as seen, for example, in the Leningrad Codex, and it may have been mistakenly completed with words from a different verse. Other Ashkenazi codices in Table 4 simply skip the reference to Proverbs 15:33.

49 About this workshop and associated manuscripts, see Ilona Steimann, “Multi-Handed Bible Manuscripts: Masoretic Workshops in Medieval Ashkenaz?,” *Corpus Masoreticum Working Papers* 8 (2024): 184–226.

50 The manuscripts are accessible online at <https://t1p.de/0j5b> (BAV, Urb. ebr. 1) and <https://t1p.de/jvcwp> (BnF, hébr. 9) [accessed 05/2025].

**Table 3:** The *musar* list in Ashkenazi Masoretic manuscripts

The left column lists biblical references in biblical order (their order in manuscripts varies). Manuscripts MS1–MS10 are detailed below the table. A plus (+) or minus (–) indicates the presence or absence of a reference within a single list in each manuscript. A slash (/) separates occurrences of the same list within a manuscript, corresponding to the folio numbers as detailed below the table (also separated by slashes). A superscript 2 indicates a duplicate reference within a single list.

Verses	MS1	MS2	MS3	MS4	MS5	MS6	MS7	MS8	MS9	MS10
1. Isa. 53:5	++	+/+/+/+/+	+/+/+	+/+	–	–	+/+	+	+	+
2. Jer. 10:8	++	+/+/+/+/+ <sup>2</sup>	+ <sup>2</sup> /+ <sup>2</sup> /+	+/+	+	+	+/+	+	+	+
3. Jer. 30:14	++	+/-/-+/+	+/+/+	+/-	+	+	+/+	+	+	+
4. Prov. 1:3	++	+/+/+/+/+	+/+/+	+/+	+	+	+/+	+	+	+
5. Prov. 1:8	++	+/+/+/+/+	+/+/+	+/+	+	+	+/+	+	+	+
6. Prov. 4:1	++	+/+/+/+/+	+/+/+	+/-	+	+	+/+	+	+	+
7. Prov. 7:22	++	+/+/+/-/-	-/-/+	+/+	+	+	+/+	+	+	+
8. Prov. 13:1	++	+/-/-/-/+	-/-/+	+/+ <sup>2</sup>	–	+	-/-	–	–	+
9. Prov. 15:5	++	+/+/+/+/+	+/+/-	+/-	+	+	+/+ <sup>2</sup>	+ <sup>2</sup>	–	+
10. Prov. 15:33	++	-/-/-/-/-	-/-/-	-/-	–	–	-/-	–	–	–
11. Job 12:18	++	+/+/+/+/+	+/+/+	+/-	+	+	+/+	+	+	+
12. Job 20:3	++	+/+/+/+/+	+/+/+	-/-	+	+	+/+	+	+	+
[Prov. 22:4]	-/-	-/-/-/-/-	-/-/-	-/-	–	–	+/+	+	–	–
[Jer. 2:30]	-/-	-/-/-/-/-	-/-/-	-/-	–	–	-/-	–	+	–

**MS1.** The Leningrad Codex: fol. 241r (Isa. 53:5) / fol. 251r (Jer. 10:8). Egypt (Cairo), 1008/1009.

**MS2.** The Arundel Bible: fol. 166v (Jer. 30:14) / fol. 325v (Job 12:18) / fol. 328r (Job 20:3) / fol. 336r (Prov. 1:3, 8) / fol. 341r (Prov. 13:1). Ashkenaz (Lower Rhine), 1280–1290.

**MS3.** The Xanten Bible: vol. I, fol. 160r (Job 12:18) / vol. I, fol. 169r (Prov. 1:3, 8) / vol. II, fol. 115r (Jer. 30:14). Ashkenaz (Lower Rhine), 1294.

**MS4.** Vatican, Biblioteca Apostolica, Barb. Or. 163: fol. 9r (Jer. 10:8) / Or. 164, fol. 59v (Prov. 4:1). Ashkenaz, 1295–1297.

**MS5.** Karlsruhe, Badische Landesbibliothek, Cod. Reuchlin 1, fol. 444r (Jer. 30:14). Ashkenaz (Franconia), ca. 1300.

**MS6.** Basel, Universitätsbibliothek, A III 1, fol. 34r (Jer. 30:14). Ashkenaz, the fourteenth century.

**MS7.** Vatican, Biblioteca Apostolica, Urb. ebr. 1 (the Urbinati Bible): fol. 776r (micrographic panel opening Proverbs), copied by Isaac ben Simeon ha-Levi / fol. 781r (Prov. 7:22), copied by Ḥayyim ben Senior. Ashkenaz (Franconia), 1294.

**MS8.** Paris, Bibliothèque nationale, hébr. 9 (the Paris Bible): fol. 104r (Jer. 10:8). Ashkenaz (Franconia), 1304.

**MS9.** Vienna, Österreichische Nationalbibliothek, Cod. hebr. 16, fol. 276r (Prov. 1:3, 8). Ashkenaz (Franconia), 1298.

**MS10.** Paris, Bibliothèque nationale, hébr. 4, fol. 324r (Jer. 30:14). France (Franche-Comté), 1286.

Another issue in the *musar* list is the reference to Proverbs 13:1, בן חכם מוסר אב ולץ לא, שמע גערה, which is often either missing or significantly distorted in Ashkenazi codices. This reference appears in only two of the five *musar* lists in the Arundel Bible and in one of the three in the Xanten Bible (Table 3: MS2 and MS3), truncated to בן חכם מוסר אב in both manuscripts. In the Bibles copied by Ḥayyim ben Senior and Senior ben Ḥayyim, the Urbinati and Paris Bibles (Table 3: MS7 and MS8), Proverbs 13:1 was replaced by a very confused reference that reads: ולא נאץ מוסר אביו (Table 4). To understand the cause of this error, we look at the *musar* list in Ḥayyim ben Senior's earlier manuscript, the Prophets and Writings (1291/92) now in Berlin, which is otherwise identical to that in the Urbinati

Bible (Table 4, nos. 1, 2).<sup>51</sup> The earlier version of this list that appears in the Berlin Prophets and Writings shows that Proverbs 15:5 ends with מוסר אויל instead of מוסר אביו, possibly as a result of a conflation with the previous reference, Proverbs 7:22. The reference immediately following Proverbs 15:5 initially repeated the words מוסר אביו נאץ, this time with the correct rendering of אביו. However, Ḥayyim likely noticed this repetition and altered the verse by adding ול and erasing ויל י, resulting in מוסר אביו נאץ ולאיל. This modified version was subsequently copied in the Urbinati and Paris Bibles (Table 4, nos. 2, 3). While the phrase מוסר אביו נאץ ולא does not correspond to any biblical verse, it might indirectly reflect the missing Proverbs 13:1, which contains similar consonants: ולץ לא שמע גערה (underline mine). It is therefore possible that the model these masoretes followed only included the phrase מוסר אב ולאץ, misspelled and with its parts switched (אב מוסר לא).

**Table 4:** The *musar* list in the Bibles copied by Ḥayyim ben Senior and Senior ben Ḥayyim

1. The Berlin Prophets and Writings SBB-PK, Ham. 80.2, Prov. 15:5 (fol. 136r), copied by Ḥayyim ben Senior		2. The Urbinati Bible BAV, Urb. ebr. 1, Prov. 7:22 (fol. 781r), copied by Ḥayyim ben Senior		3. The Paris Bible BnF, hébr. 9, Jer. 10:8 (fol. 104r), copied by Senior ben Ḥayyim	
מוסר יב פתח וסימ		מוסר יב פתח וסימ		מוסר יב פת וסימ	
מוסר שלומנו עליו	Isa. 53:5	מוסר שלומנו עליו	Isa. 53:5	מוסר שלומנו עליו	Isa. 53:5
מוסר הבלים עץ הוא	Jer. 10:8	מוסר הבלים עץ הוא	Jer. 10:8	מוסר הבלים עץ הוא	Jer. 10:8
מוסר מלכים פתח	Job 12:18	מוסר מלכים פתח	Job 12:18	מוסר מלכים פתח	Job 12:18
מוסר כלמתי אשמע	Job 20:3	מוסר כלמתי אשמע	Job 20:3	מוסר כלמתי אשמע	Job 20:3
מכת אויב הכיתוך מוסר אכורי	Jer. 30:14	מכת אויב הכיתוך מוסר אכורי	Jer. 30:14	מוסר אכורי	Jer. 30:14
לקחת מוסר השכל	Prov. 1:3	לקחת מוסר השכל	Prov. 1:3	לקחת מוסר השכל	Prov. 1:3
שמע בני מוסר אביך	Prov. 1:8	שמע בני מוסר אביך	Prov. 1:8	שמע בני מוסר אביך	Prov. 1:8
ובעכס אל מוסר אויל	Prov. 7:22	שמעו בנים מוסר אב	Prov. 4:1	שמעו בנים מוסר אב	Prov. 4:1
ואיל נאץ מוסר אויל	Prov. 15:5	ובעכס אל מוסר אויל	Prov. 7:22	ובעכס אל מוסר	Prov. 7:22
ולאיל נאץ מוסר אביו		אויל נאץ מוסר אביו	Prov. 15:5	אויל נאץ מוסר אביו	Prov. 15:5
עקב ענוה יראת יי	Prov. 22:4	ולא נאץ מוסר אביו		ולא נאץ מוסר אביו	
וכל דסמי לאזכר דכות פת		עקב ענוה יראת יי	Prov. 22:4	עקב ענוה יראת יי	Prov. 22:4
		וכל דסמ לאזכרה דכות פת		וכל דס לאזכרה דכו	

51 Berlin, Staatsbibliothek, Preußischer Kulturbesitz (henceforth SBB-PK), Ham. 80.2. The manuscript is accessible online at <https://t1p.de/g5mtj> [accessed 05/2025].

Masoretes' copying errors, then, are key indicators of models. They reveal that manuscripts produced in the same professional setting share the same errors, and analyzing them can also illuminate their origins. The types of errors made by masoretes largely mirror those found in the core biblical text, suggesting that similar scribal mechanisms were at play. Scholars have established a typology of errors for biblical texts and have determined that their possible reasons relate primarily to a scribe's mistakes when he copied from a model. These reasons include misreading, misremembering, miswriting, and mistakenly returning to the wrong place in the text. Within these categories are visual errors (seeing as), auditory errors (hearing as, even in cases of internal dictation), and many others.<sup>52</sup> All of these "mis"-actions are classified as errors because they were accidental and involuntary, resulting in variants of a biblical text that was intended to be transmitted unchanged.<sup>53</sup> Two types of masorete errors are of particular relevance to the present discussion: the "eye-skip" phenomenon (mistakenly going to the wrong place) and graphic confusion (seeing as), as they were the two most directly embedded in the copying process itself. Identifying such errors not only helps reconstruct the text of the models used but also offers a glimpse into the models' material forms.

Continuing the comparison of Joseph of Xanten ben Kalonymos's Bibles and those from Ḥayyim ben Senior's Franconian workshop, we find that one striking difference stands out. While the Xanten Bible's model for the Masorah was another biblical codex with extensive marginal Masorah (the Arundel Bible), the Masorah of the Franconian manuscripts was likely based on codices that featured *masora magna* as stand-alone, sequential lists, without the biblical core text. Indirect evidence of copying the Masorah from such personal compilations can be seen in Senior ben Ḥayyim's Paris Bible. In a list of eight occurrences of אֶלֶף (*a'aleh*) written with a *pataḥ* (Exod. 3:17),<sup>54</sup> Senior, after referencing Jeremiah 30:17, mistakenly copied the words וְלִכְהֲנִים הָלוִים (Jer. 33:18) (Table 5). This particular verse does not contain the word *a'aleh*, and it is clear that he was aware of that fact, as he marked those words with short lines to indicate deletion (fig. 18).<sup>55</sup> The deletion suggests that he likely re-examined his model and recognized the error while he was copying the text.

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52 For more on this subject, see Hendel 2016, 149–72.

53 To this we must add memory variants, especially in cases of contaminated biblical verses, which is beyond the scope of the present discussion. Cf. David M. Carr, *The Formation of the Hebrew Bible: A New Reconstruction* (Oxford: Oxford University Press, 2011), 17 and 33; Michael V. Fox, *Proverbs: An Eclectic Edition with Introduction and Textual Commentary*, HBCE 1 (Atlanta: SBL Press, 2015), 80–81; Hendel 2016, 164–69.

54 Ginsburg 1883, vol. 2, 408, §586.

55 The error does not appear in two other instances of this list in this manuscript, all written by Senior ben Ḥayyim (BnF, hébr. 9, fols. 46r [1 Sam. 28:11] and 124r [Jer. 46:8]).

Table 5: The *a’aleh* list in the Paris Bible

The Paris Bible	
Paris, Bibliothèque nationale, hébr. 8, fol. 61v (Exod. 3:17), copied by Senior ben Ḥayyim	
אעלה ח וסימ	
אעלה אתכם מעני מצרים	Exod. 3:17
ויעל מלאך יי מן הגלגל	Judg. 2:1
ותאמר האשה את מי אעלה	1 Sam. 28:11
ויאמר המלך אל ארונה	2 Sam. 24:24
כי אעלה ארוכה לך	Jer. 30:17
ולכהנים הלויים	Jer. 33:18
מצרים כיאר יעלה	Jer. 46:8
עלות מחים אעלה לך	Ps. 66:15
תדבק לשוני לחכי	Ps. 137:6

How could this error have occurred? The mistaken reference to Jeremiah 33:18 actually belongs to the Masoretic list of the eight occurrences of the word מַעֲלָה (*ma’aleh*, with a *segol*).<sup>56</sup> Neither Jeremiah 30:17 nor Jeremiah 46:8 in the list of *a’aleh* repeats any words from Jeremiah 33:18 that would trigger such confusion, and there is no obvious connection between these verses. However, the reference preceding Jeremiah 33:18 in the *ma’aleh* list is Jeremiah 33:6 (הגני מעלה לה ארוכה), which does include the word ארוכה, just as Jeremiah 30:17 in the list of *a’aleh*. Furthermore, in the *a’aleh* list written by Senior in the bottom margins of the folio featuring Jeremiah 33:6, this reference is immediately followed by ולכהנים הלויים (Jer. 33:18; fig. 19).<sup>57</sup> Thus, it is clear that the confusion was due to the shared word ארוכה in two verses from otherwise unrelated lists.

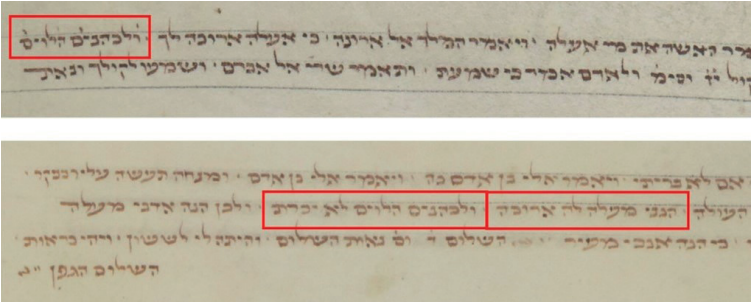


Fig. 18 (above). The Paris Bible, the *a’aleh* list, Exodus 3:17 (Paris, Bibliothèque nationale, hébr. 8, fol. 61v).  
Fig. 19 (below). The Paris Bible, the *ma’aleh* list, Jeremiah 33:6 (Paris, Bibliothèque nationale, hébr. 9, fol. 117r).

56 Ginsburg 1883, vol. 2, 408, §589.  
57 The same list appears once more in the Paris Bible, linked to 1 Sam. 7:10 (BnF, hébr. 9, fol. 33r).



The Masoretic lists of *a'aleh* and *ma'aleh* could not have appeared on the same folio in any Bible with marginal Masorah because the biblical text between the verses in both lists would always span more than a single folio. Thus, Senior must have copied those lists from a model that included sequential *masora magna* lists without the core biblical text. This arrangement would allow the references to Jeremiah 30:17 (*a'aleh*) and Jeremiah 33:6 and 33:18 (*ma'aleh*) to appear on the same page, so that the masorete might well have “eye-skipped” from one list to a neighbouring one. Furthermore, it is obvious that the Masoretic lists in such a model were arranged alphabetically rather than by biblical verse sequence, placing the lists that deal with words with the same root (such as *a'aleh* and *ma'aleh*) on the same page. Such an example is found in the second part of the Okhla Halle compilation, which focuses on lists of enumerative (detailing) Masorah.<sup>58</sup> In this manuscript, both lists of the eight occurrences of *a'aleh* and *ma'aleh* appear on the same page, right next to each other. This proximity vividly demonstrates how Senior ben Ḥayyim could have eye-skipped from the first ארוכה (in the *a'aleh* list) to the second ארוכה (in the *ma'aleh* list) and mistakenly inserted the irrelevant Jeremiah 33:18 reference into the former (fig. 20).

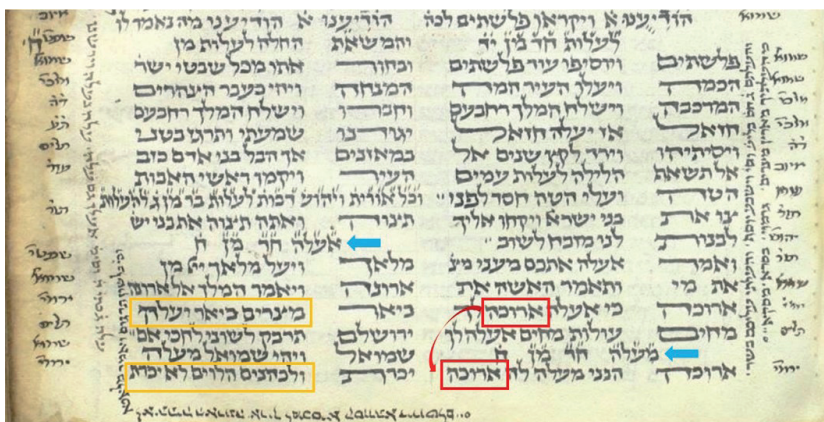


Fig. 20. Okhla Halle, the *a'aleh* and *ma'aleh* lists (Halle, Universitätsbibliothek, Y b 40 10, fol. 76r).

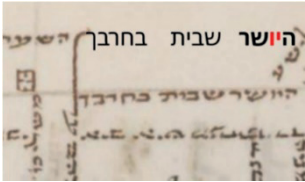
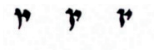
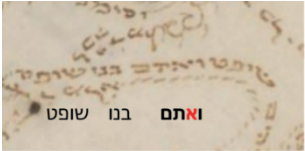
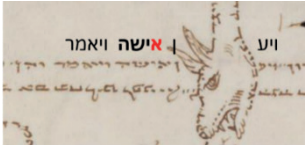

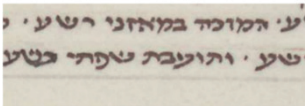
These kinds of recurring errors in Franconian manuscripts strongly suggest that the masorettes were copying from an alphabetically arranged compilation of lists. Naturally, their model(s) was not the specific Okhla Halle manuscript, but rather one or more of similar compilations of enumerative and cumulative Masorah. Unlike Okhla Halle, which is written in square script, the Franconian masorettes' models were likely rendered in a semi-cursive one. We can come to this conclusion based on the presence of graphic confusions in the copied Masoretic lists. Graphic confusions are common misspellings that arise from the morphological similarity of certain letters, such as  $\daleth$  and  $\daleth$  as well as many others.<sup>59</sup> These

58 Halle, Universitätsbibliothek, Y b 40 10 (France, second half of the thirteenth century), published by Diaz Esteban, *Sefer 'Oklah We-'Oklah: Colección de listas de palabras destinadas a conservar la integridad del texto hebreo de la Biblia entre los judíos de la Edad Media* (Madrid: CSIC 1975) and Bruno Ognibeni, *La seconda parte del Sefer 'Oklah We-'Oklah. Edizione del ms. Halle, Universitätsbibliothek Y b 40 10* (Madrid: CSIC, 1995).

59 Hendel 2016, 155.

errors, rooted in the visual appearance of Hebrew letters, reflect the visual characteristics of the source manuscript. The set of letters that could be confused with one another varied not only among different script types (e.g., Ashkenazi and Sephardi) but also within their different modes (square and semi-cursive). This latter aspect is particularly relevant to the Franconian Masoretic codices, as some of their graphic confusions reveal that their models were written in a semi-cursive Ashkenazi script. The manuscripts of Ḥayyim ben Senior and his fellow masorete Isaac ben Simeon ha-Levi reflect particularly large numbers of graphic confusions. The most frequently observed errors are confusions between semi-cursive *alefs* and *yod-vavs* (and vice versa; Table 6, nos. 1, 2) and *alefs* and *mems* (and vice versa; Table 6, nos. 3, 4), which were sometimes mistaken for similar-looking letters in a semi-cursive script. Such confusions would not have occurred if the models had been written in square script (which is the case for Masoretic lists when they appear in the margins of biblical codices).

**Table 6:** Graphic confusions in Ḥayyim ben Senior’s Bibles

Verses		Graphic confusions	Examples of Ashkenazi semi-cursive script
1.	2 Kings 6:22 הָאִשֶּׁר שְׁבִית בַּחֲרֹבָךְ	 BAV, Urb. ebr. 1, fol. 776r, Isaac ben Simeon ha-Levi	<i>alef</i> that can be confused with <i>yod-vav</i> 
2.	2 Chr. 26:21 וְיִיתֶם בְּנוֹ שׁוֹפֵט	 BAV, Urb. ebr. 1, fol. 561r, Isaac ben Simeon ha-Levi	
3.	Exod. 4:1 וַיַּעַן מֹשֶׁה וַיֹּאמֶר	 BAV, Urb. ebr. 1, fol. 298r, Isaac ben Simeon ha-Levi	<i>mem</i> that can be confused with <i>alef</i> 
4.	Mic. 6:11 הַמִּזְכָּה בְּמֵאזְנֵי רֶשַׁע	 SBB-PK, Ham.80.2, fol. 131r, Ḥayyim ben Senior	

Few personal *masora magna* collections are extant, but as Salomon Frensdorff observed, such collections must have been widespread during the Middle Ages.<sup>60</sup> Their auxiliary status and notebook-like appearance may account for the fact that so few have survived. Among the limited extant examples of this type of Masoretic collection is a fourteenth-century Ashkenazi codex now in Basel, which contains *masora magna* lists in semi-cursive script, arranged according to the sequence of verses in the Prophets, Psalms, and the five *megillot* (scrolls).<sup>61</sup> The two extant *Okhla ve-Okhla* compilations, the aforementioned Okhla Halle and another one in Paris,<sup>62</sup> both seemingly of French provenance, also appear to belong to this category. Such personal compilations of Masoretic lists were not produced exclusively to serve as models. They were apparently created for the accumulation, preservation, and study of Masoretic material and were utilized as models when a substantial stock of Masoretic lists was required. Thus, the choice of the material prototype, Bibles with marginal Masorah serving as models in Western Ashkenaz (Joseph of Xanten ben Kalonymos's Bibles) versus stand-alone compilations of Masoretic lists used in Franconian workshops, may have been predefined by the overall quantity of Masoretic material to be included in the copy. The principal quantitative difference between these two regions was in the use of micrography. Elaborate micrographic panels introducing biblical books were a hallmark of Franconian manuscript production, with Ḥayyim ben Senior's and Senior ben Ḥayyim's Bibles serving as prime examples. The sheer volume of Masoretic content required for these large micrographic sections meant that Franconian masoretes had to utilize far more Masoretic lists than those employed for linear Masorah. Bibles featuring only linear Masorah, even the more extensive examples such as the Arundel Bible, simply could not provide sufficient material to serve as models. As a result, the increasing demand for micrography in Franconia may have prompted the use of personal Masoretic compilations as models for both linear and micrographic Masorah. In contrast, micrography never gained such prominence in manuscripts from the Lower Rhine and Western Ashkenaz in general.<sup>63</sup> Masoretes in those regions, such as Joseph of Xanten ben Kalonymos, could rely on other Bibles with linear Masorah as their primary models. These are, however, only initial observations that further findings may confirm or refute.

## 5 A Single Quill but Two Scriptural Visions

Despite being the work of the same scribe-masorete, the Arundel and Xanten Bibles reflect significant differences in their production programmes, which can be attributed to their differing functions. The Arundel Bible was largely modelled on the Bibles of the Tiberian

60 Salomon Frensdorff, *Das Buch Ochlah W'ochlah (Massora)* (Hannover: Hahn'sche Hofbuchhandlung, 1864), III.

61 Basel, University Library, A III 1. Joseph Prijs, *Die Handschriften der Universitätsbibliothek Basel. Die hebräischen Handschriften* (Basel: Universitätsbibliothek, 1994) 24–25, no. 17.

62 BnF, hébr. 148, published by Frensdorff 1864.

63 Ilona Steimann, “Masorah for Embroidery”: Regional Approaches to Micrography in Medieval Germany and France” (forthcoming).

tradition, whereas the Xanten Bible adheres to the Talmudic (Babylonian) model, which was the one generally adopted by Ashkenazi scribes. This is especially evident in the arrangement of the Prophets and Writings (Table 7). The chronological sequence Isaiah-Jeremiah-Ezekiel in the Arundel Bible follows the Tiberian Masoretic tradition, whereas the sequence Jeremiah-Ezekiel-Isaiah in the Xanten Bible aligns with the order described in the Babylonian Talmud (*Bava Batra* 14b). In the Writings, similar to early Near Eastern examples such as the Aleppo, Leningrad, and Sassoon Codices, the Arundel Bible places Chronicles at the beginning, whereas in other Ashkenazi Bibles it is at the end, as prescribed by the Babylonian Talmud. However, from Ruth to Ezra-Nehemiah, it is the Xanten Bible that follows the Tiberian tradition, which groups the *megillot* chronologically.<sup>64</sup> In contrast, the Arundel Bible's sequence in this instance more nearly matches the Babylonian Talmud, albeit with some deviations.<sup>65</sup> Notably, at the end of Psalms, Jacob, the Arundel Bible's vocalizer, commented on the order of the books (fol. 348v): "כאן כתב בסיני ספר רות" ("Here, in the Sinai Codex is the Book of Ruth and all five *megillot* one after the other"), a sequence that is somewhat atypical for the known Near Eastern Masoretic Bibles.

**Table 7:** Order of biblical books

	The Arundel Bible	The Xanten Bible	Babylonian Talmud	Tiberian Masoretic Bibles	Codex Sinai
<b>Early Prophets</b>	Joshua Judges 1–2 Samuel 1–2 Kings	Joshua Judges 1–2 Samuel 1–2 Kings	Joshua Judges 1–2 Samuel 1–2 Kings	Joshua Judges 1–2 Samuel 1–2 Kings	
<b>Latter Prophets</b>	Isaiah Jeremiah Ezekiel Twelve Minor Prophets	Jeremiah Isaiah Ezekiel Twelve Minor Prophets	Jeremiah Ezekiel Isaiah Twelve Minor Prophets	Isaiah Jeremiah Ezekiel Twelve Minor Prophets	
<b>Writings</b>	1–2 Chronicles Ruth Psalms Job Proverbs Song of Songs Ecclesiastes Lamentations Esther Daniel Ezra-Nehemiah	Psalms Job Proverbs Ruth Song of Songs Ecclesiastes Lamentations Esther Daniel Ezra-Nehemiah 1–2 Chronicles	Ruth Psalms Job Proverbs Ecclesiastes Song of Songs Lamentations Daniel Esther Ezra-Nehemiah 1–2 Chronicles	1–2 Chronicles Psalms Job Proverbs Ruth Song of Songs Ecclesiastes Lamentations Esther Daniel Ezra-Nehemiah	Psalms Ruth [Proverbs Song of Songs Ecclesiastes Lamentations Esther]

<sup>64</sup> Ginsburg 1897, 6–7. See also Greg Goswell, "The Order of the Books in the Hebrew Bible," *Journal of the Evangelical Theological Society* 51/4 (2008): 673–88.

<sup>65</sup> Out of the two dozen French and German Bibles from ca. 1300 consulted for this study, the order of the books of Writings as it appears in the Arundel Bible was found only in Senior ben Ḥayyim's Paris Bible (BnF, hébr. 10).

Other Ashkenazi Masoretic codices from that period reflect significant variations in the order of books within the Writings, even among those copied by the same scribes. The only consistent element across these codices is the placement of Chronicles at the end.<sup>66</sup> However, their present-day book order is an unreliable criterion. To enable patrons and owners to customize the books' sequence, medieval scribes systematically used "junctions" (caesurae), which aligned the end of a textual section (typically a biblical book) with the end of a quire. In her study of the Latin giant "Atlantic Bibles," a format that emerged in mid-eleventh-century Rome and subsequently spread north of the Alps, Marilena Maniaci demonstrates that scribes employed systematic caesurae not just between the Old and New Testaments but also after the Minor Prophets. They thereby enabled the division of the Old Testament into two volumes of comparable length without compromising the structural integrity of the quires or the continuity of the text.<sup>67</sup> To create the caesurae, scribes manipulated the structure of the book's last quire, adding or removing leaves to match the text's end or including blank leaves. In Masoretic codices, such caesurae usually appear at the end of the Pentateuch and the Prophets, allowing their owners to bind the manuscript in one, two, or three volumes. However, additional caesurae sometimes appear within each of these three blocks, allowing for binding the biblical books in various sequences.<sup>68</sup> In the Xanten Bible, we find the following caesurae (marked with ||):

Pentateuch || Joshua, Judges, 1–2 Samuel, 1–2 Kings, Jeremiah (irregular last quire)  
 || Isaiah || Ezekiel, Twelve Minor Prophets || Psalms || Job || Proverbs, Ruth, Song  
 of Songs || Ecclesiastes, Lamentations, Esther, Daniel, Ezra-Nehemiah (irregular last  
 quire) || 1–2 Chronicles (irregular last quire).

These structural "junctions" imply a modular design enabling flexible binding arrangements, such as placing Chronicles at the beginning or at the end of the Writings and inserting Psalms and/or Job (in either order) after the Song of Songs.<sup>69</sup> The great diversity of book sequences within the Writings in Ashkenazi manuscripts, including those mentioned and many other variations, likely arose from such modularity and, in turn, contributed to the general instability of the books' order. A side effect of this practice was the extraction of the Prophets' quires from the Xanten Bible sometime before the nineteenth century and their binding as a second volume. Unlike the commissioned Xanten Bible, which was designed to offer its patron binding flexibility, the Arundel Bible was clearly produced by Joseph of Xanten ben Kalonymos for his personal use. Thus, it features very few caesurae, thereby indicating that the sequence of the books in the Writings, starting with Chronicles

66 See also Stephen G. Dempster, "The Canonical Shape of the Hebrew Old Testament," in: *Canon Formation. Tracing the Role of Sub-Collections in the Biblical Canon*, eds. W. Edward Glenny and Darian R. Lockett (London: T&T Clark, 2023), 41.

67 Marilena Maniaci, "The Structure of Atlantic Bibles," in: *Trends in Statistical Codicology*, ed. Marilena Maniaci (Berlin: De Gruyter, 2021), 35–63.

68 The caesurae of Hebrew manuscripts are largely unstudied. Future systematic analysis may reveal their additional functions and historical dynamics.

69 The caesurae around Isaiah are unclear. Joseph most likely intended to add another caesura before Jeremiah, which would have allowed for binding Isaiah and Jeremiah in either order, but he forgot to do so.



as in the Near Eastern Bibles, was intended to be fixed. The single caesura in the manuscript can be found between Prophets and Writings, which, together with the nonextant Pentateuch, would have allowed Joseph to bind it in three volumes.

Another echo of ancient Near Eastern tradition in the Arundel Bible is the division of its text into *sedarim*, a practice uncommon among Ashkenazi scribes. Joseph not only included lists of *sedarim* at the end of biblical books but also marked them in the margins, albeit inconsistently. Regarding the *sedarim* in the Prophets and Writings of early Near Eastern Bibles, Yossi Ofer notes their remarkable stability with only minor variations. Comparing the deviations he documented to the *sedarim* in the Arundel Bible reveals that its *sedarim* most closely match those of the Leningrad Codex, as listed at the end of its biblical books.<sup>70</sup> The Xanten Bible, by contrast, does not include the *sedarim*.

Beyond the ordering of books and *sedarim*, Joseph's two Bibles also exhibit notable visual-aesthetic distinctions. A key difference lies in his approach to text articulation and decoration, which led to the production of two distinct material objects in terms of their overall appearance. Unlike contemporary Ashkenazi Masoretic codices, including the Xanten Bible, in which large-scale initial words mark the beginning of biblical books (fig. 22), the Arundel Bible renders initial words in the same script size as the main text (fig. 21).<sup>71</sup> Instead of enlarged initials, Joseph demarcated book divisions in the Arundel Bible utilizing established Masoretic conventions. He often commented between the books that three lines should be left empty there and, indeed, usually left them blank.<sup>72</sup> In contrast, the Xanten Bible's visual organization prioritizes aesthetic principles over Masoretic ones. Its biblical books typically start on a new folio and feature rich, coloured pen-work decoration around the initial words. The decorations usually consist of various scrolls and fantastic animals, sometimes occupying up to a third of the page (fig. 22).



Fig. 21. The Arundel Bible, beginning of Isaiah (London, British Library, Arundel Or. 16, fol. 119r).



Fig. 22. The Xanten Bible, Beginning of Isaiah (New York, Public Library, Spencer 1, vol. II, fol. 130r).

Taken together, the distinctions between the Arundel and Xanten Bibles highlight two differing approaches, shaped by their intended uses: one a personal copy and the other a commissioned manuscript designed to conform to contemporary Ashkenazi norms and trends. More significantly, these differences underscore Joseph's view that the Ashkenazi

70 Yosef Ofer, "סדרי נביאים וכתובים," *Tarbitz* 58 (1989): 156–57.

71 For further insights into the development of visual means of text navigation in Hebrew manuscripts, see Malachi Beit-Arié, *Unveiled Faces of Medieval Hebrew Books: The Evolution of Manuscript Production – Progression or Regression?* (Jerusalem: Magnes, 2003), 57–59.

72 As prescribed in the Jerusalem Talmud, Megillah 1:9.

Masoretic tradition was a later development, thus rendering it secondary to the “original” Tiberian tradition. Consequently, he used what he considered the “original” tradition as a foundation for his own model codex from which he could copy other manuscripts, varying their content and appearance to accommodate the preferences of his Ashkenazi patrons.

## 6 Conclusions

Ginsburg’s designation of the Arundel Bible as a “manifestly a Model Codex” invites a deeper inquiry: What exactly constituted its “model” function? Medieval manuscripts were rarely singular in purpose; rather, they were intrinsically multifaceted artefacts. While the Arundel Bible was conceived as a comprehensive Masoretic resource for copying other codices—a function evident in its use for the Xanten Bible—this was but one facet of its utility. The Arundel Bible was a meticulously proofread codex that accommodated variants of spelling and vocalization from authoritative sources and was an accomplished Masoretic manuscript in its own right, capable of meeting diverse scholarly and liturgical demands. This inherent multifunctionality of medieval manuscripts was largely due to the considerable production expenses, which made versatile usage a pragmatic necessity. For his work on the Xanten Bible, Joseph ben Kalonymos drew some elements from the Arundel Bible but also consulted other exemplars. These work methods underscore the unique character of each manuscript, even when crafted by the same scribe-masorete. The practice of re-evaluating textual nuances for individual manuscripts, which precluded one-to-one copying from a single model, generated the rich tapestry of regional textual traditions. As a material object, the Arundel Bible, created for Joseph ben Kalonymos’s personal use, drew inspiration from ancient Near Eastern Bibles, which he obviously admired. Conversely, the Xanten Bible was a bespoke commission, designed to meet the specific demands of its contemporary Ashkenazi patron. A comparative analysis of the textual structure, text articulation, and decoration of Joseph’s two Bibles vividly illustrates the divergences between the Near Eastern and Ashkenazi traditions, as they were reflected in those two manuscripts produced within the same decade. The interplay between the Arundel and Xanten Bibles thus transcends mere copying; it reveals a dynamic confluence of diverse models and traditions, varying manuscript functions, and the different hands involved—an intricate relationship that can only be fully grasped through careful palaeographic investigation.

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Appendix 1a: The *Musar* List in the Arundel Bible

The references that do not appear in all *musar* lists of the Arundel Bible are screened in orange (Jer. 10:8), lilac (confused Jer. 10:8), green (Jer. 30:14), blue (Prov. 7:22), and red (Prov. 13:1).

1. Jer. 30:14 (fol. 166v)	2. Job 12:18 (fol. 325v)	3. Job 20:3 (fol. 328r)	4. Prov. 1:3, 8 (fol. 336r)	5. Prov. 13:1 (fol. 341r)
מוֹסֵר יֵב וְסִימָּ	מוֹסֵר יֵב פֶּתַּ וְסִימָּ	מוֹסֵר יֵב פֶּתַּ וְסִימָּ	מוֹסֵר יֵב פֶּתַּ וְסִימָּ	מוֹסֵר יֵב פֶּתַּ וְסִימָּ
מוֹסֵר שְׁלוֹמִינוּ עֲלִיו Isa. 53:5	מוֹסֵר שְׁלוֹמִינוּ עֲלִיו Isa. 53:5	מוֹסֵר שְׁלוֹמִינוּ עֲלִיו Isa. 53:5	מוֹסֵר שְׁלוֹמִינוּ עֲלִיו Isa. 53:5	מוֹסֵר שְׁלוֹמִינוּ עֲלִיו Isa. 53:5
מוֹסֵר הַבַּלִּים הַמָּה [Jer. 10:8]	מוֹסֵר הַבַּלִּים עֵץ הוּא Jer. 10:8	מוֹסֵר הַבַּלִּים עֵץ הוּא Jer. 10:8	מוֹסֵר הַבַּלִּים הַמָּה [Jer. 10:8]	מוֹסֵר הַבַּלִּים עֵץ הוּא Jer. 10:8
מוֹסֵר מַלְכִּים פֶּתַּח Job 12:18	מוֹסֵר מַלְכִּים פֶּתַּח Job 12:18	מוֹסֵר מַלְכִּים פֶּתַּח Job 12:18	מוֹסֵר מַלְכִּים פֶּתַּח Job 12:18	מוֹסֵר הַבַּלִּים הַמָּה [Jer. 10:8]
מוֹסֵר כְּלִמְתִּי אֲשַׁמַּע Job 20:3	כְּלִמְתִּי אֲשַׁמַּע Job 20:3	כְּלִמְתִּי אֲשַׁמַּע Job 20:3	מוֹסֵר כְּלִמְתִּי אֲשַׁמַּע Job 20:3	מוֹסֵר מַלְכִּים פֶּתַּח Job 12:18
לִקְחַת מוֹסֵר הַשְׁכַּל Prov. 1:3	לִקְחַת מוֹסֵר הַשְׁכַּל Prov. 1:3	לִקְחַת מוֹסֵר הַשְׁכַּל Prov. 1:3	לִקְחַת מוֹסֵר הַשְׁכַּל Prov. 1:3	מוֹסֵר כְּלִמְתִּי אֲשַׁמַּע Job 20:3
מוֹסֵר אֲבוּרִי עַל רֵב עוֹנֵג Jer. 30:14	שָׁמַע בְּנִי וּבְעֵכֶס אֵל Prov. 7:22	שָׁמַע בְּנִי וּבְעֵכֶס אֵל Prov. 7:22	מוֹסֵר אֲבוּרִי עַל רֵב עוֹנֵג Jer. 30:14	לִקְחַת מוֹסֵר הַשְׁכַּל Prov. 1:3
שָׁמַע בְּנִי מוֹסֵר אֲבִיךָ Prov. 1:8	וּבְעֵכֶס אֵל מוֹסֵר אֵוִיל Prov. 15:5	וּבְעֵכֶס אֵל מוֹסֵר אֵוִיל Prov. 15:5	שָׁמַע בְּנִי מוֹסֵר אֲבִיךָ Prov. 1:8	מוֹסֵר אֲבוּרִי עַל רֵב עוֹנֵג Jer. 30:14
שָׁמַע בְּנִים מוֹסֵר אֲבִיךָ Prov. 4:1	אֵוִיל יִנְאָץ Prov. 7:22	אֵוִיל יִנְאָץ Prov. 7:22	שָׁמַע בְּנִים מוֹסֵר אֲבִיךָ Prov. 4:1	שָׁמַע בְּנִי מוֹסֵר אֲבִיךָ Prov. 1:8
וּבְעֵכֶס אֵל מוֹסֵר אֵוִיל Prov. 7:22	וְכָל דְּסִמִּיךְ לֹא דִכְרָה דְּכֹ Prov. 13:1	אֵוִיל יִנְאָץ Prov. 15:5	אֵוִיל יִנְאָץ מוֹסֵר אַב [אַבִּיו] Prov. 15:5	בֶּן חֲכָם מוֹסֵר אַב Prov. 13:1
בֶּן חֲכָם מוֹסֵר אַב Prov. 13:1		וְכָל דְּסִמִּיךְ לֹא דִכְרָה דְּכֹ	וְכָל דְּסִמִּיךְ לֹא דִכְרָה דְּכֹ	אֵוִיל יִנְאָץ מוֹסֵר אֲבִיךָ [אַבִּיו] Prov. 15:5
אֵוִיל יִנְאָץ מוֹסֵר אֲבִיךָ [אַבִּיו] Prov. 15:5				שָׁמַע בְּנִים מוֹסֵר אֲבִיךָ Prov. 4:1
וְכָל דְּסִמִּיךְ לֹא דִכְרָה דְּכֹ				וְכָל דְּסִמִּיךְ לֹא דִכְרָה כּוּתָהּ



Appendix 1b: The *Musar* List in the Xanten Bible

The colour screening corresponds to that in Appendix 1a.

1. Jer. 30:14 (vol. II, fol. 115r)		2. Job 12:18 (vol. I, fol. 160r)		3. Prov. 1:3, 8 (vol. I, fol. 169r)	
מוֹסֵר יָב וְסִימָּה		מוֹסֵר יָב וְסִימָּה		מוֹסֵר יָב וְסִימָּה	
מוֹסֵר שְׁלוֹמִינוּ עָלָיו	Isa. 53:5	מוֹסֵר שְׁלוֹמִינוּ עָלָיו	Isa. 53:5	מוֹסֵר שְׁלוֹמִינוּ עָלָיו	Isa. 53:5
מוֹסֵר הַבָּלִים עֵץ הוּא	Jer. 10:8	מוֹסֵר הַבָּלִים עֵץ הוּא	Jer. 10:8	מוֹסֵר הַבָּלִים עֵץ הוּא	Jer. 10:8
מוֹסֵר מַלְכִּים פֶּתַח	Job 12:18	מוֹסֵר הַבָּלִים הַמָּה	[Jer. 10:8]	מוֹסֵר הַבָּלִים הַמָּה	[Jer. 10:8]
מוֹסֵר כְּלִמְתֵּי אֲשַׁמֵּעַ	Job 20:3	מוֹסֵר מַלְכִּים פֶּתַח	Job 12:18	מוֹסֵר מַלְכִּים פֶּתַח	Job 12:18
לִקְחַת מוֹסֵר הַשֶּׁבֶל	Prov. 1:3	מוֹסֵר כְּלִמְתֵּי אֲשַׁמֵּעַ	Job 20:3	מוֹסֵר כְּלִמְתֵּי אֲשַׁמֵּעַ	Job 20:3
מוֹסֵר אֲכֹרִי עַל רֵב עֹנֵד	Jer 30:14	לִקְחַת מוֹסֵר הַשֶּׁבֶל	Prov. 1:3	לִקְחַת מוֹסֵר הַשֶּׁבֶל	Prov. 1:3
שָׁמַע בְּנֵי מוֹסֵר אֲבִיךָ	Prov. 1:8	מוֹסֵר אֲכֹרִי עַל רֵב עֹנֵד	Jer. 30:14	מוֹסֵר אֲכֹרִי עַל רֵב עֹנֵד	Jer. 30:14
שָׁמַעוּ בָנִים מוֹסֵר אֲבִיךָ	Prov. 4:1	שָׁמַע בְּנֵי מוֹסֵר אֲבִיךָ	Prov. 1:8	שָׁמַע בְּנֵי מוֹסֵר אֲבִיךָ	Prov. 1:8
וְכַעֲבֹס אֶל מוֹסֵר אוֹיֵל	Prov. 7:22	שָׁמַעוּ בָנִים מוֹסֵר אֲבִיךָ	Prov. 4:1	שָׁמַעוּ בָנִים מוֹסֵר אֲבִיךָ	Prov. 4:1
בֶּן חֶכֶם מוֹסֵר אֲבִיךָ	Prov. 13:1	אוֹיֵל יִנְאֵץ מוֹסֵר אֲבִיךָ [אֲבִיךָ]	Prov. 15:5	אוֹיֵל יִנְאֵץ מוֹסֵר אֲבִיךָ [אֲבִיךָ]	Prov. 15:5
וְכָל דֹּסְמִיךְ לֹאֲדַכְרָה כּוֹתֶה		וְכָל דֹּסְמִיךְ לֹאֲדַכְרָה כּוֹתֶה		וְכָל דֹּסְמִיךְ לֹאֲדַכְרָה כּוֹתֶה	