



Critique of “Did the Original Scribes Write the Distigmai in Codex Vaticanus B of the Bible (*Vat. gr. 1209*)?”

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Abstract

This article critiques Gordon et al.’s *VLR* Dec. 2024 article (henceforth “Gordon”). Gordon denies that the original scribe of Codex Vaticanus B (henceforth “Vaticanus”) penned any distigmai. It is true that X-ray fluorescence (XRF) tests prove that some distigmai are very late and can distinguish between inks that look similar. Gordon, however, tested only one of the eighteen distigmai that I identify as visually identical to original Vaticanus ink, 1243 B21 RM. 1243 B21 RM has the same ink signature as original Vaticanus ink and looks like a distigme, but Gordon calls it a *sigma*. Furthermore, Gordon’s claim that distigmai are from the sixteenth century ignores distigmai in the fourth or fifth century Codex Sarravianus-Colbertinus. This article identifies the graphic characteristics and the significance of Vaticanus’s New Testament obeloi. It identifies six striking contrasts between the 16 distigme lines with an obelos (15 of these obeloi evidently by scribe B plus 1 added later) and the 31 with an undisputed paragraphos. Only the hypothesis that scribe B penned obeloi and left a gap in the text at the precise location where some manuscripts insert at least four consecutive words explains these six striking contrasts.

Keywords

Codex Vaticanus – distigme – obelos – paragraphos – XRF – textual criticism – scribe B – 1 Cor 14:34–35 – text-critical symbols – LXX – distigme-obelos – Codex Sarravianus-Colbertinus

1 Introduction

I applaud the Vatican Apostolic Library for permitting scientific research on the Codex Vaticanus (*alias* Codex B). I bless the memory of Paul Canart’s life dedicated

to Vaticanus research. I thank Nehemia Gordon for welcoming my input and review of his team’s findings.¹

Gordon et al.’s Dec. 2024 *VLR* article² (henceforth “Gordon”) appears at first glance to be a *coup de grâce* that decisively disproves Canart’s, Ulrich Schmid’s, and my arguments that some Vaticanus distigmai are original.³ Gordon states that “*the distigmai, whether apricot or chocolate, were not written in the same inks as the original text*”.⁴

Section 2 of this critique summarizes Gordon’s key strengths and weaknesses. It documents that Gordon denies any original distigmai even though Gordon XRF tested only 1 of the 18 distigmai that are visually identical to original Vaticanus ink, 1243 B21 RM. Its XRF test has the identical copper to iron ratio as original ink, but Gordon (136, n. 70) dismisses it as a *sigma*. Section 3 documents that Gordon concealed their omission of the most crucial tests by using two different definitions of “apricot”. I am partly to blame because I trusted Canart’s judgment that all forty additional distigmai that Canart identified without me present are “original apricot” and, like the first eleven we had previously identified together, also match original Vaticanus ink. Section 4 identifies graphic, contextual, and text-critical data that oppose Gordon’s claim that 1243 B21 RM is a *sigma*. Sections 5–6 critique Gordon’s analysis of the distigme on the first minuscule page and the suggestion that Sepúlveda

1 This article follows the scholarly convention explained in Payne & Canart 2009, 199–200, n. 1 of not italicizing distigme, distigmai, obelos, obeloi, paragraphos, and paragraphoi, except in exact quotations. *VLR* prohibited any reference to my emails with Nehemia Gordon.

2 Downloadable from <https://doi.org/10.1163/27728641-00302005>.

3 Payne & Canart 2000, 105–113; Schmid 2010, 99.

4 Gordon et al. 2024, 138; cf. 135, 136; cf. “prove” on 125, 146, 149, Figure 19, 150, and 152.

added the Vaticanus distigmai. Section 7 identifies many categories of evidence that scribe B penned fifteen Vaticanus New Testament obeloi and highlights their significance for textual criticism. Section 8 discusses distigme-obelos symbols and identifies what XRF tests are needed to resolve the issues that Gordon raised.

2 Key Benefits and Failings of Gordon's XRF Texts and Analysis

I am grateful to Gordon for providing crucial evidence that four of the bars that I identify as obeloi in the Vaticanus New Testament match original Vaticanus ink.⁵ Every test that Gordon reported on obeloi confirms their originality. I am particularly grateful that Gordon demonstrated that I was wrong to accept Canart's judgment that all forty distigmai that Canart identified when I was not with him match the "original apricot" color of Vaticanus. I accepted Canart's judgments because he had access to the original manuscript then, when I did not, and because I assumed that Canart continued to use the same definition of "original apricot" that we had used to describe eleven original apricot-color ink distigmai in *NovT* 42 (2000): 105–113. In fact, only seven of Canart's forty are visually identical to original Vaticanus ink as reproduced in the 1999 IPZS facsimile.⁶ I am also grateful for Gordon's XRF tests showing negligible copper content in all but one of their tests of distigme ink. Gordon's XRF tests show that I was wrong to attribute to scribe B five of the fifteen distigmai with both an obelos and a gap.⁷ Those tests also demonstrate that I was wrong to regard most chocolate distigmai as reinked original distigmai.

Gordon's tests show how important it is for scholars to verify the statements of experts, even experts whose earlier judgments they have been able to confirm personally, as I had been able to do with Paul Canart's assessment of the first eleven apricot-color distigmai that look identical to nearby unreinked letters.⁸ This is especially important for people who vouch for the findings of others by co-signing their articles, as I did for Canart's statements and as Gordon's co-authors did for Gordon's state-

ments. Correspondingly, if those who invite others to co-sign an article know that the article has major omissions or weaknesses, they have an obligation to reveal them.

Gordon writes that "Payne and Canart initially observed that 'eleven umlauts unambiguously match the original ink of Codex Vaticanus,' which is correct based on a strictly visual assessment."⁹ It is remarkable, therefore, that Gordon dismisses all distigmai as late without doing an XRF test on any of those eleven.¹⁰ As mentioned above, seven other Vaticanus distigmai also match the color and faintness of nearby unreinked text.¹¹ Gordon XRF tested only one of those seven, the two dots that Canart and I identified as a distigme at 1243 B21 RM.¹² Gordon's XRF test shows that 1243 B21 RM has "the same copper to iron ratio as the second unreinked *nu* at 1243 C20 (Cu 0.10 and 0.10, respectively)."¹³ Even though it looks like a distigme and does not look like any other *sigma* in the Vaticanus text of Matthew, Gordon states, "1243 B21 is actually an unreinked *sigma*."¹⁴ Gordon does not provide any image of 1243 B21 or acknowledge any of the graphic, contextual, and text-critical evidence provided in section 4 below that 1243 B21 RM is a distigme.¹⁵

Since Gordon's hypothesis depends on XRF test results, it is odd that Gordon writes that "no convincing palaeographical analysis can be done on the *distigmai*."¹⁶ Surely, the key to resolving the question of whether some of the distigmai date to the original production of Vaticanus is to perform XRF tests on the seventeen remaining distigmai that actually do appear identical to original Vaticanus ink to see if they match the chemical content of nearby original Vaticanus ink.

There are clearly identifiable differences between the color and/or faintness of the ink of every XRF-tested distigme Gordon lists as "apricot"¹⁷ and original Vaticanus ink on the same page. Neither Gordon's SBL presentation nor *VLR* article, however, acknowledged that none of the dots they identify as "apricot" distigmai actually match

⁵ These four obeloi are identified in note 68 below.

⁶ 1243 B21 RM (Gordon calls it a *sigma*), 1336 A22, 1349 B19, 1350 B18 RM, 1357 C1 RM, 1368 C15, and 1383 A4 in *Bibliorum sacrorum Graecorum Codex Vaticanus B* (1999). Payne and Canart 2009, 204–208, Table 10 lists those forty. Computer display of color is not reliable.

⁷ Note 104 below lists the five. Note 71 below lists the fifteen.

⁸ Published in Payne & Canart 2000, 105–113.

⁹ Gordon et al. 2024, 128.

¹⁰ Payne & Canart 2000, 108 lists those eleven: 1339 C42, 1339 C42 RM, 1355 B40, 1356 B24, 1370 A32, 1459 C41 RM, 1466 A25, 1466 B6, 1468 B3, 1475 B11, 1499 C42 RM.

¹¹ Note 6 above lists those seven.

¹² Payne and Canart 2009, 204 #1.

¹³ Gordon et al. 2024, 136, n. 70.

¹⁴ Gordon et al. 2024, 128, n. 18 and a similar assertion on 136, n. 70.

¹⁵ See the image and analysis in section 4 below.

¹⁶ Gordon et al. 2024, 149.

¹⁷ Gordon et al. 2024, 138, Table 1 lists ten "apricot" distigmai. Canart called eight of them "apricot". In fact, however, none of the ten visually match the color of original Vaticanus ink.

the color of original Vaticanus ink—not even in Gordon’s lengthy discussion of “confusion about the precise number of apricot *distigmai*”.¹⁸ Instead, Gordon repeatedly gives the false impression that they had tested many original apricot-color *distigmai*.¹⁹ As section 3 below documents, Gordon’s shifting definition of “apricot” obscures this. Gordon’s central claim lacks the essential experimental data required to demonstrate that no *distigmai* are original.

Gordon’s team did XRF tests on only eight of the forty Canart-designated “apricot *distigmai*”.²⁰ It is reasonably likely that in a random distribution, the eight they tested would include one of the seven of those forty whose ink signature matches that of nearby original ink. That is exactly what Gordon did find. Gordon confirms that one of the eight that they tested has an ink signature that matches nearby original ink, the one at 1243 B21 RM.²¹ Eight tests are too few to provide adequate assurance that they tested any of the six remaining Canart-designated “apricot *distigmai*” that actually do match the color and faintness of original Vaticanus ink.

Gordon’s conclusion that all *distigmai* are late without doing XRF-testing on any of the eighteen *distigmai* that look identical to original Vaticanus ink except one that he dismisses as a *sigma* is like asserting that there is no vehicle at a property without ever looking in the garage. It is like a mold-detection company that, after having been notified of suspected mold in many places in a basement, certified that there is no mold in the house, even though the only mold test done in the basement confirmed a chemical composition that corresponds to mold.

I completely agree with Gordon’s final “warning about reaching definitive palaeographical or codicological conclusions based on visual appraisal of the color of ink alone.”²² Gordon’s article demonstrates that an

ink color that is merely “similar” to “original apricot” ink color is not a reliable guide for determining original ink.

Gordon’s final warning, however, is doubly ironic. First, Gordon asserts “definitive palaeographical or codicological conclusions” regarding all *distigmai* without doing an XRF test on any of the *distigmai* that actually match the color and faintness of original Vaticanus ink, unless 1243 B21 RM is a *distigme*. If it is, Gordon’s own XRF test on 1243 B21 RM disproves Gordon’s thesis that all *distigmai* are late.

Second, Gordon based his own definitive palaeographical conclusions on the same loose definition of “apricot” that Gordon’s XRF tests prove that Canart should not have used to identify original ink. Both Canart and Gordon called ink “apricot” that is only similar to, not identical to, original ink. Both also incorrectly said that that color matches the color of original Vaticanus ink.

Mere similarity in color should not guide judgments regarding original ink. Gordon implicitly acknowledges this regarding 1308 B27 and C21: “The apricot *distigme* is certainly closer in color to the original scribe’s *theta* than it is to the reinkers supralinear *tau*.”²³ Any reader with good eyesight can see clear differences in the color, darkness, and texture of the apricot *distigme* [1308 B27] and the original ink *theta* [1308 C21] in the photographs in Gordon’s Figure 19. Visual identity in ink color, however, is a remarkably good guide.

All scholars, including Gordon, use ink color and faintness in order to identify original Vaticanus “unreinked” letters. The only way Gordon could correctly recognize “the reinking of the adjacent *eta* at 1280 C10 and the horizontal line and *rho* at 1285 B12” is by seeing differences between the color and faintness of those original symbols and their reinking.²⁴

Based on my rigorous application of a strict standard of identical color, none of Gordon’s XRF tests have contradicted any of my visual judgments. Every XRF-tested *distigme* that I identify as visually different from original Vaticanus ink has an ink signature that differs from nearby original ink. Gordon’s XRF tests have also confirmed that I was correct to judge the two dots in the margin of 1243 B21 RM and the left end of the bar at 1243 A12 as original Vaticanus ink.

18 Gordon et al. 2024, 128, n. 18.

19 Gordon et al. 2024, 147–151 refer to “the *distigmai*” 17 times (83 times in the entire article), including, “The elemental profile of the *distigmai* with its near lack of copper impurities. ... the *distigmai* as a group, both apricot and chocolate ... all the *distigmai*, including one on the replacement pages, were written with ink that was chemically purified.” Cf. 125–126, 138.

20 Gordon et al. 2024, 138, Table 1 of XRF-tested “apricot *distigmai*” lists eight out of the forty *distigmai* that Canart by himself identified as “apricot” in Payne and Canart 2009, 204–208. Neither 1241 B1 nor 1469 A3 (the small protrusion of lighter ink on the left side of its right dot) are in Canart’s list of forty “apricot *distigmai*”.

21 Gordon et al. 2024, 136, n. 70, cf. section 4 below. 1243 B21 RM is not in Table 1.

22 Gordon et al. 2024, 152.

23 Gordon et al. 2024, 149.

24 Gordon et al. 2024, 144, Figure 12; cf. 146, Table 5; 147, Table 6, “unreinked ... original”.

3 Gordon Concealed Their Crucial Omission by Using Two Different Definitions of “Apricot”

Gordon’s article at first correctly explains what I mean by “apricot”.²⁵ On p. 126, it states regarding Payne & Canart 2000, “they correctly noticed that the color of the apricot distigmai matched the original unreinked text”. On p. 127, it refers to “original apricot distigmai” four times. On p. 129, it refers to “visual appraisal of their color being the same”. In the context of “Distigmai, Original Ink, and Reinking” on p. 135, it refers to XRF tests “distinguishing between inks that visually appear to be identical”. Readers naturally conclude, therefore, that “apricot” distigmai “visually appear to be identical” to original Vaticanus apricot ink. Gordon’s next paragraph identifies “62 tests on 32 distigmai” including “20 tests on 10 ‘apricot’ distigmai”.²⁶ Whenever referring to XRF-tested distigmai, however, Gordon shifts what he means by “apricot” distigmai to include distigmai that are merely “similar to” the color of nearby original Vaticanus ink.

Three factors contributed to this shift in definition. First was my acceptance that the forty distigmai that Canart identified as “apricot” without me present “match the original apricot color of unreinforced text”.²⁷ Although I accepted Canart’s judgments, I made it clear that this was Canart’s judgment: “The fifty-one distigmai that Canart judged to match the color of the original ink”.²⁸ In the summer of 1998, Paul Canart, the Vice Prefect of the Biblioteca Vaticana, and I together examined many distigmai in the original Vaticanus bifolios both without magnification and with a high-powered, internally-lighted loupe that made each dot look like a huge apricot-colored moon. On p. 226, Gordon mistakenly identifies this as done in “2000”. This was done in 1998, not 2000.

The second factor is that Gordon apparently does not see differences in color that seem obvious to me. Otherwise, he would not have called the eight distigmai his team tested “apricot” and written, “Despite appearances, the apricot *distigmai* tested were not written in the same ink as the original main text”.²⁹ Gordon writes regarding Figure 18, “The chocolate *distigme* bears a striking visual resemblance to the dots flanking either side of

the Arabic numeral ‘3.’³⁰ The color of the *distigme* and of the flanking dots in Gordon’s Figure 18, however, are clearly different. Their dot shapes and horizontal alignment also clearly differ. Similarly, Gordon’s Figure 11 (a), page 143 states, “Note the similarity in color in visible light between the right dot and the original ink of the adjacent *kappa*.” In fact, however, the right dot is far darker and far more brown than the original ink of the adjacent *kappa*.

The third factor is that Gordon chose to promote his own hypothesis that all distigmai are from the sixteenth century, and so ignores, conceals, downplays, or provides implausible explanations for evidence contrary to that hypothesis. Observant readers will find in footnotes significant data that challenges Gordon’s hypothesis that all distigmai date to the sixteenth century. This includes three articles confirming Chinese use of an ink-purifying “cementation process on a commercial scale to extract copper from vitriolic solutions in 1086”,³¹ four articles on the possible use of the cementation process in medieval Spain, and four more articles on its use in Central Europe as early as the thirteenth century.³² Downplayed evidence includes reinked distigmai as well as distigmai where one dot is obviously different in color or darkness than the other dot. In order to explain why lighter ink appears on the left side of some distigmai, Gordon writes, “The thin part of the stroke could be where the pen first touched the parchment.”³³ In fact, however, Vaticanus ink is typically darkest where the pen first touched the parchment, as the bars in Gordon’s Figures 7, 12 (twice), 14, 16, 17 and 20 illustrate.³⁴ It is virtually impossible that the two starkly-differing color right dots at 1469 A3 (Fig. 10, p. 142) were “produced by the same stroke of the pen.”³⁵

4 Gordon’s Claim That The Two Dots at 1243 B21 RM Are a *sigma* Is Doubtful

4.1 *The Graphic Evidence: It Looks Like a Distigme, Not a Sigma*

Gordon’s XRF tests demonstrate that the two dots at 1243 B21 RM, [Fig. 1] which Canart and I identified as an apricot distigme that matches original Vaticanus ink, do in fact match the ink signature of nearby original Vaticanus

25 Gordon et al. 2024, 126–128. I never, however, called this a “dichotomy” with only two sets.

26 Gordon et al. 2024, 135–136.

27 Payne 2009, 203; Payne 2010a, 1–2, 10; Payne 2010b, 34.

28 Payne & Canart 2009, 203; Payne 2010a, 1; Payne 2010b, 12, 34, “Paul Canart’s assessment that fifty-one distigmai match the faded original apricot color ink of Codex Vaticanus”.

29 Gordon et al. 2024, 152.

30 Gordon et al. 2024, 149.

31 Gordon et al. 2024, 133, n. 61.

32 Gordon et al. 2024, 134, n. 62.

33 Gordon et al. 2024, 144.

34 Gordon et al. 2024, 140, 144, 146, and 150.

35 Gordon et al. 2024, 136, n. 67.

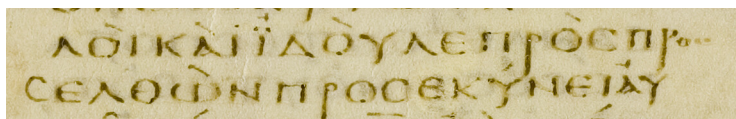


FIGURE 1 Mat 8:2 1243 B21–22 has two dots in the right margin. *Vat. gr.* 1209
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ink.³⁶ Gordon’s dismissing those two dots as a *sigma* reflects his belief that “all the *distigmai* ... were written with ink that was chemically purified”.³⁷ Many visual, contextual, and text-critical factors, however, favor interpreting these two dots as a distigme.

No complete *sigma* is visible at 1243 B21 RM. The two dots are the only areas with ink that can be clearly distinguished from similar shading variations in nearby parchment tones. No ink is clearly visible where either the top or the bottom curving strokes of a *sigma* would be if the two dots were part of a *sigma*. This contrasts sharply with all twenty-eight instances in Matthew where a *sigma* is visible at the right end of a line and that *sigma* is repeated in the left margin of Vaticanus’s next line. In each of these twenty-eight cases the complete “c” shape is visible in both the line-ending *sigma* and the replicated *sigma* preceding the following line.³⁸

Furthermore, none of these twenty-eight line-ending *sigmas* are compressed vertically nearly as much as the one at 1243 B21 RM, if it is a *sigma*. Almost all of Vaticanus’s *sigmas* are roughly circular, similar in height and width, including small ones at the end of a line, e.g. 1244 A44, 1245 C7, 1248 A15, 1251 B26. See, for example the line-ending unreinked *sigma* in Gordon 140 Figure 8’s upper right image of 1257 A30. In the Vatican Library image at https://digi.vatlib.it/view/MSS_Vat.gr.1209 (henceforth VatLib) at maximum magnification, the visible parts of the two dots at 1243 B21 RM are over 2 1/3 times wider than they are tall. No *sigma* in Matthew that is replicated in the following margin is flattened nearly as much as the “*sigma*” Gordon imagines to connect the two dots at 1243 B21 RM.³⁹ All twenty-eight are undoubtedly *sigmas*. The two dots at 1243 B21 RM simply do not look like a *sigma*.

36 Gordon et al. 2024, 136, n. 70.

37 Gordon et al. 2024, 150.

38 Matthew’s twenty-eight line-ending *sigmas* are at: 1241 A24, 1243 B6, 1244 B10, 1245 C7, 1246 B7, B39, C23, 1247 B41, 1248 A15, 1251 B26, 1252 B14, C15, 1254 A30, 1256 A9, C17, 1257 A30, B17, C2, 1259 C2, 1260 C15, C28, 1265 B31, 1266 C16, 1269 A39, 1270 B12, 1273 A23, B40, B42.

39 The width and height of the fully magnified VatLib image of the four most flattened *sigmas* are: 1246 B7 (12 mm w, 7 mm h), 1252 B14 (12.5 mm w, 8 mm h), 1265 B31 (12 mm w, 8 mm h), 1273 B42 (10 mm w, 8 mm h).

4.2 Evidence from Its Function: It Coincides with a Textual Variant

Distigmai signal textual variants. Distigmai on the right side of the first five columns of the open codex normally signal a textual variant beginning at the right side of that line. For example, the original-ink-color distigme on the right side of 1350 B18 RM is adjacent to the last word in that line, Βηθανία (John 1:28), where many manuscripts have Βηθαβαρά (C² K T U Π Ψ^c 083 f¹ 2^c 33), Βηεβαρά (Λ f¹³ 69), or Βηθαραβᾶ (8² 892^{v1}). Similarly, the distigme position on the right side of 1243 B21 most naturally signals a textual variant at the end of this line. It is precisely regarding the last word in 1243 B21 that many manuscripts of Mat 8:2 (C K L S U W Γ Π 2. 33. 124. 579. 1071. 1241. / 844 M) substitute ἐλθων, and 788 and 1424 have neither verb. These two dots are perfectly positioned to signal a textual variant regarding this word. Since distigmai signal textual variants, this perfect positioning adds to evidence that it is a distigme.

4.3 Contextual Evidence Supports Understanding 1243 B21 RM as a Distigme

Contextually, Vaticanus’s nearby original text twice clearly has προέρχουμαι without a *sigma*. This favors understanding these two dots as a distigme rather than a *sigma* since then all three verbs in close proximity and conveying closely parallel ideas would originally have been the same verb, προέρχουμαι. The RSV translates the three parallel verbs:

Mat 8:2 “a leper came to him”

Mat 8:5 “a centurion came forward to him”

Mat 8:19 “a scribe came up and said to him”

In all three cases, the verb is split between two lines with **πρ** ending a line and the rest of the verb at the beginning of the next line. In all three cases, the reinker inserted a *sigma* immediately before the beginning of the next line.

A **τ** (*tau*) from the opposite side of the parchment at 1243 C23 is faintly visible following **πρ** at 1244 A23 [Fig. 2]. Gordon incorrectly states that “The reinker’s *sigma* was added in place of an unreinked *sigma* in the word προσελθών (Mat 8:19) at the end of 1244 A23. The

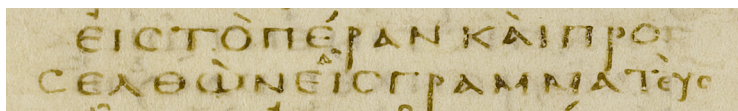


FIGURE 2 Mat 8:19 1244 A23–24. *Vat. gr. 1209*
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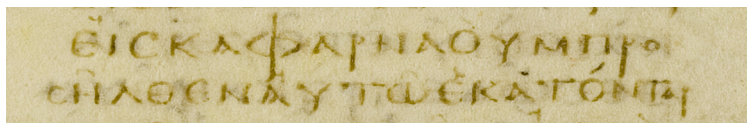


FIGURE 3 Mat 8:5 1243 B37–38. *Vat. gr. 1209*
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unreinked *sigma* was too faint to test.”⁴⁰ That faint trace of a straight vertical line touching a straight horizontal line is not an unreinked *sigma*. It is because there never was a *sigma* following *πρ*ο at the end of 1244 A23 that Gordon found insufficient ink to test. By adding a *sigma* in the left margin of 1244 A24, the reinker changed the word *προελθὼν* into *προσελθὼν*.

Gordon does not mention 1243 B37 [Fig. 3], but the vertical shadow following the *omicron* at the end of 1243 B37 is ink that is partially visible from the vertical stroke of the *κ* on the opposite side of the parchment at 1244 B37. *πρ*ο ending 1243 B37 and 1244 A23 prove that a *sigma* inserted before the following line does not imply that there was originally a *sigma* at the end of the preceding line. Since both of these and 1243 B21 are in close proximity and occur at the same point in the same word, *προέρχομαι*, this pattern increases doubt that 1243 B21 RM is a *sigma*.

Surprisingly, Swanson, NA²⁸, and Moulton and Geden’s Concordance provide no record of the original Vaticanus *προέρχομαι* in Mat 8:5 and 19. It would be natural for the reinker who added the *sigma* to *προέρχομαι* in Mat 8:5 and 19 to make the identical correction at the identical point in the identical word at 1243 B21 (Mat 8:2) as well. That reinker probably did not interpret the two

dots at 1243 B21 RM as a *sigma*, just like Paul Canart and I did not. No papyrus includes any of these three passages (Mat 8:2, 5, 19), so they shed no light on whether the verb in Mat 8:2 originally was *προέρχομαι*, like Vaticanus undoubtedly has in Mat 8:5 and 19, or *προσέρχομαι*, as later manuscripts have in all three places.

4.4 Why Is There a *Sigma* in the Left Margin of the Line Following 1243 B21?

Four factors may have contributed to a scribe inserting a *sigma* in the left margin of Mat 8:2, which in turn explains the same addition of a *sigma* in Mat 8:5 and 19. First, Mat 8:2 is about a leper who “approached” Jesus, and *προσέρχομαι* is more commonly used for personal approach than *προέρχομαι*. This might influence a scribe to add a *sigma* in Mat 8:2, 5, and 19. Second, *προσέρχομαι* is approximately twelve times more common in Matthew than *προέρχομαι*, so it might appear to this corrector to be more “at home” in Matthew. Third, the immediately preceding *λεπρός* in 8:2 could suggest changing *πρ*ο to *πρ*ο*ς*. Fourth, the immediately following paired verb “knelt before” (*προσεκύνει*) in 8:2 begins with *πρ*ο*ς*. This may have influenced the reinker to change the parallel verb to make it also begin with *πρ*ο*ς*.

The reinker undoubtedly changed *προέρχομαι* into *προσέρχομαι* in both of the following nearby instances of *προέρχομαι* in 1243 B38 and 1244 A24. If the reinker first added a *sigma* to change *προέρχομαι* in Mat 8:2 into *προσέρχομαι*, this would set a natural precedent for the reinker to make the same correction at the same point in this same word in Mat 8:5 and 19. If, however, the *sigma* in the left margin by Mat 8:2 were merely indicating a different place to break a syllable, as Gordon suggests elsewhere,⁴¹

⁴⁰ Gordon et al. 2024, 146, n. 87. If Gordon is correct that this ink is “too faint to test”, this indicates that the risk of ink from the opposite side of Vaticanus parchment corrupting XRF-test data is low, even when a trace of ink that partially bled through is visible on the other side of the parchment. This raises doubt about the assertion in Gordon 131, Figure 3: “Before carrying out any XRF tests, it was necessary to ... verify that there was no ink on the opposite side of the page in the spot to be checked. In transmission light (a light shining through the back of the parchment) an *alpha* and *sigma* from the word *ἐδίδαξας* (Luke 13:26) are visible from the other side of the page. The *sigma* from the other side of the page invalidated using XRF on the original ink on the left side of the *gamma*.”

⁴¹ As Gordon et al. 2024, 145, n. 82, and 146 suggest regarding a different verb *προσεύχομαι* (“to pray”) at 1241 A24–25.

this would not explain the *sigmas* in the margins by Mat 8:5 and 19.

4.5 One Possible Objection to 1243 B21 RM Being a Distigme Is Weak

One possible objection to viewing the two dots as a distigme is that the left dot appears to dip lower than the right dot. This objection is weak. Six of the eleven original-apricot-color distigmai identified by Payne and Canart in *NovT* have a left dot that dips lower than the right dot: 1339 C42, 1339 C42 RM, 1355 B40, 1370 A32, 1468 B3, and 1475 B11.

Two crucial questions should be asked regarding any higher-resolution images of 1243 B21 RM that may become public in the future. First, is any additional ink that is not visible in the IPZS facsimile or the VatLib images clearly different from variations in the shading of the surrounding parchment? Only ink that is clearly different from shading in the surrounding parchment should be regarded as ink. Second, where is the new ink? Is it within the location of the two dots of a distigme if both dots originally were roughly equal in size, height, and elevation above the baseline? If it is, that additional ink would be consistent with an original distigme.

5 What About the One Distigme on the First Minusculer Page?

Gordon concludes, “The strongest argument for a late date was always the existence of *distigmai* on the fifteenth century minuscule replacement pages”⁴² and states that Payne referred to “*distigmai* on the replacement pages”.⁴³ In fact, however, there are not, nor did I refer to “*distigmai* [plural] on the replacement pages [plural].” There is only one distigme in the first column of the first page of minuscule text. I clearly explained this in both studies where Gordon incorrectly attributes this to me.⁴⁴

Furthermore, Gordon incorrectly attributes to me that “*distigmai* on the replacement pages could have

been copied ... when the minuscule replacement pages were first produced”.⁴⁵ Neither of my studies that Gordon cites mentions, “when the replacement pages were first produced”.⁴⁶

Gordon states Niccum’s main argument, “that no other paratextual features, such as paragraphoi, were reproduced in the minuscule replacement pages from the original pages so it was unlikely that the *distigmai* on p. 1519 were.”⁴⁷ In n. 26, Gordon states, “For a response, see Payne & Canart 2000, 109 n. 25.” Gordon does not, however, correct any of Niccum’s errors that my response identifies. In addition to the distigme at 1519 A12, there are also two much smaller, non-horizontal, raised dots of undetermined purpose by its second column (1519 B 12, by Heb 10:1) and an angular “chapter break symbol at the beginning of Hebrews 10 (1519 B 8). Both the distigme and chapter-break symbol mimic the form of these paratextual features in the preceding uncial Vaticanus text,”⁴⁸ and all three occur in the minuscule text only here. The absence of paragraphoi is hardly surprising “since there is only one such bar in the previous complete uncial text page.”⁴⁹

What best explains the presence of three symbols that occur in the replacement minuscule text only in a 3 cm × 9 cm segment of the very first page of the eighteen pages of replacement text? Skeat proposed that the minuscule bifolios appended to Vaticanus replaced damaged uncial bifolios.⁵⁰ When a manuscript deteriorates, the first parts to break off are almost always at the beginning and end of that manuscript. That is why both the beginning and end of Vaticanus are missing. Skeat’s proposal, therefore, makes perfect sense. The damaged leaf of the Vaticanus New Testament with original uncial text most likely to have survived is the leaf closest to the surviving intact manuscript, namely 1519. If the person who added these symbols had access to whatever survived of that damaged bifolio, this would explain why all three of these symbols are recorded here and nowhere else in the minuscule bifolios. All three could have been copied from the damaged uncial leaf into corresponding positions in the minuscule text. This would also explain why

42 Gordon et al. 2024, 152.

43 Gordon et al. 2024, 150 and n. 102.

44 Gordon et al. 2024, 150, n. 102, citing Payne 2010a [which Gordon incorrectly identifies out of both chronological and alphabetical order as 2010b], 17–18 and Payne & Canart 2000, 109, n. 25. Payne 2010b, 28 also identifies only one distigme here. Gordon et al. 2024, 126 also incorrectly states, “According to Payne, the original scribe of Codex Vaticanus ... he ...” Contrast Payne 2017, 611, n. 30, “Or she” reflects Eusebius, *Hist. eccl.* 6.23.2, Origen employed “girls trained in penmanship.”

45 Gordon et al. 2024, 150.

46 Gordon et al. 2024, 150, n. 108. Cf. Payne 2010b, 28; Payne & Canart 2000, 109, n. 25.

47 Gordon et al. 2024, 129, n. 26, citing Niccum 1997, 245.

48 Payne 2010b, 28. Compare these symbols at 1518 B 5; 1517 A 40, C 6; 1516 B 30. Cf. Payne & Canart 2000, 109, n. 25; Payne 2010a, 17–18.

49 Payne & Canart 2000, 109, n. 25; Payne 2010a, 18; Payne 2010b, 29.

50 Skeat 1984, 454–465.

there is a distigme here even though its text was the standard text throughout the fifteenth and sixteenth centuries and so unlikely to have been marked as a textual variant at that time. Gordon proposes no explanation for why these symbols were added only in this small section of 1519 and nowhere else in the replacement pages.

I have long argued that only a small percentage of distigmai match original Vaticanus ink. I have argued against the originality of some distigmai including the one at 1390 A32.⁵¹ I do not dispute that the XRF-tested distigmai, including the one in minuscule text at 1519 A12, were written with different ink than the minuscule text added to Vaticanus. The omission of the Pastoral Epistles shows that that scribe was no textual scholar, nor was that scribe competent to write uncial text. It is hardly surprising, therefore, that someone else would insert the symbols that occur only on its first page. Since these symbols were added by a different scribe, it is only natural that it was penned with different ink than the minuscule copyist used. Gordon provides sufficient evidence of use of purified ink prior to the sixteenth century, that those symbols could well have been added to minuscule page 1519 before Vaticanus was given to the Vatican. Or the gift could have included the surviving fragment from which those three symbols were later copied.

6 What About Niccum's Suggestion That Sepúlveda Added the Vaticanus Distigmai?

Gordon repeats Curt Niccum's suggestion that Sepúlveda added the Vaticanus distigmai. Juan Ginés de Sepúlveda, "in 1533 cross-checked all places where Erasmus's New Testament differed from the Vulgate, and supplied Erasmus with 365 readings where the Codex Vaticanus supported the latter."⁵² But if distigmai identify "all places where Erasmus's New Testament differed from the Vulgate" why are there many distigmai in the Vaticanus Old Testament? Gordon lists "Septuagint" as a keyword, but neither "Septuagint" nor "LXX" ever appears in the article. Nor does Gordon cite any distigmai in the Vaticanus LXX or provide any explanation for their presence there. Furthermore, if distigmai were all the result of a collation, why are there such stark differences in color between their two dots, e.g. 1409 B25 and 1453 A30, and even completely different color ink protruding from

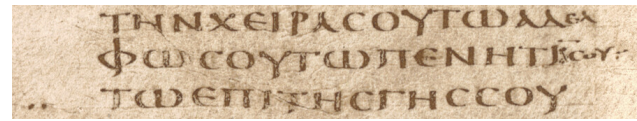


FIGURE 4 Distigme in LXX G 228 B20, from Deut 15:11
IMAGE BY AUTHOR

under or next to distigmai, e.g. 1253 A38, 1469 A3, and 1501 B42?⁵³ In addition, 365 is less than half as many distigmai as are in Vaticanus.

Gordon completely ignores the distigmai in the fourth- or fifth-century Codex Sarravianus-Colbertinus (LXX G), which has close similarities to Vaticanus and may have been written in the same scriptorium.⁵⁴ For example, the distigme at LXX G 228 B20, from Deut 15:11, marks a Greek textual variant between G and the LXX.⁵⁵ The distigme in the margin is at the exact point that G [Fig. 4] omits words that occur in both the Hebrew and LXX texts: καὶ τῷ ἐπιδομένῳ, "and to the one who is distressed." It identifies where the G text differs from the standard LXX text. Thus, like Vaticanus's distigmai, it marks the location of a Greek textual variant. Similarly, the distigme at G B8 marks ποτε as an addition to both the standard LXX text and the Hebrew text.

How does Gordon explain LXX G's distigmai if "there is no reasonable chance that the *distigmai* were written in the 4th century"?⁵⁶ LXX G's distigmai support David C. Parker's rejection of Niccum's arguments that it is 'likely' the distigmai 'originated with Sepúlveda ... Payne successfully vindicated his case [against Niccum's critique].'⁵⁷

7 Obeloi in the Vaticanus New Testament

7.1 Gordon Misrepresents Scholarly Opposition to Obeloi in Vaticanus's New Testament

Gordon states, "the hypothesis that the New Testament portion of Codex Vaticanus contains horizontal lines

51 E.g. Payne 2017, 614.

52 https://en.teknopedia.teknokrat.ac.id/wiki/Codex_Vaticanus_Graecus_1209.

53 Payne & Canart 2009, pl. 8; Gordon et al. 2024, Figures 11, 13, 10.

54 See documentation and a photograph of an LXX G distigme in Payne 2017, 607–608, an *NTS* article that Gordon cites five times.

55 The author made the image in Figure 4 above from *Vetus Testamentum graece: codicis Sarraviani-Colbertini quae supersunt in bibliothecis Leidensi, Parisiensi, Petropolitana phototypice edita* (ed. H. Omont; Leiden: A.W. Sijthoff, 1897).

56 Gordon et al. 2024, 125.

57 Parker 2003, 408, n. 17, refuting Niccum 1997, 245. Payne and Canart 2000, 109, n. 25 and Payne 2009, 235–237 rebut Niccum's arguments.

that function as obeloi has been generally rejected."⁵⁸ In support of this, Gordon incorrectly appeals to "Epp 2005, 18–19."⁵⁹ Epp actually affirms on those pages:

Payne provides more than sufficient evidence to show that these bar-umlauts also are 'sigla indicating textual problems,' ... this combination of literary analysis and text-critical assessment has moved a sizable group of scholars to view the passage on 'silent women' as a later intrusion into 1 Corinthians and most likely one never written by Paul.

Gordon also appeals to "Andrist 2009."⁶⁰ In that work, however, Andrist refers to "des 'distigmai + bar', qui sont peut-être une variante des précédents". Anthony J. Forte wrote:

Important text-critical discoveries that Philip B. Payne and Paul Canart have made in their careful study of Codex Vaticanus's use of distigmai ... and the distigme-obelos symbol (distigme + bar, B"–) to identify the location of multi-word interpolations where there is a gap in the text should be incorporated into the critical apparatus of Nestle-Aland. This convention is accepted by modern New Testament textual critics.⁶¹

These citations show that Gordon misrepresents the extent of scholarly rejection of Vaticanus New Testament obeloi. Furthermore, each of the works Gordon cites that do oppose New Testament obeloi were written long before I had published my analysis of sixteen obeloi.

7.2 Many Scholars Argue That Paragraphoi Were Not Originally in Vaticanus's New Testament

These include Jan Krans, Jesse Grenz, Dirk Jongkind, Frederick Henry Ambrose Scrivener, and John W. Olley.⁶² Peter Head wrote, "the horizontal paragraphoi are not original to the work of scribe B, they are subsequent to the original scribal activity"⁶³ and "paragraphoi are secondary in B. Gaps are original indications of para-

graphing in B."⁶⁴ Versace does not identify any *Vaticanus* New Testament original-ink color paragraphoi; Peter J. Williams reports "thinking that the paragraphoi were later".⁶⁵ Jean Duplacy refers to "1426.2.25"⁶⁶ [actually 1426 B24] as the only original-ink paragraphos. It, however, does not match the color of the original ink protruding from the *kappa* seven letters to its left or the original-ink *epsilon* two lines below that *kappa*.

If New Testament paragraphoi were added later, original ink obeloi could not be paragraphoi, and obeloi could not originally have been confused with nearby paragraphoi. Gordon provides no evidence against the originality of any of the fifteen obeloi I attribute to scribe B.⁶⁷

7.3 Gordon Provides Important Evidence for Vaticanus New Testament Original-Ink Obeloi

Perhaps the most important revelation of Gordon's testing is its confirmation that four of the bars that I identify as obeloi by scribe B (1241 B9, 1243 A12, 1280 C10, 1285 B12) match original Vaticanus ink.⁶⁸ Each of these four obeloi mark blocks of spurious text in some manuscripts that would interrupt the earlier text in Vaticanus at the precise point of a gap in the Vaticanus text: 15 words to 1241 B9 (Mat 6:13), 7 words to 1243 A12 (Mat 7:21), 4 words to 1280 C10 (Mark 3:5), and 15 words to 1285 B12 (Mark 6:11).

Virtually all scholars agree that obeloi mark locations where the Vaticanus text adds words that are not in the Hebrew. Only scribe B could pen the mid-line ÷ shaped obelos at 1016 C12, shown in Figure 5 at the top of the next page. That Figure shows that Joseph Ziegler was incorrect to write that there are no obeloi in the midst of Vaticanus text.⁶⁹

⁵⁸ Gordon et al. 2024, 179.

⁵⁹ Gordon et al. 2024, 129, n. 37.

⁶⁰ Andrist 2009, 242, citing Payne & Canart 2009, 199–202.

⁶¹ Forte 2013, 289–290. Cf. Lavrinoviča 2012, 69–70.

⁶² Krans 2019, 254; Grenz 2017; Grenz 2018, 1, 13; Grenz 2021, 54–61; Jongkind 8 Dec. 2017 email to Payne; Scrivener 1894, 1:108; Olley 2009, 41.

⁶³ http://evangelicaltextualcriticism.blogspot.com/2017/09/more-payne-no-gain-on-distigmai.html?showComment=1506328860222_25_Sep_2017_9:41AM_comment.

⁶⁴ <https://evangelicaltextualcriticism.blogspot.com/2017/11/where-does-parable-of-sower-begin-mark.html?m=0#comments> 11 Nov, 2017 6:12 PM comment.

⁶⁵ Versace 2018; <https://evangelicaltextualcriticism.blogspot.com/2017/11/where-does-parable-of-sower-begin-mark.html?m=0#comments> 11 Nov, 2017 7:52 PM comment.

⁶⁶ Duplacy 1976, 126.

⁶⁷ Note 71 below lists these fifteen. Cf. Payne 2023, 87–101, 185–187 (images).

⁶⁸ Gordon et al. 145, 146: "1241 B 9 left horizontal line (original) Cu 0.12 ink original". Gordon et al. 146 (and 147), "The XRF tests indicate that the original horizontal line (Cu 0.09–0.10) [at 1243 A12] was written in the same ink as the original main text (Cu 0.10)." Gordon et al. 144, Figure 12 displays faint original ink on the left and top sides of the left end of 1280 C10's horizontal bar and also on the left side of that bar's downward dipping right end. Gordon et al. 144, Figure 12, states that "the reinking of ... the horizontal line and *rhō* at 1285 B12 ... [is] unmistakable." The original bar matches the color of the original faint ink of the *rhō* it crosses.

⁶⁹ Ziegler 1983, 56.



FIGURE 5 Mid-line obelos with two dots at 1016 C12, Isa 14:23. *Vat. gr. 1209*
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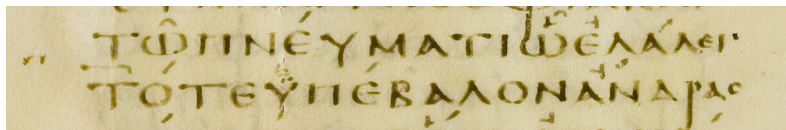


FIGURE 6 Acts 6:10 1390 A32. *Vat. gr. 1209*
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The obelos was the standard symbol for identifying spurious text. LSJ 1196 identifies ὀβελός “horizontal line ... used as a critical mark to point out that a passage was spurious.” Francesca Schironi argues that the obelos has “a rather unequivocal meaning” so the reader knows that an obelos “line is considered spurious, and this is an unambiguous piece of information.”⁷⁰

7.4 *Two Graphic Characteristics Distinguish Vaticanus’s New Testament Obeloi from All But One of the Paragraphoi on Lines with a Distigme*

A horizontal bar shares two graphic features seventeen times by distigme lines: they extend on average farther into the margin (at least 1.9 mm) and they are longer (at least 3.8 mm) than most distigme-line undisputed paragraph bars. As Table 1 shows, these purely graphic features distinguish New Testament obeloi (O) from all but one distigme-line undisputed paragraphoi (¶). I regard the one where no manuscript adds words that interrupt Vaticanus’s text, at 1395 C19 (Acts 9:31), as one of the thirty-one distigme-line paragraphoi. Given the natural random variation in handwritten paragraphoi, it is not surprising that one shares these features.

The sixteen horizontal bars symbolized by O all coincide with locations where some manuscripts interrupt the text with four or more consecutive words.⁷¹ In fifteen of these sixteen, some manuscripts interrupt the text with four or more consecutive words precisely where Vaticanus has a gap. 1390 A32 [Fig. 6] is the only such bar with no gap. It has distinctive downward-dipping ink

from both dots and the bar. Consequently, it should not be attributed to scribe B.

Whoever penned this bar could not add a gap to the already-written text, but recognized that obeloi in Vaticanus mark multi-word insertions into the text that are preserved in some manuscripts, in this case, fifteen consecutive words after ᾧ ἐλάλει in Acts 6:10.

These differences in both form and function indicate that they are separate symbols. The reason that these obeloi are typically longer than paragraphoi is probably that obeloi represent arrows (Isidorus, *Etymologiae* 1.21.3). Longer lines more naturally represent arrows.

7.5 *Six Key Contrasts between the Sixteen Obeloi on Lines with a Distigme and the Thirty-One Paragraphoi on Lines with a Distigme*

There are six striking contrasts in form or function between Vaticanus’s sixteen distigme-line horizontal bars whose characteristics fit obeloi and its thirty-one distigme-line undisputed paragraphoi.⁷² If all forty-seven were paragraphoi, on average, both groups should have been roughly similar regarding all six.

1. Some manuscripts insert four or more consecutive words into all sixteen obelos lines. Since four-or-more-word NA²⁸ or Swanson-noted insertions occur on average only once in 83.5 lines of Vaticanus’s Matthew, this strongly supports that they were intended as obeloi marking insertions.⁷³ In

⁷⁰ Schironi 2012, at 103, cf. 89, 95, 99, 103, 108.

⁷¹ The sixteen are 1241 B9, 1243 A12, 1243 C40 RM, 1253 B13, 1259 A33, 1279 C41 RM, 1280 C10, 1284 C12, 1285 B12, 1305 A17, 1332 C20, 1361 C3 RM, 1371 C17 RM, 1385 B7, 1390 A32 (the only one with no gap), 1474 A20. Cf. Payne 2023, 87–101, 185–187 (with images of all sixteen).

⁷² Ten of these 31 have no gap: 1245 B6, 1312 C6, 1342 C7, 1345 B11, 1361 A40, 1401 B2, 1442 C2, 1504 B31, 1505 B26, 1505 B33. Seventeen of these 31 have a mid-line gap: 1237 B37, 1237 C30, 1267 C31, 1268 A17, 1287 C14, 1301 B21, 1365 A8, 1387 C35, 1395 C19, 1403 A33, 1428 C22, 1429 C27, 1447 C3, 1454 C18, 1469 C17, 1470 A1, 1500 C24. Four of these 31 have a line-ending gap: 1255 B3, 1262 C25, 1403 B21, 1460 B32.

⁷³ On how this was calculated, see page 3, note 8 at <https://www.pbpayne.com/wp-content/uploads/2021/07/Critique-of-Fellows-Krans-Vaticanus-Distigme-Obelos-Denials.pdf>.

[illegible]

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sharp contrast, neither NA²⁸ nor Swanson lists even one completely new Greek word inserted into any manuscript of 21 of the 31 distigme lines with undisputed paragraphoi.⁷⁴ Four insert one word.⁷⁵ Three insert two words.⁷⁶ One each inserts four, five, or six words.⁷⁷

Since distigmai mark the locations of textual variants, distigme lines are considerably more likely than random lines to have multi-word insertions. This is confirmed by comparing the frequency of four-or-more-consecutive-word insertions in random Vaticanus lines in Matthew (on average, 1 in 83.5 lines) with their frequency in lines that have a distigme and an undisputed paragraphos (3 in 31 lines = 1 in 10.333 lines). These comparative frequencies indicate that distigme lines have roughly eight times as many four-or-more-consecutive-word insertions as random Vaticanus lines in Matthew.⁷⁸ Since distigmai mark variants, ten insertions in thirty-one distigme lines are not noteworthy. Nor are the three lines that insert, respectively, four, five, or six words noteworthy. Insertion frequencies like these should be expected on distigme lines.

Due to the far higher probability of insertions on distigme lines, it is crucial to restrict any distigme-line-insertion comparisons to lines with a distigme.⁷⁹ This is further confirmed by the 71 lines in Matthew with a gap and a bar without both of the graphic characteristics of obeloi. Only 1 (1261 B21 at Mat 19:30–20:1) of these 71 lines coincides with any four-or-more-consecutive-word insertion (only in C^c) anywhere on those lines.

2. The second striking contrast between Vaticanus's sixteen distigme-line obeloi and its thirty-one distigme-line undisputed paragraphoi is that all except one of these sixteen lines have a gap—that

only scribe B could leave—at the precise point of a widely-acknowledged spurious insertion.⁸⁰ In sharp contrast, 10 of the 31 distigme-line undisputed paragraphoi have no gap.⁸¹ The only natural explanation for this conjunction of multi-word insertions beginning at a gap on lines with a bar with these characteristics is that scribe B left these gaps and penned these bars in order to mark the location of these insertions.

3. The sixteen obeloi's average extension into the margin is 72.5% greater than the average extension into the margin of the 31 distigme-line undisputed paragraphoi.⁸²
4. The average length of the sixteen obeloi is almost 22% longer than the average length of the 31 distigme-line undisputed paragraphoi.⁸³
5. The average proportion of the sixteen obeloi that extend into the margin compared to their average proportion that extends into the text is almost double that of the 31 distigme-line undisputed paragraphoi.⁸⁴
6. The sixteen lines with both a distigme and an obelos average over twenty inserted words per line compared to an average of 0.8 inserted words per distigme-line with an undisputed paragraphos.⁸⁵ Thus, the sixteen distigme lines with an obelos average over twenty-five times more added words per line than the thirty-one distigme lines with an undisputed paragraphos.⁸⁶

74 These 21 are: 1255 B3, 1262 C25, 1268 A17, 1287 C14, 1342 C7, 1345 B11, 1361 A40, 1365 A8, 1387 C35, 1395 C19, 1401 B2, 1403 A33, 1428 C22, 1429 C27, 1442 C2, 1447 C3, 1454 C18, 1460 B32, 1504 B31, 1505 B26, 1505 B33.

75 1237 B37, 1237 C30, 1267 C31, 1470 A1.

76 1245 B6, 1312 C6, 1500 C24.

77 1469 C17 (1 Cor 10:17, four words not at the gap), 1301 B21 (Mark 14:70, five words at the gap), 1403 B21 (Acts 14:18, six words at the gap) counting the most-extensively-supported NA²⁸-or-Swanson-listed long addition in each case.

78 $8 \times 10 \frac{1}{3} = 82.666664$.

79 Krans 2019, 255 is therefore wrong to call this crucial distinction a "basic error. Payne applies his measurements only to the small set where paragraphoi and distigmai go together." For a detailed critique of Krans 2019, see Payne 2021, 12–24.

80 On the sixteen and the one with no gap, 1390 A32, see above note 71, section 7.4, and Figure 6.

81 The ten are: 1245B, 1312C, 1342C, 1345B, 1361A, 1401B, 1442C, 1504B, 1505 B26, B33.

82 Obelos bars average 2.6375 mm extension into the margin. Other bars by distigme lines average 1.529 mm extension into the margin. $2.6375 \div 1.529 = 1.725$. "Extension into the margin" is from the far-left edge of letters on the margin, excluding $\top$, Υ , ϕ and Ψ , whose vertical strokes abut the margin, and $\times$, which straddles the margin.

83 Distigme-line obeloi average 4.53125 mm long. Other distigme-line bars average 3.719 mm long. $4.53125 \div 3.719 = 1.2184054$.

84 Their average obelos extension into the margin (2.6375 mm) $\div$ their average extension into the text (1.89375 mm) = 1.3927. Their average paragraphos extension into the margin (1.529 mm) $\div$ their average extension into the text (2.19 mm) = 0.698. $1.3927 \div 0.698 = 1.995$.

85 322 words were added to the sixteen obelos lines. $322 \div 16 = 20.125$. 25 words were added to the 31 lines with undisputed paragraphoi (4 single words + $[3 \times 2 \text{ words} = 6] + 4 + 5 + 6 = 25$). $25 \div 31 = .8$ So on average, .8 words were added per distigme-line undisputed paragraphoi.

86 $20.125 \div .8 = 25.16$. I calculated this using the most-extensively-supported NA²⁸-listed or Swanson-listed long insertion in each case.

If these obeloi were merely paragraphoi, one should not expect any of these six sharp contrasts in form or function. Why do these obeloi contrast so sharply in both form and function from undisputed paragraphoi by distigme lines?

My main hypothesis is that scribe B penned most of the distigme-line bars that are at least 3.8 mm long and extend into the margin at least 1.9 mm. These striking contrasts indicate that scribe B penned obeloi and left a gap in each of their lines in order to mark the precise point that some manuscripts insert a bloc of text. This explains all of these sharply contrasting differences between obeloi and undisputed paragraphoi by distigme lines. Gordon's hypothesis provides no explanation for any of these sharply contrasting differences.

7.6 *Evidence That Scribe B Penned Some New Testament Obeloi*

Three key factors support that scribe B penned some New Testament obeloi with these two purely graphic characteristics and a gap.

1. Gordon confirms that at least four of these bars contain original Vaticanus ink.⁸⁷ This associates them with the original scribe, scribe B.
2. All sixteen obeloi on lines with a distigme are by lines where some manuscripts preserve at least four consecutive words that interrupt the earlier text. This cannot plausibly be attributed to mere coincidence because four-or-more-consecutive-word insertions identified in NA²⁸ or Swanson occur on average only once in 83.5 lines of Vaticanus text.⁸⁸
3. All of these sixteen bars except one—with distinctive downward-dipping ink indicative of a later hand—have a gap on that line precisely where some manuscripts interrupt the earlier text with at least four consecutive words.⁸⁹ Only the original scribe could leave gaps.

7.7 *Scribe B's Three Obelos Explanations in Isaiah Provide Five Precedents for New Testament Obeloi*

Scribe B explained three times in Isaiah that an obelos marks where Vaticanus's text includes words that are not in the Hebrew Scriptures. In all three, scribe B penned an obelos below and to the right of the explanation. Signif-

icantly, in all three of these obelized lines, scribe B left a gap at the precise point that Vaticanus includes a multi-word block of text that is not in the Hebrew text. All three provide precedents for scribe B penning obeloi and leaving gaps in the New Testament at the precise point that some manuscripts interrupt the earlier text with spurious text.

Figures 7–9 below show scribe B's three abbreviated **ΩΒ'** (obelos) explanations in Isaiah. Each explanation is identical: **ΟΙΩΒ'ΟΥΚ'Π'ΕΒ'.**⁹⁰ This abbreviates **οἱ ὠβελισμένοι**,⁹¹ **οὐ κείνται παρ' ἐβραίοις**,⁹² “the [words] marked with an obelos do not occur in [the] Hebrew [text].” A gap on an obelized line following all three **ΩΒ'** explanations marks the precise point where a multi-word insertion interrupts the Hebrew text. The most natural explanation of this consistent pattern is that scribe B left these gaps to signify precisely where LXX words interrupt the Hebrew text.

On the second line of Figure 7, the word immediately following the first obelos, **ΔΩCΩ** (“I will give”), is not in the Hebrew text, which has instead, “I will put” (**שׁוּב**). **ΔΩCΩ** is the only word on this line that does not correspond exactly to the meaning of the MT.

The text on the third line with the second obelos in Figure 7, **τῶν ἀδικησάντων σε**, “those who injured you,”⁹³ closely parallels the Hebrew text, “those who torment you **[גַּח]**.” **HRCS 1:25** identifies **ἀδικεῖν** here in **Isa 51:23** as the Greek equivalent of **גַּח**, so **τῶν ἀδικησάντων σε** should not be interpreted as the later-added words signaled by this obelos. Instead, the gap at the end of this line marks where the corresponding Hebrew text was interrupted by a multi-word addition. This is the shortest line in its column. The other 41 lines extend on average over 1.5 letters farther. A corrector later added an s-shaped abbreviation with a grave accent representing **καὶ**.⁹⁴ Its position above the base line and its black ink make it clear that this abbreviation was not part of Vaticanus's original text.⁹⁵ Immediately following the gap, Vaticanus, like the usual LXX text, adds words that are not in the Hebrew text: **τῶν ταπεινωσάντων σε**, “them that humbled you.”⁹⁶

87 Cf. above, section 7.3 and note 68.

88 See note 73 above. Regarding the only distigme-line bar with both graphic features that I do not regard as an obelos, see section 7.4 above.

89 Payne 2023, 185–187 includes images of these sixteen lines.

90 The VaticanusLSU font is available from <https://www.linguistsoftware.com/ntmssu.htm>. For the OdysseyUBSU font used in this article, see <https://www.linguistsoftware.com/lgku.htm>.

91 Cf. Hagedorn 2004, 3:235.

92 As Ziegler 1983, 56 explains it.

93 LSJ s.v. **ἀδικέω** 11.2. explains that **ἀδικέω** means “harm, injure” when transitive with an accusative regarding persons, as here.

94 A similar accented symbol replacing part of **κ** also means **καὶ** at 1053 B14 (**Isa 54:12**).

95 Cf. Ziegler 1939, 317.

96 BDAG, s.v. **ταπεινώω** 2, “to cause someone to lose prestige or

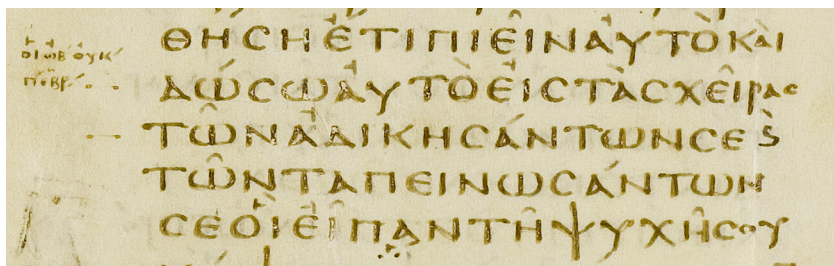


FIGURE 7 Isaiah 51:23 1051 B31. Abbreviated obelos explanation + obelos + gap + multi-word addition. *Vat. gr. 1209*
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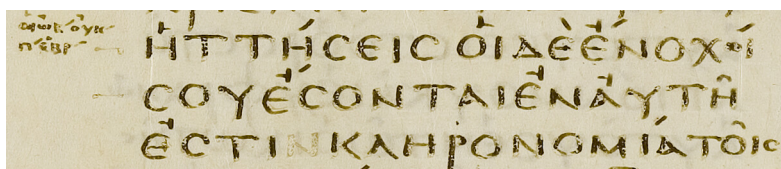


FIGURE 8 Isaiah 54:17 1053 B39. Abbreviated obelos explanation + obelos + gap + multi-word addition. *Vat. gr. 1209*
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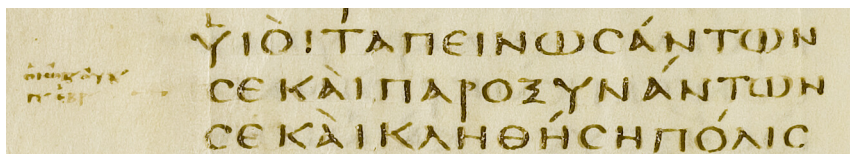


FIGURE 9 Isaiah 60:14 1058 A31. Abbreviated obelos explanation + obelos + gap + multi-word addition. *Vat. gr. 1209*
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Two verses earlier at Isa 51:21 and at Isa 58:3, 5, 10 and 60:14 ταπεινώ translates נָגַע, not נָגַח. This and the fact that נָגַח has already been translated confirms that τῶν ταπεινωσάντων σε is the added text marked by the obelos on line three above. The added words fill the next line and continue on the following line. Neither of those following two lines where τῶν ταπεινωσάντων σε occurs has an obelos. The gap at the precise point where the text was interrupted confirms that scribe B was aware that τῶν ταπεινωσάντων σε are the added words marked by the obelos on line 3. The obelos by line 3, therefore, marks the line where the Hebrew text was interrupted. Surprisingly, Rahlfs 2:637 does not identify any hexaplaric insertion here.

As in Isa 51:23, the gap at the end of 1 Cor 14:33 (1474 A20 with a distigme-obelos symbol that may originally have been only an obelos) marks where the earlier text

was interrupted.⁹⁷ As in Isa 51:23, there is no obelos before any of the following inserted lines (1 Cor 14:34–35).

Isaiah 54:17 [Fig. 8] has a gap at the exact point where the LXX adds seven words that are not in the Hebrew: οἱ δὲ ἐνοχοί σου ἔσονται ἐν αὐτῇ. Bothobeloi match the original ink color of the ν in the following line. This gives strong support that scribe B penned bothobeloi. Surprisingly, Rahlfs 2:640 does not identify this as a hexaplaric insertion.

Isaiah 60:14 has a gap precisely where the LXX adds words that are not in the Hebrew Scriptures: καὶ παροξύναντων σε [Fig. 9]. **BP** in the abbreviation matches the faint obelos's original apricot-color ink, showing that scribe B penned both the abbreviated explanation and the obelos. Since there is only one line with an obelos and since the LXX inserts multiple words, the abbreviation more naturally refers to obelized "words" than to

status, *humble, humiliate, abase*. LSJ s.v. ταπειν-όω 2 "humble, abase".

97 Cf. obelos-marked, line-ending gaps where other manuscripts add words that interrupt the text at Mat 8:13 (1243 C40), Luke 14:24/25 (1332 C20), and John 7:52/8:12 (1361 C3).

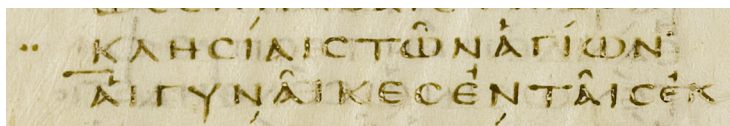


FIGURE 10 1Corinthians 14:33/34. 1474 A2o. *Vat. gr.* 1209
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“lines”. Here and in Isa 51:23, only the line where the text corresponding to the Hebrew text was interrupted has an obelos. Similarly, 1 Cor 14:34–35 has an obelos only on the line where the earlier text was interrupted [Fig. 10].

Each of these three abbreviated obelos explanations provides five precedents for distigme-obelos symbols in the Vaticanus NT: (1) an abbreviated explanation (in the NT, a distigme that explains where a textual variant occurs), (2) a horizontal-bar obelos, (3) typically below and to the right of the abbreviated explanation,⁹⁸ and (4) a gap on the line following the obelos (5) precisely where some manuscripts add multiple words that interrupt the earlier text.

7.8 *Vaticanus Obeloi Show That Scribe B's Textual Judgments Are Trustworthy, That Vaticanus's Gospels' Text Is Early, and That Paul Did Not Write 1 Corinthians 14:34–35*

Extensive evidence shows that scribe B was extraordinarily careful not to add to or remove from Vaticanus's exemplars' text, high stops, obeloi, nomina sacra, or paragraphoi.⁹⁹ In thirteen places scribe B did not add an obelos but wrote ΟΥΚ'Π'ΕΒΡ' in the margin.¹⁰⁰ This demonstrates the extraordinary care scribe B took not even to add obeloi if they were not in Vaticanus's exemplar manuscript. Jesse Grenz writes that “Versace makes a convincing case that these Hexaplaric sigla originated in the exemplar.”¹⁰¹

Scribe B's obelos-marked textual judgments should be trusted for two key reasons. 1. The variety of sources evident in scribe B's obelos-marked judgments shows that scribe B had access to far more pre-Vaticanus text than all surviving New Testament papyri combined. 2. Standard critical editions agree with all but one of these sixteen

obelos-marked textual judgments. Their agreement with scribe B's textual judgments also confirms that the standard principles of textual criticism are reliable guides for assessing the earliest text of New Testament.

The text of Vaticanus's Gospels is so early that it has virtually no sentence-ending high stops. It has only half as many nomina sacra abbreviations as Ƴ⁷⁵, which NA²⁸ dates as “III”.¹⁰² Some of Vaticanus's spellings are more primitive than Ƴ⁷⁵'s. Fifteen times Vaticanus has χρείνω where Ƴ⁷⁵ has χρίνω. Nor is Vaticanus's Matthew corrupted either by any of the thirteen obelos-marked insertions on its lines with a distigme or the eight insertions on its lines where there is a bar with the obelos graphic characteristics and a gap but no distigme.¹⁰³

Vaticanus's epistles obelize only one passage, 1 Cor 14:34–35. Unlike all other obelized passages, 14:34–35 is in Vaticanus's text. Scribe B faithfully preserved it from Vaticanus's exemplar, but obelized it. Scribe B consistently followed this same pattern by preserving the additions to the Hebrew text marked by all 121 obeloi in Vaticanus's prophetic books. Just as scribe B faithfully preserved its Gospels' primitive exemplar text uncorrupted by any of the later obelos-marked insertions, scribe B also faithfully preserved its later exemplar for 1 Corinthians without removing any of its high stops or 1 Cor 14:34–35, although obelizing it as spurious [Fig. 10].

This obelos is a prime example of the two purely graphic characteristic features of scribe B's obeloi both in its bar's greater-than-average extension into the margin and length. Furthermore, the unusual gap clearly marks where Paul's text was interrupted by the insertion of 1 Cor 14:34–35. This obelos and gap indicate that Paul did not silence women in the churches.

8 Distigme-Obelos Symbols

Gordon's XRF tests show that scribe B could not have written five of the sixteen distigmai by lines where I identify an obelos.¹⁰⁴ This raises key questions:

98 Scribe B may have repositioned New Testament obeloi since distigmai typically occupy that position or to distinguish them from LXX obeloi. This lower-right position suggests that obeloi identify a specific kind of textual variant.

99 See Payne 2017, 609, 621–624 and Payne 2023, 92–95.

100 The thirteen are: 988 A7*; 1033 B21, 37; 1034 B31*; 1035 C8; 1038 B15; 1045 C2, 38; 1046 A40*; 1054 C16*; 1066 C30*; 1073 C36*; 1074 B17*. Every letter of ΟΥΚ'Π'ΕΒΡ' in the lines with an * matches original ink except the ΟΥΚ' in 1034 B31, which is reinked.

101 Grenz 2021, 123 citing Versace 2018, 12.

102 NA²⁸ 796.

103 The eight are identified in note 105 below.

104 The five are at 1243 A12, 1243 C40 RM, 1279 C41 RM, 1285 B12,

8.1 *Are There Other Vaticanus New Testament Obeloi Where There Is No Distigme?*

I examined all 211 bars in Matthew with both graphic characteristics of obeloi and a gap but no distigme. Eight coincide with a four-or-more-consecutive-word insertion that begins at the gap in that line, significantly more than average distribution.¹⁰⁵ Five coincide with three-word and none with two-word insertions.¹⁰⁶ This corroborates the view that New Testament obeloi signify locations where some manuscripts insert at least four consecutive words. These bars in Matthew also confirm that by far the highest correlation between New Testament obeloi and four-or-more-consecutive-word insertions are obeloi on lines with a distigme (16 of 16).

8.2 *Why Were Distigmai Later Added to At Least Five Lines with an Obelos?*

There are two possible explanations for why one or more scribes later added distigmai to lines with an obelos. First, those scribes may have understood that a distigme marks the location of a textual variant and so added these distigmai. Although this would explain why distigmai were added, it would not explain why all sixteen distigme-obelos symbols coincide with four-or-more-consecutive-word insertions.

Second, like the scribe who added the distigme-obelos with distinctive downward-dipping ink at 1390 A32 but could not insert a gap, those scribes may have understood that a distigme-obelos marks the location specifically of a multi-word spurious insertion.¹⁰⁷ Only this explains why every distigme-obelos occurs precisely where at least four consecutive words interrupt the earlier text.¹⁰⁸ Later scribes would be more likely to understand the meaning of the distigme-obelos symbol if Vaticanus originally had at least one distigme-obelos symbol.

8.3 *Gordon Did an XRF Test on Only 2 of the 16 Bars in Distigme-Obelos Symbols*

Gordon identifies XRF tests on only 2 of the 16 bars by lines with both an obelos and a distigme, and both

tests confirm original ink in the obelos.¹⁰⁹ I agree that Gordon's XRF test on 1243 A12 demonstrates that its bar has a different chemical composition than its distigme and so could not have been penned with that distigme. Gordon identifies the bar at 1243 A12 as "original" ink that has 0.10 Cu content like unreinked text on that page.¹¹⁰ This confirms the correctness of my assessment that: "The left portion of the obelos [at 1243 A12] matches Vaticanus's original apricot color ink."¹¹¹ To have enough evidence to assert that scribe B did not pen any distigme-obelos symbols, XRF testing must be done on the other fourteen bars in distigme-obelos symbols and also on the other ten distigmai on obelos lines with a gap.

8.4 *Gordon's XRF Test on 1241 B9's Distigme May Provide Evidence for Underlying Original Ink*

Gordon asserts that the XRF test done on the distigme at 1241 B9 disproves Payne's "hypothesis that the apricot *distigme* was written in the same ink as the visually similar original ink of the main text".¹¹² Gordon states that their XRF test "involved passing a beam along a line through the left dot and the ink smear" but does not identify the location of that line.¹¹³

The location of this XRF test is crucial to Gordon's argument. Gordon provides fourteen images that "display yellow lines indicating the precise location of the measurements."¹¹⁴ Gordon could easily have shown the path of the XRF test on 1241 B9 in Figure 14, on p. 146. In order to exclude an original distigme that was later reinked, a significant portion of the test would have to come from an underlying original dot. I request that Gordon make public the exact location of 1241 B9's XRF test's path.

None of the other nineteen XRF tests on distigmai that Gordon identifies as "apricot" gave a copper to iron ratio as high as the test of 1241 B9, namely 0.02 Cu.¹¹⁵ Eight show 0.00 Cu. Eleven show 0.01 Cu. Nor do any of the other forty XRF tests on distigmai where there could have

¹⁰⁵ 1332 C20. Gordon et al., 138, Table 1 and 139, Table 2 list these five distigmai's XRF test results. In addition to these, section 7.4 above argues that scribe B did not pen the distigme at 1390 A32 (Fig. 6). The following section 8.4 discusses 1241 B9.

¹⁰⁶ 1246 A37 (Mat 9:35–36), 1247 C32 (10:39–40), 1252 A22 (13:23), 1261 C11 (20:7–8), 1266 C11 (23:13/15), 1269 A7 (24:31–32), 1276 A37 (27:58–59), 1276 C32 (28:8–9).

¹⁰⁷ 1239 B5, 1247 C21, 1249 B9, 1250 A37, 1272 B22.

¹⁰⁸ Cf. above, section 7.4 and Figure 6.

¹⁰⁹ Note 71 above identifies the sixteen distigme-obelos locations.

¹¹⁰ 1241 B9 and 1243 A12. Note 71 above identifies the sixteen. Gordon et al. 2024, 146, Table 5 documents their original ink.

¹¹¹ Gordon et al. 2024, 147, Table 6.

¹¹² Payne 2023, 185.

¹¹³ Gordon et al. 2024, 146; 138, Table 1 identifies one XRF test done on 1241 B9's left dot.

¹¹⁴ Gordon et al. 2024, 145, n. 84.

¹¹⁵ Gordon et al. 2024, 135, 137, both Figures 5 (four lines) and 6 (ten lines).

¹¹⁶ The twenty tests are listed in Gordon et al. 2024, 138, Table 1. They were done on ten "apricot" distigmai, three of which are on a line with a bar that I identify as an obelos (1241 B9, 1279 C41 RM, 1332 C20).

TABLE 2 Seventeen tests needed on distigmai that look identical to original Vaticanus ink L=left
R=right

#	Distigme's line	Margin	Dot	Original-ink letter's line	Location to test	Letter	#
1	1336 A22	L	L	1336 A39		Ω	2nd
2a	1339 C42	L	R				
2b	1339 C42	R	R	1339 C9	R vertical stroke of	Ν	10th
3	1349 B19	L	R	1349 B23		Ε	7th
4	1350 B18	R	L	1350 A34		Ε	10th
5	1355 B40	L	R	1355 B24	R vertical stroke of	Ν	8th
6	1356 B24	L	R	1356 B23		Ν	10th
7	1357 C1	R	R	1357 C1	R vertical stroke of	Ν	8th
8	1359 A32	R	L	1359 A35		Ι	12th
9	1368 C15	L	L	1368 C22		Ο	8th
10	1370 A32	L	L	1370 A33		Ε	10th
11	1383 A4	L	L	1383 A14		Ε	7th
12	1459 C41	R	L	1459 C36		Ε	7th
13a	1466 A25	L	R	1466 A25		Ε	12th
13b	1466 B6	L	R				
14	1468 B3	L	L	1468 B15		Η	13th
15	1475 B11	L	L	1475 B10		Ε	2nd

been an underlying distigme and that Gordon identifies as “chocolate” show this much copper content.¹¹⁶

Gordon's XRF test shows that both the bar at 1241 B9 and nearby unreinked text have 0.12 Cu.¹¹⁷ Consequently, if any percentage up to 15 % of 1241 B9's XRF scan came from an original ink underlying distigme, this would affect this scan enough to explain its higher-than-normal 0.02 Cu reading. A new XRF test should be done on the part of 1241 B9 that would have the least contamination from smeared ink, namely at the middle of its right dot. Any copper to iron ratio greater than 0.02 would further support an underlying original distigme-obelos symbol here.

8.5 What XRF Tests Must Be Done to Determine the Originality of Some Distigmai and Obeloi?

Seventy-four XRF tests on the following thirty-three Vaticanus pages (#1–33) are needed to determine the originality of some distigmai and obeloi. The remaining untested seventeen distigmai that look identical to the

color and faintness of original Vaticanus ink and an unreinked letter on those pages must be tested to determine whether some or all of them match the ink signature of original Vaticanus ink on the same page [Table 2].

New XRF testing is needed on ten of the distigmai in distigme-obelos symbols, on their fourteen untested obeloi, and on an unreinked letter on eleven distigme-obelos pages [Table 3].

Since these tests have not yet been done, Gordon's assertion that it is “impossible for them [distigme-obelos symbols] to have functioned as conjoining text-critical symbols in the 4th century” lacks necessary scientific grounds.¹¹⁸ Furthermore, Gordon incorrectly claims to have done XRF tests “on 4 [only 3 were done] chocolate *distigmai* and ... on 3 apricot *distigmai* that were part of the fifteen [there are sixteen] *distigme-obelos* pairs”.¹¹⁹

In addition, seven XRF tests could establish the originality of the ink that looks original in Isaiah's obeloi and

¹¹⁶ Gordon et al. 2024, 126.

¹¹⁷ Gordon et al. 2024, 136 and n. 69 states that they tested “Chocolate: 1243 A12, 1243 C40, 1285 B12, 1474 A20; apricot: 1241 B9, 1279 C41, 1332 C20”. One of the four chocolate distigmai (1474 A20) was not tested, as Gordon et al. 2024, 139, Table 2, “XRF texts of chocolate *distigmai*” shows. Section 8.4 above addresses the location and interpretation of one of these three tests done on an apricot-color distigme on a line where I identify an obelos, the one at 1241 B9.

¹¹⁶ Gordon et al. 2024, 139, Table 2 lists only two with 0.02 Cu. The location, size, and orientation of 1444 C8's dots make them unlike every other distigme. Therefore it is virtually certain that it was not written over an underlying distigme. 1519 A12 is on a replacement minuscule page. Furthermore, Gordon's other three 1519 A12 tests show 0.01 Cu (p. 139).

¹¹⁷ Gordon et al. 2024, 146, Table 5.

TABLE 3 Tests needed on distigme-obelos symbols: ten on distigmai, fourteen on obeloi

#	Distigme line	Test	Obelos line	Location to test	Original ink letter line	Location to test	Letter to test	#
16	1241 B9	mid-RD						
17			1243 C40	on faint ink mid-bar				
18	1253 B13	LD	1253 B13	mid-bar	1253 B15		€	9
19	1259 A33	RD	1259 A33	mid-bar	1259 A27		€	11
20			1279 C41	on faint ink mid-bar				
21	1280 C10	RD	1280 C10	on faint ink on far L	1280 C9	L vertical stroke	N	3
22	1284 C12	LD	1284 C12	on faint ink mid-bar	1284 C7		C	6
23			1285 B12	on faint ink on far R	1285 B14		N	10
24	1305 A17	RD	1305 A17	on faint ink mid-bar	1305 A7		€	12
25			1332 C20	on faint ink mid-bar	1332 A21		N	5
26	1361 C3	LD	1361 C3	top side of far R end	1361 C2		€	9
27	1371 C17	RD	1371 C17	mid-bar under the left side of the M	1371 C12		€	6
28	1385 B7	LD	1385 B7	on faint ink mid-bar	1385 A36		N	18
29			1390 A32	mid-bar				
30	1474 A20	RD	1474 A20	faint R part of bar	1474 A22		€	10

TABLE 4 Tests needed on three obelos explanations, one obelos, and three original letters in Isaiah

#	Abbreviation line	Location to test	Obelos line	Location to test	Original ink letter line	Location to test	Letter to test	#
31	988 A7	Y's vertical stroke in OYK'			988 A7	middle stroke	N	5
32	1058 A31	vertical stroke of B or P	1058 A31	bar's left end	1058 A33		€	4
33	1066 C30 RM	o or final P			1066 C30	left half of	O	15

their adjacent abbreviated obelos explanations, either with or without **OB'** [Table 4].

These 74 XRF tests (17+15) + (10+14+11) + (3+1+3) on 33 Vaticanus lines could establish definitively whether the ink of some distigmai match the ink signature of nearby original ink. They could also provide guidance for determining whether scribe B conjoined some distigmai with obeloi or penned only obeloi to mark multi-word insertions preserved in some manuscripts.

Several factors suggest that scribe B may have penned some distigmai on lines with an obelos. Scribe B's three obelos explanations in Isaiah provide five precedents for distigme-obelos symbols.¹²⁰ Four of the 121 obeloi in the Vaticanus LXX Prophets have two dots: 1012 C9, 1014 C15,

and 1016 C12 (two). Furthermore, if scribe B penned any distigme-obelos symbols to signify where four or more consecutive words were inserted, this would explain why a later scribe (or scribes) who understood this added the five distigmai that XRF tests show to be subsequent to nearby obeloi.¹²¹ It would also explain why a later scribe added a distigme-obelos symbol to 1390 A32 but could not add a gap to the already-written text.¹²² It would also explain why the Cu content in the left dot at 1241 B9 is higher than all other "apricot" distigmai that Gordon tested. Finally, it would explain why all sixteen distigme-obelos symbols coincide with four-or-more-consecutive-word insertions.

¹²¹ Note 104 above lists these five. Section 8.4 above addresses 1241 B9.

¹²² See above, section 7.4 and Figure 6.

¹²⁰ See above, section 7.7.

9 Conclusions

Gordon states that X-ray fluorescence tests prove that apricot distigmai are very late and can distinguish between inks that are visually identical. Gordon gives the impression that they tested original-ink-color distigmai. Gordon nowhere acknowledges that the only XRF test that they did on any of the eighteen distigmai that visually match original Vaticanus ink is the one Gordon dismisses as a *sigma*. Gordon conceals their lack of testing of original-ink-color distigmai by shifting what the article means by “apricot” when labeling XRF tests. All those labeled “apricot” are merely “similar to” original ink.

Gordon’s XRF tests provide three good reasons to expect that when XRF testing is done on the seventeen as-yet-untested distigmai that visually do match the apricot color and faintness of original Vaticanus ink, those tests will show that some, if not most or all, of those seventeen distigmai have ink signatures that correspond to nearby original Vaticanus ink.¹²³

1. The only XRF test that Gordon did on dots that visually match nearby original Vaticanus ink, at 1243 B21 RM, confirms that their ink signature does match the ink signature of nearby original Vaticanus ink.¹²⁴ Canart and I identified 1243 B21 RM’s dots as an apricot distigmai.¹²⁵
2. Gordon’s tests and high-resolution photographs confirm that the only bar that I had identified as containing ink that matches the color and faintness of nearby original Vaticanus ink, 1243 A12’s original horizontal bar, “was written in the same ink as the original main text.”¹²⁶
3. None of the “apricot” distigmai identified in Gordon’s Table 1 visually matches nearby original Vaticanus ink.¹²⁷ In each case, their differences in ink color and faintness from original Vaticanus ink correlate perfectly with their ink signatures that differ from original Vaticanus ink.

Initially, I mistakenly accepted Canart’s judgments regarding all forty distigmai he identified as “apricot” because I assumed that he was using the same criteria for original ink color that we used together to identify eleven original-ink distigmai. Unlike Canart, I no longer

had access to the original Vaticanus bifolios, so I had no solid basis to challenge his judgments. Gordon’s tests have confirmed that the ink color differences that I continue to observe in the IPZS facsimile are a reliable guide for identifying ink that is not original. In the IPZS facsimile, only seven of the forty distigmai Canart called “apricot” are visually identical to the color of original Vaticanus ink.

Gordon’s “strongest argument for a late date ... the existence of *distigmai* on the 15th century minuscule replacement pages” is based on assertions that are false.¹²⁸ Gordon ignores distigmai in the fourth- or fifth-century Codex Sarravianus-Colbertinus (LXX G), which has close similarities to Vaticanus. The view that Sepúlveda added the distigmai to Vaticanus during a collation with Erasmus’s New Testament text does not explain the Vaticanus LXX distigmai.

Positively, Gordon provides important evidence that the ink of four Vaticanus New Testament obeloi is original.¹²⁹ Gordon’s XRF tests show, however, that at least 5 of the 16 distigmai on lines with a characteristic-bar obelos were written after that bar. This inspired me to look for evidence that scribe B also penned some obeloi where there is no distigmai.

My main hypothesis is that scribe B penned obeloi to mark where some manuscripts add spurious blocks of text and that scribe B left a gap at the precise point where those blocks of text interrupt the earlier text in Vaticanus. Seventeen of Vaticanus’s distigmai-line bars share two purely graphic features.¹³⁰ I argue that sixteen of them are obeloi.¹³¹ Only the hypothesis that they are obeloi explains any of the six striking contrasts between those sixteen bars and the thirty-one distigmai-line undisputed paragraphoi.¹³² In particular, all sixteen distigmai-line obeloi mark lines where, in some manuscripts, four or more consecutive words interrupt Vaticanus’s earlier text. This cannot reasonably be attributed to chance because four-or-more-consecutive-word insertions occur on average only once in 83.5 lines of Vaticanus text. Furthermore, all except one that was added later (1390 A32) have a gap at the precise point of the insertion. Remarkably, twenty-five times more words per line were added on average to the sixteen distigmai lines with an obelos than to the thirty-one distigmai lines with an undisputed paragraphos.

¹²³ These seventeen plus the already-tested 1243 B21 are listed in note 10 above (the 11 in Payne & Canart 2000, 108) and note 6 above (the 7 of Canart’s 40 that visually match original ink).

¹²⁴ Gordon et al. 2024, 136, n. 70, where Gordon call it a *sigma*. Section 4 above explains evidence that it is not a *sigma*.

¹²⁵ Payne & Canart 2009, 204.

¹²⁶ Gordon et al. 2024, 146, images on 147, Figure 15 and Figure 16. Cf. above, section 7.3 and n. 68.

¹²⁷ Gordon et al. 2024, 138. Cf. Payne & Canart 2009, 204.

¹²⁸ See above, section 5.

¹²⁹ See above, section 7.3 and n. 68.

¹³⁰ Each is at least 3.8mm long and extends into the margin at least 1.9mm. Cf. above, section 7.4 and Table 1.

¹³¹ Note 71 above lists the sixteen. Cf. Payne 2023, 87–101, and images at 185–187.

¹³² Section 7.5 above documents these six striking contrasts.

If Vaticanus bars with these two purely graphic features were paragraphoi, we should expect that, at least on average, they would have roughly similar numbers of words added and gaps inserted into their lines as the distigme-line undisputed paragraphoi. The fact that 16 of the 17 distigme-line bars with both graphic features mark lines where some manuscripts insert four or more consecutive words shows that virtually all of them are obeloi marking where text was added. Gordon acknowledges, “Horizontal lines that have been hypothesized to function as text-critical obeloi were written in the same ink as the original main text”.¹³³

Scribe B's obelos-marked textual judgments should be trusted for two key reasons.¹³⁴ 1. The variety of sources evident in scribe B's obelos-marked judgments shows that scribe B had access to far more pre-Vaticanus text than all surviving New Testament papyri combined. 2. Standard critical editions agree with all but one of Vaticanus's sixteen obelos-marked textual judgments.

Scribe B's obelos-marked textual judgments are significant for five key reasons: 1. Scribe B's and NA²⁸'s nearly identical judgments corroborate the validity of the standard principles of textual criticism. 2. 100% of the insertions obeloi signify are attested by surviving manuscripts even though extant papyri (p^{46.123}) attest only one of them (1474 A20). Since 100% of variants with such poor pre-Vaticanus attestation survived, how much more should the vast majority of the originally-distributed text in the New Testament also have survived in extant manuscripts.

3. The obelos and gap at the interface between 1 Cor 14:33 and 34 provides the earliest New Testament manuscript evidence that Paul did not write 1 Cor 14:34–35, the only passage in the Bible that commands women to be silent in church. 4. The Vaticanus Gospels are so early that they do not include any of the thirteen four-or-more-consecutive-word insertions that their distigme-line obeloi mark. 5. Vaticanus's Matthew is so early that it does not include any of the eight four-or-more-consecutive-word insertions beginning at the point of a gap in its 211 lines with bars having both graphic features of obeloi but no distigme. All of these twenty-one insertions occur at the precise point of a gap in Vaticanus that only the original scribe B could enter. This supports other evidence for dating the entire text of the Vaticanus Gospels, apart from inadvertent copy errors, to the 2nd century.¹³⁵

It is because scribe B's obelos-marked textual judgments are so important that I am delighted that the Vatican is planning to perform new XRF tests based on my recommendations in section 8.5. Hopefully these tests will establish definitively whether the ink of some distigmai match the ink signature of nearby original ink. They should also provide guidance for determining whether scribe B conjoined some distigmai with obeloi or penned only obeloi and left gaps to mark where some manuscripts interrupt the text with four-or-more-consecutive spurious words.

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¹³³ Gordon et al. 2024, 125–126; cf. above, section 7 on obeloi.

¹³⁴ Cf. above, section 7.8.

¹³⁵ Payne 2017, 621–623 argues for a 2nd century date for the text of Vaticanus Gospels.

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