

twenty subgroups, the first consisting of the first line following the distigme, the second consisting of the second line following the distigme, etc., does not produce even one subgroup having nearly as high a frequency of NA variants as the lines with distigmai¹³.

Paul Canart invited Payne to the Vatican to see if any of the distigmai with faded ink Payne had observed in the 1965 color facsimile of *Codex Vaticanus* did in fact match the original ink of the codex. Together they examined these distigmai on the original leaves of *Codex Vaticanus* and discovered eleven unambiguous cases where the ink of distigmai matches the apricot color ink of the original manuscript. That research was published in *Novum Testamentum* 42 (2000), p. 105-113, "The Originality of Text-Critical Symbols in *Codex Vaticanus*". That article also details evidence for the originality of distigmai in dark chocolate brown ink and outlines the significance of the discovery¹⁴.

B: The Discovery of Forty More Distigmai in the Original Ink of the Codex

The recently released, high-resolution, color facsimile of *Codex Vaticanus*¹⁵ replicates the apricot color ink of the original hand of the manuscript to a degree never before achieved in print. Examination of this new facsimile permitted Payne to identify many new instances of apricot color distigmai.

Canart then directly examined these and other distigmai in the original *Vaticanus* leaves, first with the naked eye, then with a magnifying glass, and finally with different types of loupes. He confirmed that forty additional distigmai, some of which he discovered in the process, unambiguously match the original apricot color of unreinforced text on the same page of the codex. Two of these are less than 3 mm from text in the original ink (1349 B 19) or an original ink diplé ">" mark of an OT quotation (1309 A 23). Many others are within a few centimeters of text in the same apricot color ink:

¹³ The percentage of lines containing NA variants in these twenty subgroups varies from 18.5% at the lowest to 52% at the highest. Cf. *ibidem*, p. 252-254.

¹⁴ P. B. PAYNE – P. CANART, "The Originality", p. 109-111 on reinforced distigmai and p. 111-113 on the significance of the discovery.

¹⁵ *Codex Vaticanus*.

- 2 between 3mm and 1 cm: 1332 C 20, 1349 B 19, 1475 B 11
- 6 between 1 cm and 2 cm: 1243 B 21, 1285 C 14, 1339 A 42, 1351 A 6, 1356 B 24, 1409 B 25¹⁶ (see below, *pl.* 8ab)
- 13 between 2 cm and 3 cm: 1243 B 21, 1279 B 1 (3x), 1285 C 14, 1296 A 14, 1332 B 10, 1342 C 41, 1345 B 11, 1346 B 40, 1356 B 24, 1382 C 39 (2x), 1396 B 26, 1401 C 41, 1459 B 32 (->)
- 17 between 3 cm and 4 cm: 1243 B 21, 1277 C 19, 1279 C 41, 1285 C 14, 1336 A 22, 1339 A 42, 1345 B 11 (2x), 1346 B 40 (4x), 1351 A 6 (3x), 1356 B 24, 1357 C 1, 1370 A 32, 1457 B 24, 1466 B 6, 1471 A 38 (2x), 1473 A 6, 1501 A 32

All fifty-one¹⁷ distigmai that match the original ink of *Vaticanus* are listed in the following table identifying their page, column (A, B or C), line, the type of variant found in other manuscripts, verse reference, and some locations on that page with unreinforced text displaying the original ink of the codex. If, as occurs frequently, only a single letter of a word is unreinforced, that letter is noted. These variants are easily recognizable and affect the text as cited in the following table's footnotes. Unless another critical edition is cited in the footnote, all variants are listed in the Nestle-Aland 27th edition *Novum Testamentum*.

Table 10: Table of Unreinforced Distigmai Matching Unreinforced Text

* = Other distigmai on this page match the ink of reinforced text.

◻ omitted word ◻ omitted words † replaced word † replaced words † inserted word(s)

<i>distigma locus</i>	<i>in verse</i>	<i>variant</i>	<i>the location and identification of nearby unreinforced text</i>
1: 1243 B 21 ¹⁸	Matth. 8,1-2	† ¹⁹ ◻ ²⁰	1243 B 8, 34 N, 28 E, 1243 C 20, 27 N*
2: 1261 A 21	Matth. 19,23	† ²¹	1261 A 17, 24 N*
3: 1264 C 29 ²²	Matth. 22,4	◻ ²³	1264 C 31 E, 1264 B 36 N*
4: 1276 C 31	Matth. 28,8		1276 C 12, 13, 17 N (especially 12 and 13)*

¹⁶ Canart classifies this as "probable" but not certain to match the original ink.

¹⁷ Including the eleven original ink distigmai identified in the table in P. B. PAYNE – P. CANART, "The Originality", p. 108. Those eleven are numbers 21, 22, 30, 31, 34, 43, 44, 45, 46, 49, and 50 in the table below.

¹⁸ This distigma is on the right side of col. B.

¹⁹ C K L W 33 579 1241 3R replace a word. R. J. SWANSON, *Matthew*, p. 60, adds S U Γ Π 2 1071. — Explanations of the manuscript abbreviations are given below, p. 263-265.

²⁰ 1424 omits a word. *Ibidem*, p. 60, adds 788.

²¹ 565 puts πλούσιος after ἐξέλεῦσεται; cf. *ibidem*, p. 187.

²² This distigma is farther left than usual.

²³ sy⁴ omits words.

5: 1277 C 19	Marc. 1,5	o ²⁴ τ ²⁵	1277 C 19 E, 30 N, 1277 B 15 (11) Θ*
6: 1279 B 1	Marc. 2,1	r ²⁶	1279 B 1 Y, 2 N, 1279 A 6 N*
7: 1279 C 41	Marc. 2,16-17	r ²⁷	1279 C 34 E, 1279 B 40 T*
8: 1285 C 14	Marc. 6,21	r ²⁸	1285 C 16 N, 17, 19 E*
9: 1287 C 29	Marc. 7,17	r ²⁹	1287 C 24 N*
10: 1288 B 26	Marc. 7,33	o ³⁰	1288 B 25 N, 17 E, 15 NE, 1288 C 15, 16 N*
11: 1296 A 14	Marc. 12,14	r ³¹	1296 A 14, 25 N, 1296 B 30-32 OT quotes >, 37 N*
12: 1300 A 37	Marc. 14,39	o ³²	1300 A 30 E*
13: 1300 A 39	Marc. 14,39-40	□ ³³ r ³⁴	1300 A 30 E*
14: 1308 B 27	Luc. 2,43	r ³⁵	1308 B 32 Y N*
15: 1309 A 23 ³⁶	Luc. 3,5	r ³⁷	1309 A 14-26 OT quotation marks >, 1309 B 18 N
16: 1332 B 10	Luc. 14,14	r ³⁸	1332 A 5, 1332 B 5 EI, 19 N
17: 1332 B 15	Luc. 14,15	r ³⁹ r ⁴⁰	1332 B 5 EI, 19, 20 N
18: 1332 C 20	Luc. 14,24	r ⁴¹	1332 C 23 N, 1332 B 19, 20 N
19: 1336 A 22	Luc. 17,7	r ⁴²	1336 A 16 E, 13 N, 1336 B 14, 18 N*

²⁴ Θ 69 pc omit πάντες; cf. NA²⁵; cf. R. J. SWANSON, *Mark*, p. 8.

²⁵ A G^{sup} H K M P U W Θ Π f¹ 2 700 1424 ℞ place καὶ ἐβαπτίζοντο after Ἱεροσολυμείται and 69 places ἐβαπτίζοντο after Ἱεροσολυμείται; cf. *ibidem*, p. 8.

²⁶ A C 0130 f^{1,13} ℞ replace words.

²⁷ ℞⁸⁸ A f¹ 33 ℞ c q sy sa^{ms} / κ / L Δ f¹³ (579) pc vg co / C / G 565 700 1241 1424 pc replace this word with five different phrases, and Θ replaces it with a different word.

²⁸ ℞⁴⁵ inserts ἐν after Ἡρώδης.

²⁹ A W Θ f^{1,13} ℞ sa^{ms} replace these words with a different phrase.

³⁰ κ L W 892 c i omit a word.

³¹ A f^{1,13} (28) ℞ it change the word order. D Θ 565 k sy^{sp} replace a word with one or more different words.

³² 788 omits καὶ and 69 reverses the word order of ἀπελθὼν πάλιν; cf. *ibidem*, p. 235.

³³ D it omit words.

³⁴ A C (N) W (Θ) f^{1,13} ℞ (q) sy^(ph) replace words.

³⁵ A C Ψ 0130 f¹³ ℞ it sy^{ph} bo^{pr} replace words with a different phrase.

³⁶ This distigme is farther left than usual, presumably in order to keep it from overlapping the dipole mark (shaped like a greater-than sign) of the OT quotation. This indicates that at least this distigme was written after this dipole mark.

³⁷ κ A C L W Θ Ψ f^{1,13} 33 ℞ it; I^{1st} replace a word.

³⁸ κ* N f¹³ 1 1424 2542 pc it replace a word.

³⁹ A D W Θ Ψ ℞ sy^h; Cl replace a word.

⁴⁰ A* W f¹³ ℞ sy^{ec}; Cyr^{lem} replace another word.

⁴¹ Γ f¹³ (579). 700 892^{mb} al insert a clause.

⁴² 579 replaces ποιμαίνοντα with ἡτοιμῶντα. 1071 replaces it with ποιμαίνονται; cf. R. J. SWANSON, *Luke*, p. 295.

20: 1339 A 42	Luc. 19,17	Γ ⁴³	1339 A 41 H, 34 N*
21: 1339 C 42	Luc. 19,37	□ ⁴⁴	1339 C 9, 16 N, 1339 B 11 N, 1339 A 41 H*
22: 1339 C 42	Luc. 19,37	□ ⁴⁵	1339 C 9, 16 N, 1339 B 11 N, 1339 A 41 H*
23: 1342 C 41	Luc. 21,25	Γ ⁴⁶	1342 C 41 Σ, 35 N, 30 H*
24: 1345 B 11	Luc. 22,58	Γ ⁴⁷	1345 B 17 E, 4, 18 N
25: 1346 B 40	Luc. 23,23-24	T ⁴⁸	1346 A 36, 40 E, 1346 B 40 E, 41 EN
26: 1349 B 19 ⁴⁹	Luc. 24,47	Γ ⁵⁰	1349 B 19 ΞΑΜΕΝΟΙΑΠΟΙΕΡΟΥΣΑΛ, 23 E
27: 1350 B 18 ⁵¹	Ioh. 1,27-28	T ⁵²	1350 A 19 N
28: 1351 A 6 ⁵³	Ioh. 1,42	Γ ⁵⁴	1351 A 6 ΑΟΥ, 1, 5 N, 10 E*
29: 1352 A 40	Ioh. 2,24	□ ⁵⁵	1352 A 19 E, 20 ΟΙ, 24 N, 1352 B 5 E, 1352 C 28 N*
30: 1355 B 40	Ioh. 5,2	Γ ⁵⁶	1355 B 1, 4, 24 N, 1355 C 20 Σ, 26, 33, 37 T*
31: 1356 B 24	Ioh. 5,25	Γ ⁵⁷	1356 A 24 N, 1356 B 5, 23, 29 N, 6 E (dropped from ΤΕΙΜΩΣΙ in Ioh. 5,23)

⁴³ κ Α Λ Ψ Θ Ψ f¹⁻¹³ ℞ replace a word.

⁴⁴ This distigme is on the interior margin of 1339 C. 063 it sy^c omit τῶν μαθητῶν.

⁴⁵ This distigme is on the exterior margin of 1339 C. 063 it sy^c omit τῶν μαθητῶν.

⁴⁶ D (W) ℞ replace a word.

⁴⁷ ℞^{69vid} D sy^a / A W Θ Ψ f¹ ℞ replace words with a different word or phrase.

⁴⁸ A D W Θ Ψ 0250 f¹⁻¹³ ℞ (c f) sy bo^{ms} / 1424 insert a phrase.

⁴⁹ The distigme at 1348 B 19 appears to be a mirror impression caused by the ink from the distigme at the corresponding position on 1349 B 19. This explains why the distigme at 1348 B 19 displays the original ink of the codex, why it is so faint, why it is on the right side of col. B, not on its left side as is typical, and why it is slightly below the baseline instead of the usual mid-letter height.

⁵⁰ -νoui is replaced by -νον in ℞⁷⁵ A C³ W f¹⁻¹³ ℞ sy^h, -νων in D Δ^c pc lat, -νος in Θ Ψ 565 pc.

⁵¹ This distigme is on the right side of col. B.

⁵² E F G H N 2* (pc) insert a clause. ℞⁶⁶ κ insert words. Cf. R. J. SWANSON, *John*, p. 11.

⁵³ This distigme is on the right side of col. A.

⁵⁴ A B² Ψ f¹⁻¹³ ℞ c q vg^d sy bo^{ms}; Epiph replaces a name. Θ 1241 pc vg replace it with another name.

⁵⁵ sy^a omits this phrase.

⁵⁶ ℞² A D L Θ f¹ 33 565 597 a (b) aur e ff² vg^d | pc replace words.

⁵⁷ K S Π Ω 28 al substitute ἀνθρώπου for θεοῦ. This is listed in E. NESTLE – K. ALAND, *Novum Testamentum*²⁵, p. 244, and most other editions of the NT with an extensive apparatus, including R. J. SWANSON, *John*, p. 60, A. MERK, *Novum Testamentum*, p. 324, who adds 280 482s 399s sy^hm (throughout this article the manuscript notation conventions of the work cited are used and are not converted to NA conventions); E. NESTLE, *Novum Testamentum*¹⁶, p. 244; C. TISCHENDORF, *Novum Testamentum*, t. I, p. 790, who adds al¹⁰ syr^p ms⁸ et^{hr}; and J. J. GRIESBACH, *Novum Testamentum*³, t. I, p. 525, who adds 42. 91 al.3 Chrys. in textu (in comm. variant codd.).

32: 1357 C 1	Ioh. 6,11	^{r58} ^{r59} 1357 C 1 N
33: 1368 C 15	Ioh. 12,7	1368 C 22 O, 24 N, 1368 B 7 N, 21 E, 23 N
34: 1370 A 32	Ioh. 12,47	^{r60} 1370 A 33-4, 39, 41 E, 1370 C 33-35 EI ... ΔΙΔΑΣΚΑΛΟΣ ⁶¹
35: 1380 A 26 ⁶²	Ioh. 20,14	^{r63} 1380 A 30 N, 1380 B 31 EO*
or		
35: 1381 C 26 ⁶⁴	Ioh. 21,22	1381 B 9 N, 1381 A 18 N*
36: 1382 C 39	Act. 1,14	^{r65} 1382 C 24 N, 40 N, 1382 B 36 M*
37: 1383 A 4	Act. 1,15	^{r66} ^{r67} 1383 A 14 E, 1383 B 7 Θ*
38: 1396 B 26	Act. 10,4	^{r68} 1396 B 26, 27 N, 1396 A 35, 39 N*
39: 1401 C 41	Act. 13,33	^{r69} 1401 C 38 N, 30 E, 1401 B 28-32 >, 26, 28, 42 N*
40: 1419 B 36	Act. 25,2	^{o70} ^{r71} 1419 A 30 E, 1419 C 37, 19, 9 N*
41: 1457 B 24	Rom. 12,17	^{r72} 1457 B 20 E, 32-34 >, 5 E, 1457 C 11 M, 12, 18 N*
42: 1459 B 32	Rom. 15,13	^{r73} 1459 B 11, 16, 19, 26 >, 1459 C 33 NN, 25, 36 E*

⁵⁸ Ⲙ D it sy^(p) / ⲡ^{28.66.75} N Γ 69 579 1071 *pc* / 28 replace a phrase with two different phrases.

⁵⁹ ⲕ² D Θ Ψ f¹³ Ⲡ b e j (sy^r) ac² bo^{ms} insert a phrase. 1424 *pc* insert αὐτοῦ.

⁶⁰ Variant expressions replace καὶ μὴ φυλατῆν in Ⲙ W Θ 070 0250 579 1241 *pc* Ⲡ e q it vg^{ms} sy^{hmg}.

⁶¹ The duplicated unreinforced text in 1370 C 33-35 is from Ioh. 13,14a.

⁶² This distigme, especially its first dot, is higher than usual. Perhaps the second dot was lowered to make it clear which line it indicates. This distigme may simply be a mirror impression caused by the not-quite-dry ink of the similarly-lopsided distigme on the facing page at 1381 C line 26.

⁶³ Λ and C. L. LLOYD, *H KAINH ΔΙΑΘΗΚΗ* insert ⲟ; cf. R. J. SWANSON, *John*, p. 275.

⁶⁴ This distigme, especially its second dot, is higher than usual. This distigme may simply be a mirror impression caused by the not-quite-dry ink of the similarly-lopsided distigme on the facing page at 1380A line 26.

⁶⁵ C³ 33 1739^r Ⲡ insert καὶ τῆ δεήσει.

⁶⁶ C 056 1611 replace τε with δε, D^c with δε ὁ, and D^{*} with γὰρ ὁ; cf. R. J. SWANSON, *Acts*, p. 9.

⁶⁷ E replaces ὀνομάτων with ἀνδρῶν, and 618* replaces it with ὀνομάτων; cf. *ibidem*, p. 9.

⁶⁸ 1828* replaces Τί ἐστίν with Τίς εἶ; cf. *ibidem*, p. 165.

⁶⁹ E Ⲡ / 1175 / D gig; (Or) / ⲡ^{45vid} t replace this phrase with four different phrases.

⁷⁰ ⲡ⁷⁴ omits a word.

⁷¹ H P 049 189 326 *pm* replace a phrase.

⁷² A¹ / F G 629 lat insert two different phrases.

⁷³ Ⲙ replaces δυνάμει πνεύματος with δυνάμι πνς; cf. R. J. SWANSON, *Romans*, p. 236 (prepublication galley proof shown to Payne). All manuscripts investigated by Swanson except B ⲡ⁴⁶ 69 substitute the abbreviation πνς for πνεύματος; cf. *ibidem*, p. 236.

43: 1459 C 41	Rom. 15,23	†74	1459 C 25, 36, 39 E, 33 N N *
44: 1466 A 25	I Cor. 6,20	†75	1466 A 25 E, 1466 B 21, 24, 26 N *
45: 1466 B 6	I Cor. 7,5	†76	1466 A 25 E, 1466 B 11, 21, 24, 26 N *
46: 1468 B 3	I Cor. 9,6-7		1468 B 15 K, 15, 16 marginal diples, 1468 C 7, 12 N *
47: 1471 A 38	I Cor. 11,28	†77	1471 A 31, 39, 40, 42 E, 1471 B 33, 35, 37, 39 N *
48: 1473 A 6	I Cor. 14,3		1473 B 18, 19, 29 N, 1472 C 7 E *
49: 1475 B 11	I Cor. 15,34		1475 B 10, 24 E, 13, 27 N, 1475 C 7 E, 13, 14 N *
50: 1499 C 42	Phil. 1,28	†78	1499 C 28 N, 32 E, 1499 B 15 N, 6, 28, 30, 35 E *
51: 1501 A 32 ⁷⁹	Phil. 3,5	†80	1501 A 36 E, 1501 B 26 M, 42 N E *

The NA lists a variant in thirty-six⁸¹ of the fifty-one lines listed in the chart above, namely in over 70% of the lines with distigmai matching the original apricot color ink of *Vaticanus*. This contrasts sharply with the relative infrequency, 35%, of the 540 control lines without distigmai. Thus, approximately twice as many lines with apricot color ink distigmai contain NA variants than do lines without distigmai.

⁷⁴ Φ^{46} \aleph A D (F) G Ψ 33 1739 1881 \mathfrak{M} have πολλῶν instead of ἰκανῶν.

⁷⁵ C. Tischendorf (*Novum Testamentum*, t. 3, p. 488) notes that Meth^{Epi^{ph} 579} inserts ἄραγε before δοξάσατε (as does A. SOUTER, *Novum Testamentum*) and that Ps. Ath 2,4 omits the text that occurs in this line of *Vaticanus*.

⁷⁶ \aleph^2 K L 88 326 436 614 1241 1984 1985 2127 2492 2495 *Byz Lect* \mathfrak{M} sy^{ph} got Dion Ephraem Chr^m Thret insert τῆ νηστεία καὶ ("fasting and") before "prayer". 330 451 and Iohannes Damascenus add καὶ νηστεία after "prayer".

⁷⁷ Φ^{46} has the spelling ἐσθειέτω instead of ἐσθειέτω; cf. P. W. COMFORT – D. P. BARRETT, *The Text*, p. 270.

⁷⁸ D² P Ψ 075 104 1505 *pc* \mathfrak{M} (M^{Vict} Aug) insert μέν.

⁷⁹ This distigme may simply be a mirror impression caused by the not-quite-dry ink of the distigme at 1500 C 32, but 1501 A 32 is probably the original distigme since it is in a typical distigme position whereas 1500 C 32 is not and since two other distigmai in the same facing column, 1500 C 10 and 24, are in typical distigme positions.

⁸⁰ Φ^{46} has the genitive περιτομῆς instead of the dative περιτομῆι. P. W. Comfort and D. P. Barrett (*ibidem*, p. 324), C. Tischendorf (*Novum Testamentum*, t. 3, p. 717) and J. B. Lightfoot (*Saint Paul's*, p. 146) note that some texts, e.g. Eus¹³³⁵⁹, have the nominative περιτομή.

⁸¹ 1243 B 21, 1264 C 29, 1277 C 19 (NA²⁵), 1279 B 1, 1279 C 41, 1285 C 14, 1287 C 29, 1288 B 26, 1296 A 14, 1300 A 39, 1308 B 27, 1309 A 23, 1332 B 10, 1332 B 15, 1332 C 20, 1339 A 42, 1339 C 42, 1339 C 42, 1342 C 41, 1345 B 11, 1346 B 40, 1349 B 19, 1350 B 18, 1351 A 6, 1352 A 40, 1355 B 40, 1356 B 24 (NA²⁵), 1357 C 1, 1370 A 32, 1382 C 39, 1401 C 41, 1419 B 36, 1457 B 24, 1459 C 41, 1466 B 6, and 1499 C 42.

The fact that these fifty-one distigmai match the apricot color of the original ink of *Codex Vaticanus* shows that they were penned as part of the original production of the codex. The presence of these original-ink-color distigmai scattered throughout *Codex Vaticanus* demonstrates that the scribe who penned these distigmai had the goal of systematically going through the codex to make these notations. It would be only natural for someone with a goal of systematically noting the location of textual variants in another manuscript to compare texts from beginning to end, especially since, at that time, NT texts had no verse divisions.

C. Statistical Evidence that Distigmai Mark the Location of Textual Variants

To what level of statistical probability has it been established that distigmai mark the location of textual variants? The appropriate statistical test to determine the significance of the relationship between distigmai and textual variants is the chi-square test. The chi-square test reveals the statistical probability that the null hypothesis may be rejected. In this case the null hypothesis is that occurrences of distigmai and occurrences of textual variants are independent. If, for instance, the chi-square is 6.625, the odds are one in a hundred that the null hypothesis is correct. If the chi-square is 10.828, the odds are one in a thousand that the null hypothesis is correct. The chi-square value resulting from comparing how many of the twenty-seven distigme-plus-bar lines contain NA variants to how many of the following twenty lines contain NA variants is $\chi^2 = 25.081$, a chi-square value so high that it goes off standard chi-square charts⁸². This chi-square value shows that the odds are less than one in 10,000 that the occurrences of distigmai and of textual variants are independent. This chi-square value permits rejection of the null hypothesis, that occurrences of distigmai and textual variants are independent, with a very high level of confidence. Correspondingly, this chi-square value gives extraordinarily high confirmation that there is a co-occurring relationship between distigmai and textual variants.

Applying the chi-square statistical test to the fifty-one distigmai that match the original apricot color ink of *Vaticanus* also allows rejection of the null hypothesis that the occurrences of distigmai and of textual variants are independent. Again, it does so at an extraordinarily high level of probability,

⁸² Cf. the Chi-square Distribution table in E. HATCH – A. LAZARETON, *The Research*, p. 603. $p < 0.001$ $d.f. = 1$; $d.f.$ stands for “degrees of freedom”. This calculation includes Yate’s correction for continuity.