Zachary J. Cole, Numerals in Early Greek New Testament Manuscripts: Text-Critical, Scribal, and Theological Studies, NTTSD 53; Leiden: Brill, 2017. Pp. xiii + 269. ISBN 9789004343740. Hardcover, €116.00/\$134.00.

- [1] Like modern English usage, in Koine Greek we find two different styles for writing numbers: the longhand form ( $\epsilon \tilde{i}\varsigma/\mu i\alpha/\tilde{\epsilon}\nu$ ,  $\delta io$ ,  $\tau \rho \epsilon \tilde{i}\varsigma$ , etc.) and the alphabetic shorthand form ( $\overline{\alpha}$ ,  $\overline{\beta}$ ,  $\overline{\gamma}$ , etc.). Scholars have long noticed the irregularity of the use of shorthand numerals in scriptural manuscripts, but a thorough examination of the phenomenon is still lacking, let alone any convincing explanation for it. Aiming to fill this gap, the current volume provides the first full-scale study of numerals in early Greek New Testament manuscripts. From this perspective Zachary J. Cole's book is to be welcomed.
- [2] The book is a revised edition of the author's doctoral dissertation, defended in 2016 in Edinburgh under the same title.<sup>1</sup> Its structure is clear: After the preliminary material (acknowledgements, abbreviations, a list of figures, and a list of tables), the first two chapters are the "Introduction" and "History of Research"; then comes the main parts entitled "The Data" and "Studies." The body text is followed by a bibliography and four useful indices (of authors, subjects, manuscripts, and scripture).
- [3] Chapter 1 (pp. 1–10) first defines the goal of this study and provides the general research question: "*how did NT scribes typically write numerals and why*?" (p. 2; emphasis original). As we will see, this twofold question does indeed guide the whole journey. Following these, an introduction to the system of Greek numerals is given, and then methodological issues and the scope of the data are brought out. Several points deserve to be mentioned here. First, the study focuses on "numerals as scribes wrote them in the body text of NT manuscripts" (p. 7); in other words, paratextual features are generally ignored, including most of the scribal corrections.<sup>2</sup> Second, the time frame of the examined data is up to the fifth century, the time of the rise of the "great uncials." Thus, instead of an in-depth examination into every aspect related to numerals that appear in New Testament manuscripts, this study seeks to offer "a wider view," which "will allow one to observe scribal patterns that span all of the extant witnesses" (p. 7).
- [4] Chapter 2 (pp. 11–33) reviews the history of research on the subject in question. It starts by characterizing the current trend in New Testament textual scholarship as considering manuscripts as artefacts. Such a "material turn" (Kim Haines-Eitzen's term; p. 11) emphasizes the importance of the physical and visual features of New Testament manuscripts, and an analysis on scribal numberwriting techniques, Cole believes, fits this turn well. Then he goes to discuss previous studies on New Testament numbers. Besides a brief treatment of patristic authors, the reviewed studies are all from the twentieth and twenty-first

<sup>1</sup> First supervisor: Paul Foster; second supervisor: Larry W. Hurtado. The dissertation is available online via https://www.era.lib.ed.ac.uk/handle/1842/21711. Compared to the 2016 dissertation, in the NTTSD volume there are two changed chapter titles: from "Numerals and the Dynamics of Public Reading" to "Numerals and the Mechanics of Public Reading" (chapter 8), and from "Conclusions" to a more expanded "Concluding Thoughts" (chapter 9). Besides, two lists and four indices are added.

<sup>2</sup> According to the applied rule (p. 7), corrections made by original scribes and by contemporary hands are considered, but those made by later hands are completely excluded, except for a few instances.

centuries. The first is Henry A. Sanders's 1912 study on W032 and the last Tommy Wasserman's work on early Greek manuscripts in Matthew, published in 2015. Cole observes that there are various ways in which scholars understand the scribal numbering-techniques, but those studies either lack sufficient grounds for their claims or are limited to a small scale. Thus a thorough examination is needed.

- [5] After the two preparatory chapters, the first part of the main body offers an impressive "inductive study," aiming to "identify each cardinal and ordinal number written in the body text of New Testament manuscripts through the fifth century" (p. 37). In other words, this part is intended to answer the "how" question mentioned above. It is divided into two chapters: "Internal Profiles of Papyri" (chapter 3; pp. 35–81) and "Internal Profiles of Majuscules" (chapter 4; pp. 82–127).
- Chapter 3 focuses on papyri, first on the "major papyri" (i.e., P<sup>45</sup>, P<sup>46</sup>, P<sup>47</sup>, P<sup>66</sup>, [6] P<sup>72</sup>, P<sup>75</sup>, and P<sup>115</sup>), then on those "minor papyri" that are fragmentary but still have extant or reconstructed numbers (forty-seven papyri in total). Each major papyrus is discussed in the following way (I take  $P^{45}$  for example; pp. 38–42): First, all the occurred cardinal numbers are listed in a table and the results are summarized; then the analysis turns to ordinals (which are all longhand in  $P^{45}$ ). Then discussions are devoted to "problematic readings," especially those debatable instances (e.g., Luke 10:17 in P45). At the end a summary of the findings is given.<sup>3</sup> Understandably, some papyri receive more attention than others. For instance, despite only containing nine chapters in Revelation,  $P^{47}$  is discussed at length (pp. 45-50) because of its unique techniques regarding numerals. Coming to the minor papyri, it is not surprising that they are examined much briefly. Many are treated within one paragraph by simply reporting every visible and reconstructed number. The most notable finding of the chapter is perhaps the diversity of the practice of number-writing techniques: the occurrences of abbreviated numerals are almost unpredictable, even within a single manuscript. According to the author, nevertheless, some tendencies can still be observed (see below).
- [7] The next chapter continues to analyze the majuscules in a similar way. The section on "major majuscules" includes six uncials: N01, A02, B03, C04, D05, and W032. Among them N01, D05, and W032 are examined in more details. The next section ("minor majuscules") has put another thirty-six uncials into the dataset. As in in the previous chapter, each section on the major majuscules begins with an examination of the visible cardinal numbers and then the ordinals. A helpful summary is provided after these reports. Yet, instead of the "problematic readings" in the papyrus sections, here the distinctive features of each uncial are treated differently according to the uncial's use of numerals. For instance, for N01 additional analysis is given to orthography as well as the issue of *nomina sacra* (pp. 93–95), for D05 the Latin text is discussed (pp. 108–10), and for W032 its particular mixture of text is brought to the minor papyri; that is, the author presents the extant numerals directly. In summary, on the one

<sup>3</sup> For P<sup>115</sup>, a section of "Reconstructed Numbers" (pp. 62–63) is also added.

<sup>4</sup> The other uncials (A02, B03, and C04) are discussed briefly due to their (almost) consistent use of longhand numbers.

hand, scribes seemed free to choose any abbreviation that fit their purpose to use abbreviations. But on the other hand, Cole claims that—based on his thorough examination—there are four "striking similarities" among manuscripts: (1) there are "no instances of 'one' ( $\epsilon i c/\mu i a/\epsilon v$ ) in its abbreviated form"; (2) there is "the nearly exclusive avoidance of abbreviations for values in the thousands"; (3) some numbers are more likely to be abbreviated than others (e.g.,  $\delta \omega \delta \epsilon \varkappa a$ ); and (4) there is a tendency for certain books to "contain distinct scribal tendencies of number-writing" (pp. 125–26).

- [8] Cole devotes part 2 ("Studies") to several issues concerning numerals in New Testament manuscripts. In the light of the research question, this part concerns the "why" question. It is divided into four chapters, each of which tests a hypothesis in an attempt to explain such a perplex subject.
- [9] Chapter 5 (pp. 129–50), examines whether numeral styles are connected to textual genealogy. Two primary small-size examples, namely, different portions of W032 and the exact usage of two later Greek-Latin bilingual manuscripts (F010 and G012), show that this hypothesis might be valid. However, after testing numerous sample sections across different New Testament books,<sup>5</sup> Cole comes to a negative conclusion that "the most significant influence on number-writing style is the individual scribe's preference rather than genealogical relationship" (p. 150).
- [10] Chapter 6 (pp. 151–70) discusses and rejects a popular thesis, first proposed by Colin H. Roberts, concerning numbers in Greek Old Testament manuscripts. In contrast to Christian scribes, who used numbering abbreviations, Roberts proposed that Jewish scribes usually avoided using those features in copying their Greek Old Testament. If such a claim is true, the use of shorthand numerals can become a criterion for distinguishing a manuscript with a disputed origin. But, by means of a method similar to part 1, a close look at numbers in certain Greek manuscripts of the Old Testament (sixty-nine in total; from second century BCE to the third century CE) draws a conclusion against Roberts's proposal. Although numeral abbreviations are commonly present in Christian manuscripts, Cole concludes, especially due to the limited size of relevant data, that "there is insufficient evidence to prove the reverse for Jewish manuscripts" (p. 170).
- [11] Since certain numbers were full of theological nuances in early Christianity, chapter 7 (pp. 171–97) explores the interesting possibility of "*numeri sacri*," a term created to resemble the well-known practice of *nomina sacra*. The question to be answered is: "Did number-symbols ever serve a theological, devotional, or mystical function analogous to, or at least similarly to, the *nomina sacra*?" (p. 173). Several possible candidates are analyzed, and among these three seem to be relevant, although all within a narrow scope. These are the number "twelve" in Matthew of  $\aleph 01$ , which correlates to the disciples; the similarity between "eighteen" ( $\overline{n}$ ) and a rarely used *nomen sacrum* in P<sup>45</sup>; and the abbreviated use of "ninety-nine" in some portions of Luke of W032. Overall, once again a negative conclusion is given; that is, no candidate is qualified for being a *numerus sacer*.

<sup>5</sup> According to the occurrence of shorthand numbers, there are thirteen test sections in the gospels, two in Acts, two in Pauline epistles, seven in Revelation, but none in the Catholic Epistles.

- [12] After three chapters with negative results, in chapter 8 (pp. 198–223), Cole argues in favor of the connection between Christian number-writing techniques and the practice of public reading in early Christianity. The proposed hypothesis is that the tendencies Cole has observed (the avoidance of abbreviations for "one," ordinal numbers, inflected forms, and values in the thousands) "produce manuscripts that can be read aloud in public with minimal ambiguity" (p. 198). Accordingly, each tendency is examined, first in the papyri, then in the majuscules. Exceptions are discussed and corresponding explanations are offered. The chapter closes with the confirmation that these tendencies of avoidance were intentionally made in order to help a given reader to read aloud, just as other "reader's aids" found in New Testament manuscripts.
- [13] The last chapter (pp. 224–33) provides some helpful summaries and reflections. More importantly, the author also mentions a number of potential directions for further research. At the end, he reminds us of the importance of studying manuscripts as physical artefacts and reemphasizes his work as part of this movement.
- [14] The strength of the book is evident: an important yet somehow ignored research question, well-documented analysis with numerous useful tables (sixty-one in total!),<sup>6</sup> and easy-to-follow arguments. The distribution between the data and interpretation is also balanced. Together, this is not only another nice piece among the present-day manuscript-oriented studies, but it also illustrates what can be done in an age while digitalized images, searchable transcriptions, and biblical software are all available.
- [15] Moreover, as promised, this massive study does increase our knowledge of early Christian scribes' number-writing techniques, albeit not always in a positive way. That is to say, the book discerns that some hypotheses appear to be less probable. Notably, in the light of the unpredictable nature of the use of numerals, it is wise to keep in mind Cole's warning: when reconstructing any lost portions of a given manuscript, try not to presume any patterns concerning numeral abbreviations.
- [16] Nevertheless, not all of the findings are negative. Some tendencies are observed on microlevels, for instance, the occurrences of shorthand ordinals in Rev 21 of 801 and the significant differences among the text blocks in W032. These results correspond to and even confirm the hypotheses made by others (here Dirk Jonkind and Henry A. Sanders respectively). Concerning the positive results, the most interesting proposal is made by the author himself. It seems not unlikely that the early Christian milieu can shed light on a few patterns of number-writing techniques.
- [17] However, there are some points in the book that make the present reviewer ponder. As mentioned above, the author limited his data to the body text of Greek New Testament manuscripts. Understandably, this is necessary for keeping the data manageable, yet it could prevent some noteworthy elements to be discovered. Ignoring paratextual features of a given manuscript, for instance, means that those items that indeed contain numbers (*stichoi, kephalaia*, etc.) are not taken into account in a study concentrating on scribal numerals. In like

<sup>6</sup> Yet the tables are not always in the ideal location, e.g., p. 106 (table 4.12); p. 158 (*For example* [on table 6.1?]). Of course the author should not be blamed for such matters.

manner, sometimes it might be worthwhile to analyze a few Greek Old Testament portions in those "great uncials," especially when there are striking differences from their New Testament part.<sup>7</sup> This kind of additional data would have made an even more precise picture for early Christian scribes' use of numbers.

- Moreover, although the author locates his study within the current "material [18] turn," it seems that the turn's spirit is not fully embodied. The two pillars of considering manuscripts as artefacts-palaeography and codicology-are practiced rather ad hoc. For instance, in the discussion of the possible use of numerals for public reading, would it be relevant to compare the results with other important factors, such as codex size and scribal hand? It is not always evident that these factors are taken into consideration. Since any notable feature of a given manuscript can be directly copied from its *Vorlage*,<sup>8</sup> it is difficult to identify a specific scribal intention based on number-writing tendencies *alone*. In particular, the unpredictable use of abbreviated numerals in the outlier P<sup>47</sup> leads Cole to suggest that it was probably created for private use. Granted, the conclusion as such corresponds to others' judgment, yet those irregular numbers may not be a relevant factor.<sup>9</sup> Given that what we now know is only a small portion of the manuscripts that ever existed, an integrative approach would be helpful to make the proposal on stronger grounds.<sup>10</sup>
- [19] All in all, what the book has offered in a way echoes the author's remark on 801: "It seems that with 8 I have uncovered more questions than answers" (p. 95). This does not mean that it is a work full of questions. On the contrary, Cole's study invites textual critics and papyrologists to reconsider the issues addressed. Not everyone will agree with all of the answers Cole has given and further research can undoubtedly be made with this indispensable volume at hand.
- [20] Appendix: Errata

It should be lauded that errors are rarely found in a book that contains such rich information. Still, very few typos and a number of blemishes<sup>11</sup>–no matter how

<sup>7</sup> For instance, while its New Testament part almost only contains longhand numbers, the scribe of B03 did write abbreviated numbers in the Old Testament (cf. p. 98 n. 28). Does this—just mentioning some random thoughts—reflect different scribal habits, contrasting editorial policies between the Testaments, or simply faithful reproductions of the *Vorlagen*?

<sup>8</sup> As the author admits, on occasions this is the best explanation to be found; e.g., on some surprising instances in P<sup>66</sup>: "Perhaps the reason for their presence is simply that these numeral abbreviations stood in the scribe's exemplar and he copied them over directly" (p. 52).

<sup>9</sup> See the discussion in the latest thorough study on the papyri: Peter Malik, *P.Beatty III (P<sup>47</sup>): The Codex, Its Scribe, and Its Text*, NTTSD 52 (Leiden: Brill, 2017), 64–66. Another example worthwhile mentioned is P<sup>72</sup>, a papyrus contains only longhand forms of numbers in its biblical text. But scholars consider that it was probably produced for private use based on palaeographical grounds; cf. Tommy Wasserman, *The Epistle of Jude: Its Text and Transmission*, CBNTS 43 (Stockholm: Almqvist & Wiksell, 2006), 30–50, esp. 49.

<sup>10</sup> For further discussion Scott D. Charlesworth's recent work (*Early Christian Gospels: Their Production and Transmission*, Papyrologica Florentina 47 [Florence: Edizioni Gonnelli, 2016]), esp. chapter 2, could be a good dialogue partner. An earlier version of that chapter is referred and critiqued by Cole in one footnote (p. 202 n. 13).

<sup>11</sup> Some inconsistencies are also found in footnotes and in the bibliography: p. 70 n. 99 [NA28]; p. 248 series title and its number ("NTTSD 37") are missing in the IGNTP volume on majuscules (also p. 120 n. 68); p. 248 Scrivener's work on D05 is "… *Being an Exact Copy*, …" (also p. 102 n. 36). Besides, punctuation is sometimes inconsistent, e.g., p. 77 [the last sentence of 3.3.47]; p. 158 nn. 28

trivial they are-are listed below:

p. 88: A confusing statement is found on the ordinal numbers of  $\aleph 01$ , where the author informs us that the most frequently occurring ordinals are "first" (155x) and "second" (40x). Yet according to table 4.4 right above, the number "third" occurs *fifty-five times*. Could it be the case that the given number of "third" is inaccurate?

p. 104: Acts 7:6 ] Acts 7:6; 13:20 (?) (in table 4.10 [on D05])<sup>12</sup>

p. 111 Cardinals in Washingtonianus W 032 ] Cardinals in W 032 (table 4.14; also p. xii)

p. 161: II/IV century ] III/IV century (*P.Bodm.* XXIV)

p. 190: δαυίδ ] δαυίδ (also n. 45 on the same page)

p. 216: Mark 5:25 ] Mark 5:13 (?)<sup>13</sup>

p. 218: "... the scribes appears to have used the abbreviation appears not out of preference but out of necessity" ] the scribes appear to have used the abbreviation not out of preference but out of necessity  $(?)^{14}$ 

p. 228: n. 4 The last sentence cannot be correct: "No less than 185 of the 350 bookrolls fit the second category (followed by 115 in the first and fifty-five in the second)." Perhaps the last word should read "third"?<sup>15</sup>

An-Ting Yi Vrije Universiteit Amsterdam

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and 29; p. 166 n. 66; p. 245 [Notopoulos] (also p. 4 n. 6); p. 246 [Priesigke]; p. 248 [Scrivener, *Sinaiticus*].

<sup>12</sup> The issue is that while the table informs us that there are two instances of shorthand forms under the value "400," only one verse is given. Presumably the other occurrence would be at Acts 13:20, yet the manuscript actually reads  $\overline{v} \times \alpha v$  (i.e., "450") there.

<sup>13</sup> If I understand correctly, this reference is pointing to the easily mistaken number 2,000 ( $\overline{\beta}$  or  $\overline{\beta}$  vs.  $\overline{\beta}$  or  $\overline{\beta}$ ), which indeed occurred in Mark 5:13 of B03 (cf. p. 99).

<sup>14</sup> In the dissertation we read "the abbreviation appears to be used not out of preference but out of necessity" (p. 276).

<sup>15</sup> Besides, William Johnson's citation in the same footnote seems from p. 161, not from pp. 159–60.