T.C. Skeat and the Problem of Fiber Orientation in Codicological Reconstruction*
S.D. Charlesworth

Introduction
Towards the end of his long life T.C. Skeat attempted to bolster a theory he had advanced several years earlier: that Christians adopted the codex around 100 CE because it could hold the four gospels in a format that set them apart from heterodox rivals.1 While conceding that without any fragments of an early second-century, four-gospel codex the theory remained conjectural, he now claimed to have proved that \( \text{P}^{64+67} \) and \( \text{P}^4 \) came from a four-gospel, single-quire codex whose ancestors "must go back well into the second century."2 Throughout his article Skeat avoids any mention of recto or verso while asserting that they are "terms which cause hopeless confusion when used in connection with a papyrus codex, since to papyrologists they inevitably suggest the sides with horizontal and vertical fibers respectively, which is irrelevant and confusing [in] ... the case of a codex."3

While it is true that confusion can easily result from trying to account for fiber orientation in codicological reconstructions, or from the different traditional and papyrological meanings of recto and verso,4 this methodological dictum is misleading.5 Analysis of fiber direction is an essential part of codicology and when ignored the inevitable result is inaccurate conclusions.

Possible codicological reconstructions of \( \text{P}^{67} \)
\( \text{P}^{67} \) (P.Barc./Montserrat inv. 1)6 consists of two small fragments from a two-column codex of Matthew. What is notable for the purposes of this article is that in folio A of \( \text{P}^{67} \) ↓ (Matt 3.9) precedes → (Matt

---

* This is a short, modified version of my article "T.C. Skeat, \( \text{P}^{64+67} \) and \( \text{P}^4 \), and the Problem of Fiber Orientation in Codicological Reconstruction," *NTS* 53 (2007) 582–604.


2 T.C. Skeat, "The Oldest Manuscript of the Four Gospels?" *NTS* 43 (1997) 1–34, at 32; repr. in Elliott, *op.cit.* (above n. 1) 158–192. P.Barc. inv. 1, now housed in the Abadia de Montserrat near Barcelona, has received a new inventory number based on its old designation. For \( \text{P}^{64+67} \) see J. van Haelst, *Catalogue des papyrus littéraires juifs et chrétiens*. Série 'Papyrologie' 1 (Paris 1976) no. 336; for \( \text{P}^4 \) see *ibid.*, no. 403.

3 Skeat, *op.cit.* (above, n. 2) 11.


5 Cf. two examples given by van Haelst, *op.cit.* (above n. 2) 7 n. 17, 158, and one discussed by E.G. Turner, *The Typology of the Early Codex* (Philadelphia 1977) 79–80 (cf. Turner, *op.cit.* [above, n. 4] 26–27), in which failure to account for fiber orientation has adversely affected codicological reconstruction. For previous criticism of Skeat’s methodology see P.M. Head, "Is \( \text{P}^4 \), \( \text{P}^{64} \) and \( \text{P}^{67} \) the Oldest Manuscript of the Four Gospels? A Response to T.C. Skeat," *NTS* 51 (2005) 450–457.

6 P.Barc. inv. 1, now housed in the Abadia de Montserrat near Barcelona, has received a new inventory number based on its old designation.
3.15), while the opposite is the case in folio B where \( \rightarrow \) (Matt 5.20–22) precedes \( \downarrow \) (Matt 5.25–28).\(^7\) In his Spanish edition Roca-Puig does not discuss this except to say that the different orientation of the fibers distinguishes fol. A from fol. B.\(^8\) But in a note at the end of that edition Roberts expresses uncertainty as to whether the codex containing P64+67 was single-quire or not.\(^9\) Kurt Aland’s examination of the fragments made him think that the codex probably had more than one quire,\(^10\) while Turner seems to have regarded that possibility as certain.\(^11\) Nevertheless, taking his lead from Roberts’ later work, in his detailed codicological analysis of P64+67 and P4 Skeat proposed that they came from the same single-quire, four-gospel codex.\(^12\) Despite its undoubted value, this analysis does not adequately address the codicology of P67 (and P4). Based on the juxtaposed fiber direction in the two folios it will be shown that P67 almost certainly had at least two quires.

Following Skeat,\(^13\) if each leaf had two columns on its front (cols. 1 and 2) and two columns on its back (cols. 3 and 4), then folios A and B came from (the outside) cols. 2 and 3 of two separate leaves, and 6 columns separated folios A and B, comprising col. 4 of leaf A + 1 complete leaf (= 4 cols.) + col. 1 of leaf B (see Fig. 1).\(^14\) This arrangement can be confirmed. After accounting for nomina sacra,\(^15\) on my count about 3836 letters are missing between the last line of fol. A and the first line of fol. B. At an

---

\(^7\) I am grateful to Sofía Torallas Tovar for visiting the Abbey at Montserrat and verifying that the fiber orientation of the two fragments as given in the edition of Roca-Puig is correct.


\(^11\) See Turner, op.cit. (above, n. 5) 98–99, where P64+67 is given as an example of an early multiple-quire papyrus codex.

\(^12\) Skeat, op.cit. (above, n. 2) takes as his point of departure the comments of C.H. Roberts, Manuscript, Society and Belief in early Christian Egypt (London 1979) 13, 22–23 on the character and relatedness of the three papyri.

\(^13\) Skeat, op.cit. (above, n. 2) 17.

\(^14\) The three diagrams associated with this section were created with the generous assistance of Carolynde Zambo. Readers might also compare the discussion in this difficult section to constructed models. A number of sheets of paper with fiber direction (and where necessary, columns) marked on each side can be folded in half to make a quire.

\(^15\) The two small fragments contain the following nomina sacra: κε, ις (P64); ις, ις (P67). Roberts, in his 1962 re-edition (op.cit. [above, n. 9]), replaced his original reading ις with ις (see Roca-Puig, op.cit. (above, n. 8) 57–59). Although they are no longer visible, the overstrokes were probably drawn above the contractions κε and ις in P64; see Roberts (1953), op.cit. (above, n. 9) 234. On nomina sacra in gospel papyri see S.D. Charlesworth, "Consensus Standardization in the Systematic Approach to Nomina Sacra in Second- and Third-Century Gospel Manuscripts," Aegyptus 86 (2006) 37–68.
average of 16 letters per line that equals c. 240 lines of missing text. To account for the decrease in the number of lines per page from 39 to 36, the number of lines per column can be averaged. If the average number of lines per column was 37, about 6.5 columns of text would be missing; if there was an average of 38 lines per column, 6.3 columns would be missing. The extra third to half column (c. 14–18 ll.) makes provision for the text in the outside columns below fol. A→ and above fol. B→. I will use the designations: A = Leaf A, B = Leaf B, L = intervening leaf, F = front, and B = back.

If we are dealing with the first half of a single-quire codex with its fibers oriented in the usual way (⇀→), it is obvious that the fiber direction of fol. B is a problem: AForge, AB→, LForge, LB→, BForge, BBForge. The fiber direction of fol. B should be BForge BBForge, but is actually BForge, BBForge (see the opposite alignment of the fragment fibers in Fig. 1). So the idea that P67 came from the first half of a single-quire codex immediately looks doubtful. There are several possible explanations for this. First, Fol. B may have come from a single leaf (i.e., half of a sheet) of papyrus that was inserted at this point. In that case it might have been inserted with the → facing up, while all other right-hand pages would have had ↓ facing up. But this would take away from the uniform appearance of the codex. Moreover, single leaves were more likely to be inserted at the end of a codex when the scribe had run out of room. Second, a single leaf might have replaced one that had been ripped out and lost. But in that case it could reasonably be expected that fol. B would be written in a different and later hand. A third possibility, that a careless scribe might confuse the order of succession, is ruled out by the fact that this is a quality, literary codex produced by a careful scribe. It is also ruled out by the simple probabilities of preservation. For example, the scribe of P45 (P.Beatty I + P.Vindob. G. 31974; see van Haelst, no. 371) seems to have confused the fiber direction of his sheets on only two occasions. Therefore, since only two small fragments of P67 survive, they are probably fragments of correctly placed sheets.

---

16 Among single-quire codices there are very few exceptions to this rule (see Turner, op.cit. [above, n. 5] 58–60, Table 6). The Mississippi Crosby codex has → preceding ↓ in its first eight leaves and then ↓→→ to its center. Turner also lists two fourth-century miniature codices as possible exceptions, P.Ryl. I 28 and P62 (P.Oslo inv. 1661; see van Haelst, no. 359). On the orientation of the fibers in the latter see L. Amundsen, "Christian Papyri from the Oslo Collection," SO 24 (1945) 121–140, at 126.

17 Turner (op.cit. [above, n. 5] 73) provides several examples of single leaves being added to codices, and cites H.A. Sanders, "A Fragment of the Acta Pauli in the Michigan Collection," HThR 31 (1938) 75 who thought a single sheet had been added to P4 (P.Oxy. II 208; see van Haelst, no. 428).

18 Turner, op.cit. (above, n. 5) 60, 64.

19 It is reasonable to assume that a careful scribe would be less likely to confuse the order of the sheets. The literary characteristics of P64-67 include a script that is a predecessor of Biblical Majuscule and a double-column format that emulates prestige literary rolls: for detailed discussion see my op.cit. (above, n. *) 584–585, 594–596, 599–600. On the characteristics of gospel manuscripts produced in what I have termed "controlled" settings see S.D. Charlesworth, "Public and Private – Second- and Third-Century Gospel Manuscripts," in C.A. Evans and H.D. Zacharias (eds.), Jewish and Christian Scripture as Artifact and Canon. SSEJC 13 (Edinburgh 2009) 148-175.

But instead of the usual ↓→↓→ arrangement found in the vast majority of single-quire codices, could we be dealing with a codex in which the sheets were alternated with like facing like (↓→↓→↓→↓)? In this case, only two arrangements are possible regardless of the size of the quires (because like must face like throughout). But neither arrangement allows like to face like, whether we work forward from Leaf A (see Fig. 2): (i) A\(F\)↓, A\(B\)→, L\(F\)→, L\(B\)↓, B\(F\)→, B\(B\)↓; or backwards from Leaf B (see Fig. 3): (ii) B\(B\)↓, B\(F\)→, L\(B\)→, L\(F\)↓, A\(B\)→, A\(F\)↓. In (a) L\(B\)↓ and B\(F\)→ clash, and in (b) A\(B\)→ and L\(F\)↓ clash, and the alternating sequence is destroyed.

What if, under the same arrangement, the codex was made from single-sheet quires? Might a single leaf have been inserted between quires? Working forwards, B\(F\)→ B\(B\)↓ would be the inserted leaf in (i) A\(F\)↓, A\(B\)→, L\(F\)→, L\(B\)↓, B\(F\)→, B\(B\)↓ (see Fig. 2); or working backwards, A\(B\)→ A\(F\)↓ would be the inserted leaf in (ii) B\(B\)↓, B\(F\)→, L\(B\)→, L\(F\)↓, A\(B\)→, A\(F\)↓ (see Fig. 3). In both cases this would destroy the harmonious arrangement of the quire, and it is hard to see why it would be necessary. As noted, a scribe copying single-sheet quires would be more likely to insert an extra quire or leaf at the end of the codex. In fact, a harmonious like-facing-like arrangement could only be maintained by the insertion of two additional leaves as follows: (iii) A\(F\)↓, A\(B\)→, L\(1\)\(F\)→, L\(1\)\(B\)↓, L\(2\)\(F\)↓, L\(2\)\(B\)→, B\(F\)→, B\(B\)↓. But this would result in 10 columns instead of the required 6 columns between the folios and is therefore an hypothesis which can be excluded.

Another arrangement might involve like facing like in an alternating quire whose outside or first page was \(\rightarrow\), and which consequently was arranged \(\rightarrow\downarrow\rightarrow\downarrow\downarrow\) etc. In this case, if working forward A\(F\)↓ would be located on the second of two \(\downarrow\) pages, or if working backward B\(F\)→ would be located on the first (i.e., the second in order of reading) of two \(\rightarrow\) pages. But we arrive again at the same impossible alternatives: (i) A\(F\)↓, A\(B\)→, L\(F\)→, L\(B\)↓, B\(F\)→, B\(B\)↓ (see Fig. 2); or (ii) B\(B\)↓, B\(F\)→, L\(B\)→, L\(F\)↓, A\(B\)→, A\(F\)↓ (see Fig. 3). In fact, regardless of the size of the quires or whether they begin with \(\rightarrow\) or \(\downarrow\), like must always face like throughout such a codex.

Therefore, we are dealing here with a codex arranged in the normal way (↓→↓→). Furthermore, the codex containing P\(^{64+67}\) could not have been single-quire, because the middle of a quire must have fallen between leaves A and B. This would allow the following arrangements: A\(F\)↓, A\(B\)→ || | L\(F\)→, L\(B\)↓, B\(F\)→, B\(B\)↓, or A\(F\)↓, A\(B\)→, L\(F\)→, L\(B\)→ || B\(F\)→, B\(B\)↓. Given the significant objections to the possible insertion of a single leaf, this is certainly the most attractive and straightforward of solutions. At some point after that, the quire containing P\(^{67}\) ended and a second quire was started which contained P\(^{64}\) (Gr. 17, Magdalen College, Oxford; frs. Ca\(^1\),Cb\(^1\),Cc\(^1\),Cc\(^1\),Ca\(^2\),Cb\(^2\),Ch\(^2\)) in its first half. Therefore, P\(^{64+67}\) had at least two quires, and there may have been more. None of these various possibilities regarding the fiber direction of P\(^{67}\) are discussed by Skeat, whose argument assumes that P\(^{67}\) and P\(^{64}\) both lay in the first half of the same quire.

\(^{21}\) This is the case in P\(^{45}\), which contains single sheet gatherings (or uniones) that must be arranged ↓→↓→↓ followed by ↓→↓↓. P\(^{66}\) (P.Bodmer II; see van Haelst, no. 426), which contains a number of different gatherings, also has like facing like on the inside (Turner, op.cit. [above, n. 5] 66–67, Tab. 11).
Codicological reconstruction of P⁴

P⁴ (Suppl. Gr. 1120 [2]) is composed of five fragments of four leaves from another two-column codex. According to Alain Blanchard, who kindly visited the National Library of France on my behalf, Merell in his edition was mistaken when he gave the fiber directions in P⁴ as Fr. A→↓, Fr. B→↓, Fr. C→↓, Fr. D↓→. The reconstructed layout of the codex can be summarised as follows (see the column headed A.B. for the fiber directions as given by Blanchard):

<table>
<thead>
<tr>
<th>Lost or extant</th>
<th>Approx. contents</th>
<th>Number of letters</th>
<th>A.B.</th>
<th>like</th>
<th>usual</th>
<th>D↓like</th>
<th>D↓usual</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Lost</td>
<td>1.1–25</td>
<td>2101</td>
<td>↓→</td>
<td>↓→</td>
<td>↓→</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Lost</td>
<td>1.26–57</td>
<td>2101</td>
<td>→↓</td>
<td>↓→</td>
<td>↓→</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 fr. A</td>
<td>1.58–2.8</td>
<td>518 553 538 500</td>
<td>↓→</td>
<td>↓→</td>
<td>↓→</td>
<td>↓→</td>
<td></td>
</tr>
<tr>
<td>4 Lost</td>
<td>2.8–36</td>
<td>2188</td>
<td>→↓</td>
<td>→↓</td>
<td>→↓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Lost</td>
<td>2.36–3.8</td>
<td>2193</td>
<td>↓→</td>
<td>→↓</td>
<td>↓→</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 fr. B</td>
<td>3.8–4.2</td>
<td>513 557 545 511</td>
<td>→↓</td>
<td>→↓</td>
<td>→↓</td>
<td>→↓</td>
<td></td>
</tr>
<tr>
<td>7 Lost</td>
<td>4.2–29</td>
<td>2169</td>
<td>×</td>
<td>↓→</td>
<td>↓→</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 fr. C</td>
<td>4.29–5.9</td>
<td>2118</td>
<td>↓→</td>
<td>↓→</td>
<td>↓→</td>
<td>x</td>
<td>↓→</td>
</tr>
<tr>
<td>9 Lost</td>
<td>5.9–30</td>
<td>2116</td>
<td>→↓</td>
<td>↓→</td>
<td>↓→</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 fr. D</td>
<td>5.30–6.16</td>
<td>537 574 551 507</td>
<td>↓→</td>
<td>↓→</td>
<td>↓→</td>
<td>↓→</td>
<td></td>
</tr>
</tbody>
</table>

The column headed like contains the required fiber orientation of the leaves if like faced like throughout the manuscript. The codex could not have been arranged in this way because the lost leaf 7 would clash with frs. B or C. As regards the fiber orientation of fr. D, Blanchard is not completely sure

---


23 Here I have modified Skeat’s table (op.cit. [above, n. 2] 15).
because of reflection difficulties associated with the papyrus being mounted under glass.\textsuperscript{24} If in fact fr. D was aligned $\rightarrow | \rightarrow$, a like-facing-like arrangement is still impossible (see the column headed $D^{\text{usual}}$),\textsuperscript{25} and the codex would have had to be arranged in multiple quires as per $D^{\text{usual}}$ (with $||$ symbolizing the center of quires and $|$ the end of quires). But under the circumstances, it would seem best to accept Blanchard's considered preference (fr. D $\rightarrow \rightarrow$).\textsuperscript{26} Therefore, the codex was probably arranged in the normal way, perhaps as given above (see the usual column) or in quarterniones ($\rightarrow \rightarrow \rightarrow \rightarrow$, fr. A $\rightarrow \rightarrow$, fr. B $\rightarrow \rightarrow$, fr. C $\rightarrow \rightarrow$, fr. D $\rightarrow \rightarrow$).\textsuperscript{27} The latter option is more likely if another gospel preceded Luke, since something would need to fill the pages prior to fr. A.

But, it might be said, Skeat could not have known that the fiber orientation of P\textsuperscript{4} as given by Merell was wrong (fr. A $\rightarrow$, fr. B $\rightarrow$, fr. C $\rightarrow$, fr. D $\rightarrow$). So if, for the sake of argument, we accept with him that faulty data, it is again remarkable that his discussion proceeds without any explicit reference to the fiber direction of the fragments of P\textsuperscript{4}. If P\textsuperscript{4} came from the second half of single-quire codex, then the fiber direction of another discordant leaf needs to be accounted for (fr. D). But it is left unexplained, like the fiber direction of fol. B of P\textsuperscript{67}, and so looms as another fatal flaw in the single-quire, four-gospel hypothesis.\textsuperscript{28} Apparently to account for these discrepancies Jaroš, who endorses the same hypothesis, states that the sheets were stacked with the $\rightarrow$ side facing up before folding, but the pile accidentally contained a few sheets with the $\leftrightarrow$ facing up.\textsuperscript{29} While there is no reason given for this speculation, the implication is that it could account for the fiber clashes in P\textsuperscript{67} and P\textsuperscript{4}. But it is better to proceed from what is known and probable, rather than from what is unknown and improbable. In a sizeable codex of c. 40–130 leaves (depending on the number of gospels),\textsuperscript{30} from which parts of only seven leaves remain, what are the chances that parts of two of several sheets that were mistakenly placed wrong side up would survive? Certainly much lower than for leaves placed right side up. (A similar question posed with respect to P\textsuperscript{64}+\textsuperscript{67} results in the same answer.) If most of the codex survived, then it could be known with certainty whether a few odd sheets had slipped past the scribe. But from the fragments that remain this cannot be known, and the

\textsuperscript{24} "Fr. D recto (foncé) et verso (clair) paraissent d’abord avoir tous les deux les fibres horizontales : le papyrus étant sous verre (qui miroite), il est très difficile de décider quel côté a finalement des fibres verticales : c’est peut-être ... le recto" (A. Blanchard, \textit{per litt.} 4 Nov. 2006).

\textsuperscript{25} In this case it is only necessary to work backwards from fr. D to see that there would be a clash with fr. C.

\textsuperscript{26} Which, for what is worth, is also that of Merell.

\textsuperscript{27} Cf. Turner, \textit{op.cit.} (above, n. 5) 62–63.

\textsuperscript{28} By showing that P\textsuperscript{4} and P\textsuperscript{64}+\textsuperscript{67} came from a single four-gospel codex, Skeat aimed to provide crucial support for his four-gospel hypothesis; see Skeat, \textit{op.cit.} (above, n. 1) 263–264; Skeat, \textit{op.cit.} (above, n. 2) 31–33.

\textsuperscript{29} K. Jaroš (ed.), \textit{Das Neue Testament nach den ältesten griechischen Handschriften: die handschriftliche griechische Überlieferung des Neuen Testaments vor Codex Sinaiticus und Codex Vaticanus} (Vienna-Würzburg 2006) 56.

\textsuperscript{30} Roberts and Skeat estimated that a four-gospel codex containing P\textsuperscript{4} and P\textsuperscript{64}+\textsuperscript{67} would have had at least 144 leaves or 288 pages (\textit{The Birth of the Codex} [London 1985] 66). Skeat subsequently reduced this to 120–130 leaves to account for the fact that leaves and inside columns are at their narrowest in Luke (Skeat, \textit{op.cit.} [above, n. 2] 19). While this figure is flawed by the assumption that the codex was single-quire, and a codex containing Luke and possibly other gospels is being discussed here, it will do for the purposes of the point being made.
probabilities of preservation and the literary quality\textsuperscript{31} of the codex combine to make this the far less likely
alternative.

For the same reason, if we now consider the correct fiber orientation of P\textsuperscript{4} as provided by Blanchard
which fr. C was unwittingly placed wrong side up can be rejected. Rather, like the fiber direction of fol. B
of P\textsuperscript{67}, the actual fiber directions of the P\textsuperscript{4} fragments indicate that the codex had a number of gatherings
of the normal kind. Luke must have started in the first half of a quire, but there is no way of knowing
whether another gospel preceded or followed it. The same can be said of the multiple-quire codex which
held the Matthean fragments.

**Codex construction and copying**

The Lukan fragments also raise a number of other questions related to codicological reconstruction. The
actual letter counts as given by Skeat for the four columns of three\textsuperscript{32} of the fragments are: fr. A: 518,
553, 538, 500; fr. B: 513, 557, 545, 511; fr. D: 537, 574, 551, 507.\textsuperscript{33} The lower letter count for cols. 1
and 4 is verified by his estimate of column widths based on the averaged length of lines in fr. D (col. 1:
4.08 cm; col. 2: 4.39 cm; col. 3: 4.20 cm; col. 4: 3.87 cm).\textsuperscript{34} The figures show that cols. 1 and 4 of P\textsuperscript{4}
consistently have the lowest number of letters. Skeat is unwilling to speculate on the reason for this.\textsuperscript{35} Perhaps
it is because a right-handed scribe would have been affected by writing into the fold when copying col. 4.
This is the explanation given by Skeat, as reported in Roberts’ editions of P\textsuperscript{52} (P.Ryl. III 457), for shorter
lines on the left-hand page of that manuscript.\textsuperscript{36} It assumes that the scribe of P\textsuperscript{52} was copying into a pre-
assembled codex. If the same applies to P\textsuperscript{4}, the scribe also seems to have been hindered somewhat, even
though writing away from the fold, when writing the inside column of right-hand pages.

Or did the scribe copy on the front and back of detached leaves before replacing them in their correct
place in the stack? In that case he would have worked on one quire at a time, working up through each
stack of sheets writing on the front and back of the left-hand leaf or side first, and then worked back down
through the stack writing on the front and back of each right-hand leaf or side in order. If so, the scribe
must have deliberately chosen to make the inside columns slightly less wide, perhaps to ensure readability

---

\textsuperscript{31} As noted above the literary characteristics of P\textsuperscript{64-67} include a script that is a predecessor of Biblical Majuscule and a
double-column format that emulates prestige literary rolls: for detailed discussion see my op.cit. (above, n. *) 584–585, 594–
596, 599–600.

\textsuperscript{32} Too little remains of fr. C to estimate the letter counts per column (Skeat, op.cit. [above, n. 2] 15).

\textsuperscript{33} Skeat, op.cit. (above, n. 2) 15. The close letter counts in cols. 1 and 4 of fr. B illustrate that the following discussion
must remain hypothetical, even though the weight of evidence supports the argument being made.

\textsuperscript{34} Skeat, op.cit. (above, n. 2) 21. His tracing of columns revealed the same amount of overlap on both sides, yet it seems
the amount of text outside the shared area varied significantly.

\textsuperscript{35} “Why these differentiations were made, and how they were carried out are questions I must leave to others” (Skeat,
op.cit. [above, n. 2] 21).

\textsuperscript{36} See C.H. Roberts, An Unpublished Fragment of the Fourth Gospel in the John Rylands Library (Manchester 1935);
case of P\textsuperscript{4} generous inside columns of up to 2 cm did not prevent interference by the margin.
was not compromised by proximity to the fold after the codex was stitched. But why not simply widen the inside margin a little and retain the symmetry of the two columns? And would such a lack of symmetry be acceptable in a two-column, literary manuscript copied in this way? At the very least, one would expect that both front and back inside columns would be the same. Clearly, this is a difficult question that calls for a wide-ranging comparative study of a representative sample of codices. One of the additional questions that might be asked is whether a scribe’s hand was restricted in greater degree the closer he came to the centre of a pre-assembled single-quire codex. One might imagine that the outside pages would bend at the binding and open more easily than those on the inside, but it is difficult to know how tight bindings were or how readily such codices opened in various places.

Once the scribe of P64+67 had settled into his rhythm, there is no suggestion that he was restricted by the fold. The reconstructed letter count of P64 in cols. 1–4 is 570, 567, 563, 567. So this manuscript could have been copied on to detached sheets. In contrast, the codex that contained P4 seems to have been pre-assembled. This suggests that P4 and P64+67 came from different codices that were copied using different methods. Turner’s research led him to conclude that most scribes copied on to detached sheets, but that “not every scribe copying a single-quire codex did so.” On the other hand, he claims not to have been able to identify another case like that of P52. Though it is multiple-quire, it seems he may have overlooked P4, and P90 (P.Oxy. L 3523) is probably another example.

Conclusion

Because of the uniformity of the text, New Testament papyri are particularly suited to codicological reconstruction. If there are two or more pieces of papyrus from the same manuscript, sound reconstructions are often possible. As part of this process, it is relevant and necessary to account for the fiber orientation of the various fragments. Flawed conclusions are the natural outcome of an absence of such analysis. In this case, the objective facts of the fiber orientation of the surviving fragments declare that P64+67 and P4 come from different multiple-quire codices. Of course, despite salient objections, the slight possibility remains that the scribe might have twice inserted a single leaf or confused the order of succession. But that two such leaves (out of only seven) should survive ahead of many regularly placed leaves is highly unlikely. That means there is no evidence as yet for an early codex containing the four gospels. But

37 In P5 (P.Bodmer XIV-XV, Biblioteca Apostolica Vaticana, Rome; see van Haelst, no. 406), which seems to have been copied in this way, symmetry is preserved. In fact, some left-hand pages have longer lines than the right-hand pages (Turner, op. cit. [above, n. 5] 74).

38 Cf. Skeat, op. cit. (above, n. 2) 16.

39 Despite their differences, both were very probably written by the same scribe at different times using a similar layout (for much fuller discussion of the various factors leading to this conclusion see my op. cit. [above, n. *]). For that reason P4 should not be dated at too much of a remove from c. 200.


41 While these figures are based on a reconstructed text into which it would be inappropriate to read too much, the preservation of the bottom of a column gives enough confidence for tentative further analysis.

42 Turner, op. cit. (above, n. 5) 74.

43 In the case of single-column codices like P90, a scribe might more readily opt to copy into a pre-assembled codex because no space between columns was being wasted.
on the positive side, there is reason to hope that advances in methodology can continue to be made. The contribution of T.C. Skeat in this regard was substantial and enduring. It only remains for scholars to appreciate and utilize the insights that codicology can bring to the study of ancient papyrus texts.