W. Geoffrey Arnott

The Length of Menander's Samia

THE LENGTH OF MENANDER'S SAMIA

The first eighteen pages of the Bodmer codex (B) held the whole of the play, beginning at the top of its p. 1 (presumably without any prefatory matter before v. 1 of the play, like Aspis but unlike Dyskolos in this codex), and ending near the bottom of p. 18 with a short colophon under the final verse. Although pages 9–18 have sustained some damage, their top and bottom margins are all preserved, and there are no lacunae in B's final 478 lines of Menander's text, apart from the six verses (606–11 Sandbach) which are found in the Cairensis text at that point but omitted by B's scribe. Pages 1–8 on the other hand are much more severely damaged, with the opening and closing lines on each of them torn off along with the top and bottom margins, and this has led to some variation among scholars in their calculations of the initial length of Menander's Samia. Even so, enough of pp.1–8 remains for calculation of the number of lines that each originally contained to be made within very small margins of error.

This calculation is based on a generally consistent relationship in B's least damaged pages, with top and bottom margins clearly visible (pp. 9–18 of Samia, pp. 2–14, 18, 20–21 of Dyskolos), between the number of lines on a page and the average distance on that page between individual lines. Of course this papyrus shows some variation in the vertical extent of margins, while very occasionally a maverick page deviates from normal practice; both of these facts will make any calculations and projections from them scientifically less reliable. Nevertheless, it may be useful to set out my measurements, calculations and projections here in more detail than hitherto, even if the end result is seen to fall within previously established parameters[1]. These measurements were taken not from published photographs (which are reduced from their original size[2]), but from the Bodmer papyrus in its present home at Cologny; I should like to express my gratitude to the officials of the Fondation Bodmer both for giving me access to the manuscript and for their assistance and courtesy.

---

[1] Kasser–Austin (Papyrus Bodmer XXV: Ménandre, La Samienne, Cologny–Geneva 1969, p. 25) suggest '890 vers environ'; J.-M. Jacques in his edition of the play (Paris 1971) lxvii–lxviii and n. 2 suggests 909; J. C. B. Lowe, BICS 20 (1973) 94–95, after correcting my earlier arithmetic (Gnomon 42, 1970, 14), suggests c. 895.

[2] The photographs published with the Kasser–Austin edition of Samia are uniformly reduced by 27% from the size of the original codex (see pp. 5–6 of that edition), while the photographs accompanying V. Martin's editio princeps of Dyskolos (Cologny–Geneva 1958) are reduced by about 20% from the original size (see p. 7 n. 2 of his edition).

W. G. Arnott

(a) Pages with top and bottom margins preserved in B

Page	Lines	Number of lines	Distance from bottom of top line to bottom of last line of play text (in cm.)	Average vertical space occupied by each line (in cm.)
			1. Samia	
9	254–308	55	25.00	.46–.47
10	309–362	54	24.75–24.80	.47–.48
11	363–410	48	24.70–24.80	.53
12	411–457	47	24.30–24.35	.53
	(including XOPOY: occupying a vertical space of 1.3 cm)			
13	458–506	49	24.70–24.80	.51–.52
14	507–554	48	24.10–24.80	.52
15	555–603	49	25.25	.53–.54
16	604–605, 612–651	42	25.00–25.20	.56
	including XOPOY: occupying a vertical space of 1.85–2.25 cm)[3]			
17	652–697	46	24.85–25.05	.53–.54
18	698–737	40	22.30	.57–.58
			2. Dyskolos	
2	1–47	47	25.10–25.20	.55–.56
3	48–94	47	25.30	.55–.56
4	95–145	51	25.90	.52
5	146–199	54	24.60–24.70	.47
6	200–250	51	24.90–25.00	.47
	(including XOPOY: 1.4–1.6 cm)			
7	251–301	52	23.90	.47–.48
8	302–354	53	24.90–25.00	.48–.49
9	355–404	50	24.70–24.80	.51–.52
10	405–452	48	23.80	.49
	(including XOPOY: 1.4–1.6 cm)			
11	453–499	47	24.30–24.35	.53
12	500–548	49	23.70–24.00	.50–.51
13	549–601	53	24.25	.46–.47
14	602–649	48	24.30–24.35	.50
	(including XOPOY: 1.6–1.85 cm)			
18	805–849	45	23.60–23.70	.54
20	888–935	48	24.35	.52–.53
21	936–971	36	16.10	.48

The above measurements and figures need some explanation. A decision to measure each page from the bottom of the initial line to the bottom of its final line, rather than from the top of the initial line to the bottom of each last line, seemed more convenient if the vertical space occupied by individual lines was to be computed; one way of achieving the latter was to divide the distance between the bottoms of first and last line by the number of lines on that page (minus one). Another way of computing the vertical

---

[3] On this page B also omits vv. 606–611, preserved only in the Cairensis (C).

space taken by one line was to select on each page of the papyrus groups of five lines towards the top, in the middle, and towards the bottom of that page, and then to work out an average from a combination of these measurements. The figures for individual lines given in the above table are based on both methods of measurement; the two modes never produced clashing results, but where there was a minor difference, that difference is noted above where two (closely related) figures are entered. However, for Samia pp. 12, 16, 18 and Dyskolos pp. 6, 10, 14 the figures are based only on five-line samples, since the insertion of χοροῦ in these pages creates difficulties for any calculation from top-to-bottom measurements. Dyskolos p. 19 is excluded, since this was written in a totally different hand from the rest of the Bodmer codex.

These computations show that the relationship between the total number of lines on a page and the average vertical space occupied by a single line on it stays remarkably constant[4]. Consequently, it seems possible to predict from the vertical space occupied by a single line the total number of lines on any page within narrow limits even when that page is incomplete. The following table gives the proposed correlations for the major scribe of the Bodmer papyrus:

(b) Correlations between number of lines on a page and space taken by single lines on pages preserved with top and bottom margins

Average vertical space occupied by each line (in cm.)[3]	Number of lines on a page	Relevant pages (D = Dyskolos, S = Samia)
.540	45	D18
.535	46	S17
.532	47	S12, D2, D3, D11
.520	48	S11, S14, D11, D14, D20
.518.5	49	S13, S15, D12
.513–.523	50	D9
.495	51	D4, D6
.480	52	D7
.475	53	D8, D13
.473	54	S10, D5
.465	55	S9

The table that follows uses these computations for the first eight pages of the Bodmer Samia, which are all defective.

(c)   Defective pages in B

Page	Lines	Number of lines preserved	Distance from bottom of top line to bottom of last line of play text (in cm.)[2]	Average vertical space occupied by each line (in cm.)[3]	Original number of lines on the page
1	1–29	29	13.15	.485–.495	51–52
2	30–57	28	13.15	.485–.500	51–52
3	58–86	29	14.10	.520–.540	45–48
4	87–119	33	14.10	.445–.455	54–56 ?
5	120–143	23	10.50	.465–.475	53–55
6	144–166	23	10.10–10.20	.485–.495	51–52
7	167–205	39	17.85	.480–.495	51–52
8	206–245	40	18.20	.455–.465	55–56 ?

[4] Observation of this fact seems to have been the basis of the Kasser–Austin calculations in their editio princeps: see their pp. 14 n. 2 and 25.

Before adding up the projected figures for the original number of lines on pages 1 to 8 of Samia, we of course need to subtract 4 to 6 lines in order to account for the space occupied by the two missing act-break signs at the end of Acts I and II. This leaves us with a median of 412 or 413 lines (±6) originally on pages 1–8, to be added to the 484 lines that would have occupied pages 9–18 if the scribe had not omitted 606–11: a total of 896 or 897 lines[5]. There is, however, a need for a final warning: this figure assumes that the scribe of B did not omit any other passage or passages (comparable to vv. 606–11) in the earlier part of the play.

University of Leeds   W. Geoffrey Arnott

---

[5] P. Oxyrhynchus 2943 now supplements the Bodmer papyrus at vv. 120–25, and provides the opening letters of v. 143 and of the first twelve lines in the lacuna after v. 143, but the latter fact provides no additional assistance towards computation of the length of the gap between vv. 143 and 144.