

was probably coined from δις-τομος to describe a two-edged knife or sword, δίκοπο μαχαίρι, δίκοπο σπαθί.⁶

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⁶ cf. Σιδέρη, I. Liddell-Scott, *Μέγα Λεξικὸν τῆς Ἑλληνικῆς Γλώσσης* (Athens, 1970): δίστομος is translated as δίκοπος. Cf. also Δ. Δημητράκου, *Μέγα λεξικὸν τῆς Ἑλληνικῆς Γλώσσης* (Athens, 1933), vol. 3b δημ. Βαλαωρ. φυγ. 24 μαχαίρι δίκοπο μέσα μου χώνει. There is nothing in N. Andriotes, *Λεξικὸν τῆς κοινῆς Νεοελληνικῆς*; also, nothing in G. Shipp, *Modern Greek Evidence for the Ancient Greek Vocabulary* (1978). Elsewhere there is no parallel for δις-τομος 'double-mouthed' in any European language that I could find; one of δις-τομος is found in German, 'zweischneidiges Schwert', in O. Springer, *Encyclopaedic Dictionary of the English and German Languages* (1962).

A NOTE ON ANCIENT METHODS OF LEARNING TO WRITE¹

There is still some confusion over the literary evidence for the methods by which children and others learnt to write in the ancient world.² There are four main sources: the analogy between the methods of the *grammatistes* and the function of the laws in Plato, *Protagoras* 326c–d, three passages in Quintilian (1. 1. 27; 5. 14. 31; 10. 2. 2), a passage from one of Seneca's letters (*Ep.* 94. 51) and a short analogy in Maximus of Tyre (p. 20 Hobein, lines 13–16).

The *Protagoras* passage has been taken to mean that the *grammatistes* who was teaching beginners (τοῖς μῆπω δεινοῖς γράφειν) did so by tracing letters on waxed tablets for pupils to go over more boldly with their *styli*. However, Sir Eric Turner showed that this passage almost certainly refers to the ruling of parallel lines to keep the writing straight and uniform (the usage of γραμμή and the specifically pointed analogy between the γραμμαί and the function of legal punishment – ὡς εὐθυνοῦσης τῆς δίκης, εὐθύναι – are surely conclusive).³ The school exercise-tablet quoted by Turner (BL Add. MS 34186 (1)) is actually not a precise example since it is clear that the four lower pairs of lines were drawn by the pupil rather than by the teacher who wrote the two neat monostichs, but the remarkable regularity of letter height in many elementary writing exercises is not natural for beginners and strongly suggests a conscious discipline and method.⁴ Such a discipline naturally became part of the professional scribe's training, and the ruler (γραφίδων ἰθύτατον φύλακα) was one of the tools of the trade, just as it became part of the regular equipment of the schoolboy.⁵

The reason for assuming that the *Protagoras* passage referred to tracing letters rather than ruling lines was its supposed connection with two other pieces of literary evidence. This is where confusion has arisen. It begins from a misinterpretation of Quintilian

¹ I am indebted to Mr Peter Parsons and to Carlotta Dionisotti for helpful comment and extra information; they must not be held to account for the opinions expressed.

² To be found in varying degrees in H.-I. Marrou, *A History of Education in Antiquity*, trs. G. Lamb (London, 1965), 156; F. A. G. Beck, *Greek Education 450–350 B.C.* (London, 1964), 115; James Bowen, *A History of Western Education* i (London, 1972), 81.

³ E. G. Turner, *BICS* 12 (1965), 67–9.

⁴ The surviving archaeological evidence is nearly all late – see G. Zlateo, *Aegyptus* 41 (1961), 170–80.

⁵ See the pleasant set of poems from varying dates on the theme of an old scribe's retirement – *AP* 6. 62–7. For the ruler as part of the schoolboy's equipment, *CGL* iii. 639. 3, 638. 6; v. 383. 19. Mr Parsons has, however, drawn my attention to the odd fact that practised writers on papyrus do not appear to have ruled horizontal guidelines at any period. There is no evidence for Marrou's association of the κανὼν with the cross-shaped object depicted in educational scenes on many Greek vases or for his view that this object was used to rule squares for writing *stoichedon* – op. cit. 155 n. 9. See also *The Greek Anthology: The Garland of Philip*, ed. A. S. F. Gow and D. L. Page (Cambridge, 1968), ii. 337.

1. 1. 27 to which Turner himself oddly enough subscribes: '...it will be useful [for the master] to trace letters as clearly as possible in the wax...' (*non inutile erit eas [ductus litterarum] tabellae quam optime insculpi...*).⁶ This will not do; 'in the wax' is a gratuitous addition, *insculpo* does not mean 'trace', and it was long ago observed that *tabella* does not necessarily refer to a waxed tablet.⁷ Moreover in the next sentence Quintilian makes it explicitly clear that what he is recommending is to be distinguished from what happens on a waxed tablet (*Nam neque errabit quemadmodum in ceris...*). The true explanation is surely given by Bonner: that Quintilian was proposing a board with incised carvings of the letters of the alphabet so that the pupil could practise hand and finger movements by running his stylus in the 'furrows' of each letter (*ut per illos velut sulcos ducatur stilus*), thus reducing the need for a teacher's guiding hand.⁸ Quintilian was perhaps making a suggestion (*non inutile erit...*) as with the ivory play-letters he proposes and not necessarily referring to common usage.

The main evidence for the practice of lightly tracing letters for pupils to follow is given by Seneca (loc. cit.) *Pueri ad praescriptum discunt; digiti illorum tenentur et aliena manu per litterarum simulacra ducuntur, deinde imitari iubentur proposita...* There are two stages⁹ here which correspond both to the evidence and to what common sense would suggest: guided practice in letter-formation for the very first steps in writing, followed by the imitation of model examples.¹⁰ It is not absolutely clear what Seneca means by *simulacra*, but pre-forming letters for children to follow receives confirmation from Quintilian 5. 14. 31, where an elaborate exhortation to let eloquence flow freely, untrammelled by rigid adherence to rules, is followed by two metaphors. These respectively contrast the man who always keeps to the beaten track with someone who walks freely in the countryside, and the state of water confined in pipes with the expansiveness of a river. Quintilian continues: *Nam quid illa miserius lege velut praeformatas infantibus litteras persequentium et...* The train of thought is clear: the shapes of the letters are followed by children in the same way as the man follows the path or water flows through the pipes. Maximus of Tyre (loc. cit.) supplies an even clearer testimony and demonstrates the astonishing continuity and uniformity of educational practice: οἷον καὶ τοῖς παισὶν οἱ γραμματισταὶ μηχανῶνται ὑποχαράττοντες αὐτοῖς σημεία ἀμυδρά, οἷς ἐπάγοντες τὴν χειρουργίαν ἐθίζονται τῇ μνήμῃ πρὸς τὴν τέχνην.

Three things can therefore be established with some degree of certainty. First, the use of guide-lines by the *grammatistes* in the fifth century B.C. and for many centuries afterwards as an aid to learning the knack of uniform writing; second, the idea of using a board with an incised alphabet for training hand and finger movements; and third, clear indications from both the Greek and Roman worlds (at any rate in later times) that the practice of going over lightly sketched letters on waxed tablets was one of the first stages of learning to write (followed by straight copying exercises). What cannot be justified is the quite common habit of assuming that these three pieces of information all refer to the same thing.

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⁶ op. cit. 67.

⁷ P. A. Beudel, *Qua ratione Graeci liberos docuerint...* (Diss. Münster, 1911), 8.

⁸ S. F. Bonner, *Education in Ancient Rome* (London, 1977), 167–8. Quintilian nowhere implies that the incised alphabet-board was in regular use.

⁹ The precise meaning of *ad praescriptum* is uncertain. Was it perhaps a conventional technical term amongst teachers signifying simply the exercise of following a written example either by retracing pre-formed letters or by imitating model sentences? Cf. *Ep.* 94. 9; *CGL* iii. 646.

¹⁰ Some examples of copying exercises are in *Studien zur Palaeographie und Papyruskunde*, ed. C. Wessely (Leipzig, 1902), pls. 2–5 (the alphabet forwards and backwards, some favourite χαλινοί and syllable-lists).