

## FRESH EVIDENCE FOR T.

SINCE the appearance of my article *Tsade and Sampi* in the preceding issue of this journal, a discovery highly important for the history of 'Tsade' has been made in the course of excavations at Ephesus by Mr. D. G. Hogarth, to whose kindness I owe the following information.

On a silver plate found in the primitive stratum of the Artemision, below the Croesus temple, there is an inscription in which T occurs thrice, in the words  $\tau\acute{\epsilon}\tau\alpha\rho\epsilon\varsigma$  and  $\tau\epsilon\tau\alpha\rho\acute{\alpha}\varphi\omicron\nu\tau\alpha$  forming part of sentences in Ionic Greek.

The position of the objects found in relation to the Croesus temple makes 550 B.C., the beginning of the reign of Croesus, the absolute terminus of date on the lower side: there is, I understand, little doubt that the inscription belongs to *the latter part of the 7th century B.C.*

Apart from the great value of so old a document to epigraphy and archaeology in general, its importance for the history of T lies in the following facts:

1. It is the oldest occurrence of T as a sibilant.
2. It occurs in ordinary words of Ionic Greek (not in a place name, nor in a foreign word in Greek characters); and it is the *only* extant instance of independent authority.

(See my article p. 344 *et seq.*)

3. It is a quite reliable reading, confirming other readings hitherto not quite sure (cp. *ibid.*), viz. those of the Halicarnassian inscription Brit. Mus. No. 886 (*I.G.A.* 500),  $\text{Ἀλικαρνατ[έω]ν, Ὀατάτιος, Παννάτιος}$ ; and those of the Teos inscription *I.G.A.* 497 B 22, 23,  $\text{θαλάτης}$ —both inscriptions being of the fifth century B.C.
4. It agrees with these and the META coins, *B.M.C. Mesambria*, pp. 132, 133 (4th–2nd cent. B.C.), in making T = Ionic  $\Sigma\Sigma$ ; and having a phonetic value which I take to be dental-sibilant, perhaps = modern *ts* or *ch* (Ger. *z* or *tsh*). I have explained (*ibid.* pp. 346, 347) some reasons for supposing that there was a dental element as well as the sibilant in T; and the Ephesus plate gives a fresh suggestion in the peculiar doubling of Tau in each of its occurrences after  $\kappa$  or  $\chi$ , even over the separation of two words, thus  $\text{ΕΚΤΤΩΝ}$  and  $\text{ΕΚΤΤΟΔΟΡΑΤΟΣ}$ . I

suspect a linguistic phenomenon resembling the Eurasian *chi-chi*.

5. It agrees with the evidence already cited (*ibid.* pp. 347, 348) to show that the area of provenance of the sibilant T is confined to two districts associated by intercourse and colonization, both using T =  $\Sigma\Sigma$ , viz. the Ionian sea-board of Mysia and Lydia (in particular the towns Teos, Halicarnassus, Ephesus, Miletus) and the Pontic coast of Thrace (Mesambria and probably Apollonia, Istrus, Odessus). It still leaves unanswered the important question whether this T was carried to Ionia from Thrace, or whether it was brought back from Thrace to Ionia.

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As regards T the episemon, I am indebted to notes kindly sent me by M. Svoronos and Freiherr Hiller von Gaertringen for some additional references.

M. Svoronos points out that in addition to the list given in my article pp. 342 *sqq.*, T occurs also on some bronze tesserae used as symbols of the theatre of Dionysos at Athens, and datable 343–338 B.C. See his *Journ. Intern. d'Archéol. numismatique* (Athens), vol. i. p. 46, no. 9  $\alpha$ – $\delta$  with plate  $\Gamma'$  no. 9; p. 46. no. 30 with pl.  $\Gamma'$  32; p. 52 no. 71 with pl.  $\Delta'$  32.

These are thus perhaps the oldest instances extant of the numeral T.

I do not readily agree with him in reading the  $\epsilon$  in pl.  $\Gamma'$  no. 1 also as a T placed on its side by error in arranging the plate for photography. Its shape is different, the inequality in the lengths of the three parallel bars which usually distinguishes T being absent from this  $\epsilon$ . Plates  $\Delta'$  4 and  $\Gamma'$  17 show a character  $\mu$  which reminds one somewhat of the Rhodian character  $\Upsilon$  (=900), to which Freiherr Hiller von Gaertringen calls my attention as 'noch jünger als Kern *Inschr. Magn.* 100.' This is of the first century B.C. See *I.G.* xii. 1, 913 (= *I.G.* Insul. i. 1, 913) and p. 207 addenda.

M. Svoronos also gives an interesting reference to a note of his *J. Intern. d'Arch. num.*, p. 114, no. 1, which suggests that the true place of T in the numerical alphabet may have been between  $\Sigma$  and  $\Upsilon$ , as agreeing with an exceptional value of the episemon which he has found. Perhaps I do not quite understand the application, but why τὸ σπάνιον καὶ περιεργον στοιχείον T? I note with agreement that he thinks T, the sibilant, is equivalent either to double Sigma or to double Tau—a sidelight on the question of a dental phonetic value.

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As regards the later Sampi, I find that Ulfilas in his adaptation of the Greek alphabet for the writing of the Gothic language in the fourth century A.D. took over  $\Upsilon$ =900 (in this form) along with the rest of the numeration alphabet.

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