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Muroi, Kazuo

Reexamination of Susa mathematical text no. 8. (English)

Sūgakushi Kenkyū 140, 50-56 (1994).

The article contains a transliteration, translation and commentary to the Susa mathematical text No. VIII (from c. 1600 BC), published by *E. M. Bruins* and *M. Rutten* in Textes mathématiques de Suse (Paris, 1961; Zbl 0101.00403)] and last discussed by the reviewer [Altorientalische Forschungen 20, 245-260 (1993)], a publication to which the author has only had access in preprint form. The tablet was mislaid when the Louvre collection was evacuated before World War II and only rediscovered recently, for which reason no photo was ever published. In lines 14 and 16, the author improves the reviewer's reconstructions of damaged passages, and in line 6 he corrects on omission. None of these changes touch the interpretation. More interesting are new interpretations and reconstructions in lines 1, 8, 11, and 17 — all of them however problematic: In line 11, the sign sequence A.NA.KI/DI is read anaddi, "I lay down", understood as "I establish". Apart from being without parallel in mathematical texts and involving a transfer of a metaphorical value from English to Babylonian, the suggestion is suspicious because the grammatical context requires a past, not a present tense. The end of the line, of which nobody so far has been able to make sense, is read "ugu sag sar-ru-[ti 5 dirig]", "exceeds the false width by 5". This does make sense, but the sign read sar does not seem to look like any second-millennium writing of this sign, even though is resembles Assyrian first-millennium writings. No other text from the mathematical Susa corpus seems to contain any sign SAR, so comparison is impossible; sarrum, "false", is invariably written sa-àr-ru. It may be safer to conclude as von Soden in his original review, that no interpretation of the passage will be possible without a collation of the tablet. The same will hold for the reconstruction of line 1. The beginning on line 8 is reconstructed as "[10šà]-ti_4", read "10, the one mentioned". In the parallel passage in line 17, however, the signs which in line 8 are read šà-ti are read le-qé. The context of line 8 excludes the reconstruction of line 17, and the context of line 17 that of line 8. The mathematical interpretation is as number algebra; in itself it brings nothing new, but provokes two terminological suggestions, both regarding line 13. Firstly it is asserted that "gaba", "counterpart", cannot have the sense it normally has in mathematical texts (the "other" side of a square), and it is suggested that it is used as a synonym for "igi", "reciprocal". Because the interpretation is purely numerical, the author overlooks that the habitual meaning is unproblematic, even though the use is somewhat unconventional. Secondly, the term "tālukum" ("going", "distance gone", "way") is argued to refer in general to a result obtained by multiplication; indeed, a distance 1 is "gone" 1 time in the previous line, which is the reference of the word (the actual meaning is of course the same).

J.Høyrup (Roskilde)

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