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Reexamination of the first problem of the Susa mathematical text No. 9.

(English)

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The author proposes a new reading of the Susa Mathematical Text IX, No. 1. Most important are two suggestions: 1) What is transliterated KI.GUB.GUB in the original text edition is read KI.GUB UŠ (strangely enough, it is not pointed out that this is a new reading). It is true that wedges of the second GUB look somewhat different from the first one on Marguerite Rutten's handcopy; yet the difference is hardly greater than in the case of other signs that appear several times in this cursively written text. All other occurrences of UŠ, on the other hand, look very different – the second GUB contains a wedge which is never in UŠ, and another one goes 45° upwards in the second GUB and invariably downwards in UŠ. Since the author does not claim that he has consulted the tablet in the Louvre, the Rutten-Bruins transliteration is certainly to be preferred. The general meaning of the term KI.GUB is rightly taken to be “position” (generally: site/something on which somebody or something stands). Without argument it is suggested that the meaning in mathematical texts should be “coefficient”, and it is stated that this fits the other (rather, the only) occurrence of KI.GUB UŠ in a mathematical text (BM 85210, no further location given). If the occurrences are those of rev. 1,2 and 10, this claim is highly dubious (the presumed coefficient is added to a line segment, and a square constructed on the resulting total). It should be observed that the related Susa Mathematical text XVI (lines 10 and 24) uses the circumlocution “as much as (there is of) lengths” when speaking of the coefficient, and that the same expression appears to be used in the damaged lines 23-24 of the present text. If a technical term KI.GUB had been in use, the use of a standardized circumlocution would be difficult to explain.

2) The repeated $\acute{u}\text{-}ul \dots \acute{u}\text{-}ul \dots \acute{u}\text{-}ul \dots$ is read as $ul \dots ul \dots ul \dots$, “not ..., nor ..., nor...”, against von Soden's $\bar{u}l \dots \bar{u}l \dots \bar{u}l \dots$, “either ... or ... or ...”. Inherently, both are possible, but since the explanations which in the author's interpretation are rejected are nothing but alternative formulations of the explanation which is given afterwards, $\bar{u}l \dots \bar{u}l \dots \bar{u}l \dots$, seems the better reading. In any case, rejection of alternatives is quite out of key not only with Babylonian mathematical style in general but also, specifically, with the particular didactically explicit part of the Susa corpus.

The reviewer (whose original critical acceptance of von Soden's stance is misquoted) would now propose a translation “or ... or ... or ...”, much in the style of modern, mathematical parlance when an equation is transformed stepwise: “ $2a^2 - 4 = 4$, or $2a^2 = 4 + 4$, or $a^2 = 4$, or $a = \sqrt{4}$ ”.

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