HURRIAN ORTHOGRAPHIC INTERFERENCE IN NUZI AKKADIAN:  
A COMPUTATIONAL COMPARATIVE GRAPHEMIC ANALYSIS

ABSTRACT

The peripheral Akkadian dialect of the cuneiform texts from ancient Nuzi (Yorgan Tepe) represents a form of middle Babylonian influenced by the native Hurrian spoken by the inhabitants. Though Hurrian interfered with Akkadian at Nuzi on multiple levels (e.g., syntax), the focus of this study is graphemic: the interference of Hurrian phonology and orthography on grapheme selection in written Akkadian, especially where homophonic signs are involved. In particular, stop consonants are examined to discern a tendency to treat voicing as subphonemic and select stop graphemes based on Hurrian orthographic convention.

The quantitative comparison of orthographic conventions (“comparative graphemics”) is a relatively new methodology in Assyriology that collects frequency distributions of sign-value usage for selected text corpora and compares them in order to discover patterns of similarity. Computer technology now enables this kind of analysis to be performed on a large scale with digitized corpora and computational tools. This study carries out a computational comparative graphemic analysis of first- and second-generation Nuzi texts with Hurrian material (Mittanni letter and Boğazköy texts) and a variety of other Akkadian texts (OB, MA, Alalakh). The comparative graphemic method is advanced by the introduction of a vector-space similarity measure, which quantifies the degree of similarity between sets of texts. A process called “phonemographic normalization” allows this method to take into account skewing due to different corpus sizes and linguistic content. Comparisons may also be computed along alternative phonemicizations by a technique here named “phonemographic aggregation”. This methodology also permits focused comparisons on specific areas of the sign inventory (e.g., consonantal stops), rather than on whole corpora. Underlying the methodology is a rigorous system of conceptualizing and encoding cuneiform sign-value transliterations.
Quantitative results suggest that orthographic interference exists somewhat in the first generation, more so in the second, for specific stop consonants. The pattern indicates not a general confusion, but selective phonological difficulties for certain scribes. Moreover, differences are discernible in Hurrian usage between the Mittanni letter and the Anatolian texts. These conclusions of interference are supported by this observation: conventional orthographic preferences are arbitrary and hence unlikely to coincide without some point of historical contact.
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