Emergence of featurality as a byproduct of script inheritance

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This presentation explores various writing systems used in languages with vowel harmony across Eurasia, with a primary focus on Turkic languages. The main objective of the project is to investigate how different scripts (Arabic, Cyrillic, Latin) adopted by Turkic speakers encode or fail to encode specific phonological features relevant to vowel harmony processes. Theoretically, this study centers on "featurality," which refers to a writing system's ability to visually represent individual phonological features. During the talk, we provide a formal definition of featurality and offer explicit derivations for the vowel systems discussed in our paper.

The examination of Turkic data raises intriguing theoretical questions regarding how featurality is represented, which leads to an investigation of asymmetries between writing and reading. Latin-based scripts utilize diacritics to transparently represent frontness/backness. On the other hand, Cyrillic-based scripts for Turkic languages often involve adding extra strokes to potentially encode similar contrasts, but the usage of these additional strokes tends to be less systematic. For instance, in Tatar, the resulting system is sufficiently transparent, but in Kazakh, the use of additional strokes to represent conflicting features raises questions about how grapheme pairs like о-ө/o-ø/ and ү-ұ /y-u/ are visually deconstructed. We hypothesize that on the orthographic level, during writing, the character can be broken down into the main glyph and the additional stroke. However, during reading, the character is perceived as a whole segment since the additional stroke involves conflicting feature specifications. Consequently, such a writing system cannot be considered truly featural.

Arabic-based writing systems for Turkic languages are typically limited in their ability to encode individual vowel contrasts. Nevertheless, in certain cases, such as Ottoman Turkish, an unexpected dimension of featurality emerges as the Arabic symbols ى and و essentially encoding roundedness.