Graphotactics, spatiality, and why writing should be studied independently of speech

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Graphotactics captures the "restrictions on ways in which" elements of writing "may combine with each other" (McCawley 1994: 115) to form larger written units. These restrictions take on many forms in the world's diverse writing systems. For instance, users of the English alphabet likely know that <v> almost never occurs word-finally as <e> is commonly added after it, cf. <have>, <give> (cf. Berg 2016: 2). Phonographically, these words (/hæv/ and /gɪv/) would not require a written word-final <e>, underlining that notwithstanding important parallels, graphotactics is not always dependent on phonotactics. This is a vital point in arguing that writing systems not only represent various levels of language but are also their own systems exhibiting distinct features—and it is paramount that they be studied (also) as such.

Despite graphotactics being a core feature of writing systems, research on it—especially comparative—is scarce. This talk aims to systematize various types of restrictions, including, at the subsegmental level, favored positions of semantic and phonological components inside Chinese characters that "determine whether the character is legal or not" (Ho/Ng/Ng 2003: 853). As for larger written units, in many abugidas such as Devanāgarī or Thai, secondary vowel graphemes occur in specific positions around consonants, with some being misaligned in appearing before consonants despite following them in speech (cf. Winskel 2009). A well-known length-related example is the 'three-letter-rule' in English: content words must consist of at least three letters (distinguishing <buy> from <by>).

Crucially, graphotactic regularities are independent of external orthographic regulation and thus not explicit, codified rules but intrinsic to writing systems as self-regulating systems and thus part of users' implicit knowledge. They rely fundamentally on a two-dimensional spatiality that departs from the linear temporality of speech. This makes graphotactics central in arguing that writing systems are indeed systematic in nature.

References

Berg, Kristian (2016): Graphemic analysis and the spoken language bias. *Frontiers in Psychology* 7: 388. DOI: 10.3389/fpsyg.2016.00388

Ho, Connie S.-H., Ting-Ting Ng & Wing-Kin Ng (2003): A 'radical' approach to reading development in Chinese: the role of semantic radicals and phonetic radicals. *Journal of Literacy Research* 35.3: 849-878. DOI: 10.1207/s15548430jlr3503_3

McCawley, James D. (1994): Some graphotactic constraints. In W. C. Watt (ed.), *Writing systems and cognition* (= Neuropsychology and Cognition, 6), 115-127. Dordrecht: Springer. DOI: 10.1007/978-94-015-8285-8_7

Winskel, Heather (2009): Reading in Thai: the case of misaligned vowels. *Reading and Writing* 22.1: 1-24. DOI: 10.1007/s11145-007-9100-z