Is the syllable universally the most salient unit of writing?

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Daniels (1992) famously suggested that the syllable plays a special role as the linguistic unit most salient for writing. He observed that both "[a]ll new writing systems […] invented by nonliterates who know that writing exists" (Daniels 2017: 84) as well as the three independently created writing systems Sumerian, Mayan, and Chinese, are or were syllabaries. This indicates a syllabic origin of writing which has led to the stronger claim of a general primacy of the syllable in writing. This talk aims to collect and critically dissect evidence in support of this claim to arrive at possible answers of *why* the syllable could be special and what that tells us about the fundamental nature of writing – and language.

The ample evidence pointing to the syllable as a central grapholinguistic unit starts at the structural level: Aside from (parts of) writing systems in which the syllable is the unmarked basic unit of representation, such as the Japanese kana syllabaries or, indirectly, the morpho(syllabo)graphic Chinese writing system, syllabic structures are also reflected in alphabets, i.e. segmental phonographic writing systems. For German and English, for example, a so-called *graphematic syllable* has been postulated based on the observation that syllable boundaries are visually marked in writing by letters with descenders and ascenders, such as |bel| in German <Gabel> 'fork' (cf. Fuhrhop & Buchmann 2009; Fuhrhop, Buchmann & Berg 2011). This visual demarcation of syllables, interestingly, also holds for alphabets using scripts other than Roman such as Greek and Armenian (cf. Meletis 2019). Strikingly, it has been shown that some letters with ascenders or descenders such as |y| were diachronically ousted from the graphematic syllable nucleus precisely because they were gradually functionalized as visual markers of syllable boundaries (cf. Fuhrhop & Schmidt 2014). This begs the question of *why* and *how* such a development proceeded. In light of the claim that humans did not evolve to better process writing, a relatively recent invention, but that inversely, writing was gradually 'changed' by humans to suit and repurpose existing cognitive abilities (cf. Dehaene 2009), the focus shifts to processing as the central dimension for an inquiry of the syllable's relevance.

While (segmental) phonological awareness might only be constituted by the acquisition of a segmental writing system which either makes phonological segments accessible or actually constructs them in the first place (cf. Davidson 2019), awareness of the phonological syllable has been found to be more robust and to exist earlier (cf. McBride-Chang & Kail 2002), suggesting that the syllable is not only central in phylogeny, but also in ontogeny. Accordingly, in literacy instruction, for alphabets such as German, methods based on syllables (such as Röber-Siekmeyer 2004) are gaining currency. Fittingly, Inkelas et al. (2013), in their study on the 'learnability of writing systems', found that graphemes representing syllables are acquired more easily than graphemes representing segments. Additional experimental evidence suggests that the syllable also plays a crucial role in production. For example, Kandel, Álvarez & Vallée (2006) found that in handwriting, intergrapheme intervals were longer at syllable boundaries than intrasyllabically: the interval between the graphemes in the sequence <gn>, which is always intrasyllabic in French (such as in <consi.gner>) and intersyllabic in Spanish (<consig.nar>), was shorter in French than in Spanish, and not only for monolingual writers of these respective languages, but also for bilingual French-Spanish writers, who systematically produced a shorter interval when writing French. For typing, Will, Nottbusch & Weingarten (2006) showed that inter-keystroke intervals were longer at syllable boundaries than within syllables, implying that syllables are relevant for the motor system.

Evidently, both the structure of writing systems and their processing by writers and readers imply that the syllable is somehow special. On the basis of the cited evidence above, this talk aims to discuss a number of questions: (1) Is the salience of the phonological syllable universal or mediated by the specific syllable structure/phonotactics of given languages? (2) Given the efforts of – mostly German – grapholinguists to define written units independently of units of speech and/or language, do there exist independent 'syllabic' structures in writing (cf. Primus 2003)? How are they similar to phonological syllables and how do they diverge from them in different types of writing systems? Finally, preliminary answers to these questions are integrated into the larger question of how writing and speech relate to one another to further our knowledge about the nature of writing and to refine existing models of writing.

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