

## Toward a typology of monosyllabic languages

In morphological typology, particularly in that of the nineteenth century, monosyllabic or isolating languages were often opposed to polysyllabic or inflectional languages. Chinese and other Southeast Asian languages were taken as the most typical examples for monosyllabic languages. Meanwhile it seems to be well known that modern Chinese, Thai or Vietnamese tend to have disyllabic words, although – according to Arlotto (1968:522) – in Chinese “the single syllable forms the most significant phonologically describable and psychologically relevant unit between the phoneme and the syntagma”. Anyway, monosyllabicity is a continuum, and it might be typologically interesting to look to what extent languages differ in regard to their proportion of monosyllabic words and which additional features can be associated with monosyllabism.

Therefore we compared (in a first step) 8 languages: 4 tone languages (Mandarin, Vietnamese, Thai, Cantonese) and 4 non-tone languages (English, Dutch, German, Russian) with respect to their proportion of monosyllabic words in text. The “text” was a controlled set of 22 simple sentences that were translated by native-speakers into their mother tongue.

**Results** (see table below): English exhibits the highest proportion of monosyllables, followed by Dutch, German, and the four tone languages. Russian shows, as expected, the lowest proportion of monosyllables. Monosyllabism also tends to be associated with a high number of phonemes per syllable; the correlation showed the expected sign but was not significant, possibly due to the fact that in tone languages a lower number of phonemes per syllable is compensated for by tones. The very plausible but non-trivial correlation between monosyllabism and number of words was highly significant.

	n of monosyllables	n of words	n of phon./syllable
English	73	96	2,69
Dutch	67	88	2,97
German	57	87	2.84
Mandarin	53	85	2.24
Vietnamese	49	78	2.24
Thai	39	70	2.77
Cantonese	27	76	2.35
Russian	13	56	2.38

### Further typological characteristics of monosyllabic languages:

- A previous study by the authors revealed positive and significant cross-linguistic correlations between monosyllabism, number of syllable types, syllable complexity, and size of phonemic inventory.
- Ke (2006) also reports correlation between number of syllable types, monosyllabism and homophony in twenty Chinese dialects as well as in German, Dutch and English.

Possible interactions will be discussed between monosyllabism and other linguistic phenomena such as the tendency to a high proportion of idioms and formulaic speech or to speech rhythm – monosyllabic non-tone languages for instance tend to a high variability of syllable structure and therefore to stress-timed rhythm.

Arlotto, A. T. (1968). On Defining “Monosyllabism”. *Journal of the American Oriental Society*, 88, 521-522

Ke, J. (2006). A cross-linguistic quantitative study of homophony. *Journal of Quantitative Linguistics*, 13, 129-159