Language-specific sound perception and its influence on acquisitional processes of LESLLA learners: empirical evidence and practical consequences

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Understanding relations between entities of spoken and written language is essential for literacy acquisition. The acquisition of an alphabetic writing system contributes to the conscious and more explicit knowledge of phonological structures (Kolinsky et al. 2021). But the cognitive concept of "phonemes" develops only gradually through literacy acquisition (e.g. Morais 2021). Moreover, target languages like English or German follow additional principles for writing according to language-specific norms. Therefore, the descriptor "Knows that a phoneme corresponds to a grapheme" (Council of Europe 2022: 44). has to be considered with some caution, since "phonemes" cannot be considered as a given fact, but as a developing cognitive entity.

Learning to read and write in L2 requires more than the learning of phoneme-grapheme-correspondences. Learners have to gain insights into the phonetic substance and language-specific differences regarding (a) the number and distribution of phonemes in L1 and L2/X", (b) their allophonic variation, and (c) their graphic representation. In early phases of L2 acquisition, learners heavily rely on L1-induced mechanisms of perceptual information. Perceptual processing of speech sounds is strongly influenced by prior language (and literacy) experiences in previously acquired languages. The necessity to rely on perceptual information is even higher with L2-/LESLLA-learners with less or no experience in written language representation. Insights into L2 speech perception are therefore particularly important.

This presentation will demonstrate language-specific perceptual effects on L2 literacy acquisition and on the choice of particular graphic representations based on data from a large-scale experimental study (Kerschhofer-Puhalo 2014). 173 L2-learners of German from 10 different L1-subsamples (Arabic, Albanian, English, Farsi, Hungarian, Mandarin, Romanian, SerBoCroatian, Turkish, Polish and an L1 German control group) participated in an L2 perception experiment. The results show that speech perception causes considerable difficulties due to allophonic variation in L1 and the target language. This contributes to a better understanding of learners' difficulties with target language sounds and their written representation. Moreover, alternative visualizations of the articulatory and acoustic vowel space will be discussed to provide a better and more accurate understanding of the complex interaction of articulatory constellations, acoustic characteristics and perceptual effects with their consequences in L2 literacy acquisition.

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