

Sonority and its Violation in Slovak

(Phonetic, phonemic and morphophonemic analysis with typological implications.)

Generally, the structure of the syllable in languages is governed by the so-called Sonority Sequencing Principle (also known as the Sonority Sequencing Generalization) saying that the centre of the syllable is created by the most sonorous sound and the sonority of the other segments in the syllable decreases towards its margins (see, e. g., Zec 2006, Goldsmith 2011). This idea is usually connected with the work of Jespersen (1904). In Jespersen's theory each speech sound is characterized by a certain degree of sonority. Sonority – a relative loudness of a sound – is given by the function of vocal cords and the opening of supra-glottal cavities during the articulation of the sound (see, e.g., Ladefoged 1992), that is, it depends on the articulatory-acoustic and perceptual characteristics of sounds¹. All speech sounds are ranked alongside the sonority scale with vowels as the most sonorous sounds on the top of this hierarchy and obstruents at its bottom. The sonority hierarchy 'vowels > liquids > glides > nasals > fricatives > stops' is considered language-universal and can also be found in the Universals Archive as the Universal Number 626 (typo.uni-konstanz.de). However, despite this declared universal nature of the sonority hierarchy, it is well-known that the arrangement of the consonantal segments determined by their sonority slightly varies in languages and combines language-universal aspects with those that are language specific (see, for example, Parker 2012), as I will also illustrate in my contribution.

Nevertheless, contrary to the Sonority Sequencing Principle (SSP), in languages, there are syllables that do not follow this rule. For example, in Polish, there are combinations sonorant + obstruent + sonorant or two-consonant clusters with liquids and nasals (*rtec*, *mchu*) (Pawelec 2012), similar combinations can be found in Czech (Ziková 2017). It seems that Russian syllable does not obey the SSP too, as reported by O'Brian (2006). The SSP is violated in many other (not only Slavic) languages (see, e.g., Engstrand 1999, deLisi 2005 or Parker 2012 who also provides the detailed overview of the relevant literature). The preliminary research in Slovak (Gregová 2012) indicates that neither the organization of segments in the structure of the Slovak syllable is always fully in accordance with the principle of sonority sequencing.

Consequently, the aim of this paper is to present a detailed phonetic, phonemic and morphophonemic analysis of the initial and the final consonant clusters in Slovak on the basis of the SSP. Following the functional theory of the syllable structure (see, e.g. Kuryłowicz 1948, Sabol 1989, Gregová 2016), the medial clusters will not be included in the analysis since they are easily decomposable into the legal initial and final clusters (Hammond 1999: 69) or, in other words, they are "the possible combinations of initials and finals (Jones 1976: 121). First, I will introduce the sonority hierarchy delimited for Slovak, then the models of the initial and the final clusters will be specified and analysed from the viewpoint of the Sonority Sequencing Principle. Third, the exceptional clusters from Slovak will be summarized and their structure will be compared to the structure of the morpheme. This type of analysis will help find out if the violation of the SSG has historical and morphological reasons (Ziková 2017) or the violations are given by the perceptual advantages of the exceptional clusters, as indicated by some theories (Engstrand – Ericsson 1999). Moreover, the findings from Slovak will be compared with Polish and Czech clusters violating the SSG (see above). The research will thus have broader typological implications.

¹ This is the phonetic dimension of sonority. For the phonemic delimitation of this notion, see, for example, Zec 2007 or Clements 2006)

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