

Testing Laryngeal Relativism in Polish – a preliminary acoustic study

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Laryngeal Relativism (LR) makes a number of formal claims concerning the status of obstruents in two major dialects of Polish, i.e. Cracow-Poznań (CP) and Warsaw (WP) (Cyran 2011, 2014). Firstly, phonetically speaking, the voiced and voiceless obstruents are identical in the two dialects, while having the opposite marking phonologically: in CP, the lexically voiceless obstruents carry a laryngeal category and the ‘voiced’ series is unmarked, while in WP the marking is reversed. Secondly, LR claims that the word-final obstruents which become voiced in pre-sonorant context (CP sandhi voicing) are phonologically and consequently also phonetically identical to word-internal voiced (unmarked) obstruents, whose voicing is called ‘enhanced passive’ in that dialect. Enhanced passive voicing means that it is not merely due to phonetic conditions (passive), but is a result of phonetic interpretation (spell-out).

In this preliminary study, we concentrate only on the phonetic description of plosive consonants in CP in different contexts, which would allow us to verify the second claim: that the result of CP voicing is no different from the voiced obstruents word-internally in that dialect. Based on recordings made among students from Cracow area, we make the following measurements: closure duration, voicing duration, VOT, **duration of interval between the onset of closure and onset of voicing in the following sonorant consonant or vowel**. We look at CP plosives in the following contexts (C = plosive, S = sonorant consonant or vowel):

1. SC⁻# S → [C⁺]: CP voicing of lexically voiceless
2. SC⁺ # S → [C⁺]: retention of lexical voicing (absence of FOD)
3. SC⁺ # S → [C⁻]: absence of retention of lexical voicing (FOD)
4. SC⁻# S → [C⁻]: absence of CP voicing of lexically voiceless
5. SC⁺S → [C⁺]: word-internal voiced
6. SC⁻S → [C⁻]: word-internal voiceless

Instances of 1-2 (CP voicing or retention) are selected auditorily. CP sandhi is a complex phenomenon which is subject to variation which, among others, is due to the interference of pauses. Audible CP voicing is viewed as proof that all conditions (phonological and phonetic) have been fulfilled for the phenomenon to occur. For this reason, only such instances are compared to the results in the remaining contexts. In this study, we focus on comparison of closure duration and duration of interval between closure and onset of voicing. A number of observations have been made concerning the durational conditions on voicing, which will have to be further studied.

Conclusion as to claim 2: there is no significant phonetic difference with respect to the two parameters between stops in contexts 1, 2 and 5, i.e. between results of CP voicing, retention of voicing in sandhi on the one hand, and word-internal voiced plosives in CP.

References

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