Phonetic evidence for gradience: Spanish resyllabification and voicing reconsidered

In this presentation, I will discuss how subtle phonetic cues can provide crucial insight into the complexity involved in various phonological phenomena. Two experiments will be discussed: one on Spanish resyllabification and one on Spanish voicing in whispered speech.

Word-final consonants in Spanish are commonly assumed to undergo resyllabification across a word boundary before a following vowel, e.g. /los#otros/ ‘the others’ is realised as [lo.s|o.tros]. However, in many dialects of Spanish, word-final prevocalic consonants (‘derived onsets’) pattern phonologically with canonical codas and distinctly from canonical onsets. This property of derived onsets has been the subject of much interest in the phonological literature, and has led some linguists to question whether resyllabification indeed applies in all Spanish dialects. In this presentation, evidence for resyllabification is evaluated based on acoustic data from 11 speakers of Castilian Spanish. The results show that word-final prevocalic /s/ has increased duration compared to coda /s/, but at the same time, it is shorter compared to word-initial /s/. This result is incompatible with a full resyllabification hypothesis, which would predict word-final prevocalic /s/ to be indistinguishable from canonical onsets. An alternative in the form of partial resyllabification is considered, the role of the syllable as a relevant unit in explaining /s/-sandhi in Spanish is further discussed.

An underlying voicing contrast tends to be preserved in whisper, even though phonetic voicing as such is not present. This study investigates whether whispered speech also contains phonetic cues to instances where voicing is not lexically contrastive, but where it arises contextually through assimilation to a following obstruent. Spanish speakers read 8 repetitions of 6 test items where word-final /s/ appeared in the context of a following fortis or lenis obstruent (e.g. gatas tensas, sopa densas). Of the 8 repetitions, 4 involved normal phonation and 4 involved whisper. A number of cues were analysed as potential correlates of sibilant voicing. Results show that the contrast between sibilants followed by fortis and lenis stops was preserved in vowel duration and vowel-consonant intensity differences. The contrast between sibilants followed by fortis and lenis stops in whispered speech indicates that aspects of voicing assimilation may also be found in the absence of vocal fold vibration. This result contributes to our understanding of how different cues are integrated in signalling assimilatory voicing. As the cues observed in whispered speech cannot be secondary to the presence of vocal fold vibration, they should be viewed as independent and speaker-controlled exponents of voicing assimilation.