Prominence as a cue to the diphthong/hiatus distinction: A preliminary analysis on Campidanese Sardinian.

A diphthong and a hiatus might be defined phonologically as a tautosyllabic and a heterosyllabic vocalic sequence, respectively. However, the acoustic correlates of this distinction have been proved elusive and, although some correlates have been pinpointed, such as duration, slope of formant trajectory, length/presence of steady states (Aguilar 1999, Gubian et al. 2015, Cronenberg et al. 2024), none of them comprehensively allow to fully capture the distinction between these two phonological categories.

In this talk, first a brief overview of the monophthong inventory of Campidanese Sardinian will be provided based on the data collected in the town of Sinnai (Cagliari). Subsequently, I will present some preliminary results of the analysis of the diphthong inventory focusing on the parameter of direction (opening/closing/height-harmonic), i.e. how the vowels that make up the diphthong are ordered in terms of sonority (e.g. /ia/ vs. /ai/), and especially on the parameter of prominence (rising/falling), i.e. which vowel of the diphthong is the most prominent or "stressed" (e.g. /ia/ vs. /i'a). More specifically, it will be shown how the parameter of prominence in a vowel sequence seems to correlate with the distinction between stressed and unstressed monophthongs and how this correlation might also be used as a cue to better understand the distinction between diphthong and hiatus from an acoustic point of view.

Aguilar, L. (1999). Hiatus and diphthong: Acoustic cues and speech situation. Differences. In: Speech Communication 28. 57-74.

Cronenberg, J., Chitoran, I., Lamel, L., Vasilescu, I. (2024). Crosslinguistic Comparison of Acoustic Variation in the Vowel Sequences /ia/ and /io/ in Four Romance Languages. In: Interspeech 2024. 3689-36-93

Gubian, M., Torreira, F., Boves L. (2015). Using Functional Data Analysis for investigating multidimensional dynamic phonetic contrasts. In: Journal of Phonetics 49. 16-40.