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**Dear Editor,**

Department of Swedish Language and Multilingualism

I am submitting for consideration in *Phonetica* my paper “The acoustic characteristics of Swedish vowels”. I present static and dynamic analyses of all 21 vowels of Central Swedish, using a new release of a recently recorded vowel corpus, the SwehVd. The characteristics of SwehVd along the primary determinants to vowel identity, F1 and F2, are subsequently compared against vowel data recorded one generation ago, to investigate potential vowel shifts in the space.

I present two studies. In Study 1, the acoustic cues and cue correlations are analysed at the steady state of the vowel in static analyses, and across formant trajectories, in dynamic analyses. Some previously reported hypotheses in the literature are evaluated, for instance, the importance of F3 for unrounded-rounded vowel distinctions, the extent to which long-short vowel pairs differ in quality, and diphthongization in the long vowels. Study 2 investigates to what extent this up-to-date characterization of all 21 categories differs from previous mappings of the entire space. I use a database of talkers of the same dialect recorded one generation ago to assess potential shifts in the space over the last 20 years.

The goal of the present study is to expand on previous work on Swedish by mapping the entire vowel space of 21 categories using both static and dynamic analyses. To this aim, I use a variety of measures ranging from formant means and vowel plots, to category separability, generalized additive mixed-effects models of formant dynamics, and orthogonal projection ratio for vowel shifts. The paper further aims to contribute to our understanding of vowel acoustics in general, in particular, the informativity carried by formant dynamics in quantity distinctions.

Respectfully,

Anna Persson