

ACOUSTICS2008/28
Order effects and peripherality: a cross-linguistic perceptual study
using an [i]-[e] articulatory continuum

Charalampos Karypidis^a, Antonia Colazo-Simon^a, Angelica Costagliola^a, Cirineu Cecote Stein^a and Gilles Guglielmi^b

^aUMR 7018, CNRS / Univ. Paris III, 19, rue des Bernardins, 75005 Paris, France

^bARP / UFRL Univ. Paris VII - Denis Diderot, 30, rue du Chateau des Rentiers, 75013 Paris, France

This paper attempted to provide further evidence on whether peripherality is a universal bias triggering stimulus order effects. Participants from four linguistic systems - Brazilian Portuguese, Salentinian Italian, French and Spanish - participated in the study. In Experiment 1, listeners identified as /i/ or /e/ the ten stimuli of a continuum prepared with an articulatory model. Experiment 2 consisted in an AX 'same-different' discrimination task including pairs of stimuli differing in one or two steps along the continuum. Discrimination was better when the more peripheral stimulus was presented second in a pair. However, these order effects were found mainly within the /i/ category and only for Italian and French. Experiment 3 was a replication of Experiment 2, except that two modifications were introduced: a. identical pairs were added, and b. one- and two-step pairs were separately examined. Order effects were again found but, this time, they covered a wider area of the continuum. Peripherality alone was not able to account for order effects. The role of focalization was later discussed.