



Universidad de Valladolid

Departamento de Filología Inglesa

## CONFERENCE

Tuesday July 9 2019, 12-13 h.

*Facultad de filosofía y letras*

English department seminar

### *Perceptual normalization in bilinguals and second language learners*



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Research on speech perception has demonstrated that, when processing an incoming message, people utilize certain top-down strategies that affect how they listen to speech in real time. It has been shown that listeners' expectations about what they are about to hear affects what they end up hearing. For instance, perceptual processes take into account whether one is listening to a male voice or a female voice ("gender" perceptual normalization). The question we address in this study is whether bilinguals and second-language learners utilize perceptual expectations about the languages they speak to process incoming speech in their two languages. Do bilinguals normalize for "language" in real time? In the present study, Spanish-English bilinguals' perceptual boundaries between voiced and voiceless stops (a /b/-/p/ continuum including pre-voiced, voiceless unaspirated, and voiceless aspirated tokens) are shown to be modulated by whether participants are "led to believe" they are classifying Spanish vs. English sounds. In a first experiment, simultaneous Spanish-English bilinguals and beginner second language learners of Spanish labeled the same acoustic continuum in two experimental sessions (Spanish mode, English mode), and both groups were found to display language-specific perceptual boundaries (or session effects). In two other experiments, early bilinguals and late second language learners of various levels of proficiency participated in a single session in which, in random order, they labeled nonwords that were designed to prime either Spanish or English language modes. Early bilinguals and relatively proficient second language learners, but not less proficient learners, displayed mode-specific perceptual normalization criteria even in conditions of rapid, random mode switching. Along with similar ones, the experiments reported here demonstrate that bilinguals are able to exploit language-specific perceptual processes (or norms) when processing speech sounds, which entails some degree of separation between their sound systems.