

**THE DEPARTMENT OF LANGUAGES AND  
APPLIED LINGUISTICS  
PRESENTS:**

**SPANISH VOWEL AND CONSONANT  
CONTRIBUTIONS TO TALKER IDENTIFICATION AND  
LEXICAL CONTRAST  
STEPHANIE LAIN (UC SANTA CRUZ)**

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**WEDNESDAY, APRIL 17<sup>TH</sup> 5:30PM  
HUM 1, RM. 202**

Acoustic properties of the input determine how speech sounds are processed, categorized, and encoded in memory. This information is used to identify words and convey information about the speaker. The series of experiments described in this talk were undertaken with the goal of clarifying the roles vowels and consonants play in lexical decision making and talker identification in Spanish. Participants in the study were 101 listeners who self-identified as native speakers of Spanish. They performed one of six same-different auditory discrimination experiments which varied according to task (lexical decision or talker identification) and condition (unaltered stimuli, vowels excised, consonants excised). Responses from each participant were used to calculate a D prime score (evaluating the participant's ability to discriminate between tokens), as well as a language dominance score (participants were Spanish/English bilinguals). Reaction times and null responses were also recorded. Results were analyzed using a multivariate 2 x 3 factorial analysis with language dominance as a co-variate, followed by univariate analyses to further examine the effects of independent variables. Findings from the current study largely confirm results from previous studies conducted in English which suggest a greater reliance on consonants when performing lexical decision tasks and vowels when performing talker identity tasks. From this, we may infer that variation observed in response to the acoustic properties of vowels and consonants appears to be universal to linguistic processing and not a result of the interaction between speech sounds within a given language system. These results have implications for theories of speech perception, particularly with regard to the role of listener experience in the perception of phonemes and talker-specific acoustic properties.