

## Word Length Modulates the Effect of Emotional Prosody

Seung Kyung Kim

Aix Marseille Univ, CNRS, LPL, Aix-en-Provence, France

seung-kyung.kim@lpl-aix.fr

Previous work on the effect of emotional prosody on spoken word recognition (Kim, 2015; Kim & Sumner, submitted) has shown that emotional prosody, independent of the lexical carrier, activates words associated with the emotional information. For example, hearing a non-emotional word (e.g., *pineapple*) uttered with angry prosody facilitates recognition of angry-associated words (e.g., *mad*). This work showed that phonetically cued social information can directly activate lexical representations.

Building on this finding, the current study delves into the nature of the affective/prosodic priming between emotional prosody and emotional words and tests if word length modulates affective priming. Word length is an important dimension in lexical processing, as longer words are shown to produce stronger lexical activation than shorter words (Pitt & Samuel, 2006). If we hypothesize that social information shows a stronger effect when lexical activation is *weaker*, we predict to find stronger affective priming with shorter words than longer words.

This hypothesis was tested with a cross-modal lexical decision task. The visual target words were 12 angry related words (e.g., *mad*, *upset*). The target was preceded by two-, three-, or four-syllable non-emotional prime words (e.g., *atom*, *envelope*, *aluminum*) spoken with angry prosody. The results showed that listeners recognized angry words faster after hearing angry prosody than after hearing neutral prosody when the prime words were short (2 syllables) but not when the prime words were longer (3-4 syllables). The current results provide evidence that social effects in word recognition are modulated by the strength of lexical activation.