Acoustic Correlates of Speaker Confidence: Can They Tell I Don’t Know?

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Abstract: When nervous, unprepared, or less knowledgeable about a subject area, speakers may become increasingly worried that they are revealing telling acoustic cues about their anxiety level (e.g., hesitation before speaking or vocal jitter) to their audience. The current study is a two-part (production/perception) experiment that sought to evaluate when 1) speakers produce telling acoustics and 2) listeners become sensitive to vocal confidence cues produced by the speaker. The results indicated that when a speaker produced discriminating (un)confidence cues (e.g., rising intonation and delayed speech onset), the listener was significantly better able to predict the speaker’s confidence level. Interestingly, the speaker was significantly more likely to produce discriminating acoustic cues when more social pressure was applied, suggesting that speakers may intentionally communicate information about confidence. This indicates that confidence cues may be produced for the benefit of the listener and not to the detriment of the speaker.