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Breathing in expressive speaking and listening contexts

The data briefly summarized in this short talk come from three related projects that are currently conducted by the University of Southern Denmark with international research partners. The projects are related in that they focus on expressive contexts. For example, (1) how is breathing related to the perceived charisma of a speaker? Are rhetorical manuals right in claiming that abdominal ("belly") breathing makes a speaker sound more charismatic on stage? Moreover, (2) are the characteristic breathy-voice qualities of rhetorical questions expressing disgust and mockery reflected in a speaker's speech breathing, compared to a reference condition of modal-voice information-seeking questions? Finally, (3) if listeners are confronted with spoken hate speech, how do their breathing patterns change as a (stress-based) function of the severity and type of hate speech? The talk addresses questions (1)-(3), presents initial answers to (1) and (2) and reports interesting challenges in analyzing the data of question (3) in which the breathing signal represents a perception-related biosignal rather than a signal connected to, and coordinated with speech production.