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Syllable production rate in conversational speech

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Most acoustic analyses of speech are based on samples obtained from carefully constructed corpora that are read or recited by subjects in a laboratory setting. Recently, speech scientists have attempted to obtain speech samples that are representative of a more casual, conversational style than might be obtained in the laboratory. One available and plentiful source of such speech samples can be found in "talkradio" shows in which listeners engage in phone conversations with radio hosts. Phone-in programs receive calls from thousands of callers each day across the continental United States. Moreover, the listeners who call generally speak in an essentially natural, unselfconscious manner, exhibiting a broad range of rates and emotional states. This paper reports the results of a study of syllable production rate from samples of speech obtained from a variety of types of phone-in programs, including those focusing on sports, politics and the arts. The data reveal that syllable production rates (in syllables per second) range from 3.05 to 7.50. Subjective judgements of speech rate by naive subjects were found to correlate only moderately with actual rates of syllable production.