

## Audio – emotion in human speech III

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Variations of accoustic variables Murray & Arnott (1993)

<b>Emotion</b>	<b>Pitch</b>	<b>Intensity</b>	<b>Speaking Rate</b>	<b>Voice Quality</b>
Anger	high mean, wide range	increased	increased	breathy
Joy	Increased mean and range	increased	slow tempo; increased rate	sometimes breathy; moderately blaring timbre
Sadness	normal or lower than normal mean, narrow range	decreased	slow	resonant timbre