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## Some useful definitions

**acoustic energy** - The energy in a sound wave.

**acoustic source** - The place or object that produces a sound.

**acoustic spectrogram** - a display of the amplitude of a sound at different frequencies measured over time.

**audio analysis** - study of recorded material to determine information such as content, voice, noise content, intelligibility, and many other variables.

**consonant** - a speech sound that causes a reduction in airflow through the vocal tract.

**periodic wave** - a wave that repeats continuously.

**phonetic** - having to do with the production, transmission, and perception of speech.

**psychoacoustics** - the study of the relationship between physical stimuli and the psychological responses to which they give rise.

**sound wave** - a wave that is a fluctuation in the static pressure of a medium such as air or water.

**spectral plot** - a graph of the magnitudes of frequency components of sound (amplitude, intensity, sound pressure)

**spectrogram** - a plot of the changes in a sound as a function of time; generally showing time from left to right, frequency from bottom to top, and amplitude(volume) as shades of gray or color.

**signal enhancement** - the process of utilizing various analog and digital systems to “cleanup” and improve the content of a recording in order to obtain the best representation of the desired content as opposed to noise, interference, and other unwanted content.

**tone or pitch** - a sine wave; a single frequency.

**transcript** - a written or typed document of the verbal content of a recording.

**voice identification** - the process of identifying an unknown voice. Normally samples of a known voice are compared to similar examples of an unknown voice. These samples contain information that are similar to physical fingerprints.

**waveform** - a graph showing the variation of a physical quantity at one point as a function of time.

**waveform plot** - a graphic plot of a segment or continuous content of a sound waveform which shows amplitude of the signal with respect to time.