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**Aeroacoustic production of speech sounds**

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Speech sound production is described in terms of its essential physics by focusing on the aeroacoustics of jets in the vocal tract. Aeroacoustic theory is used to show that the primary sources of sound may be expressed in terms of unsteady aerodynamic forces on the vocal tract walls, especially where a jet is formed, and where the jet performs a strong interaction with the walls. The theory further clarifies which details of jet structure and vocal tract geometry contribute to sound production. This information is used to guide useful approximations concerning the aerodynamics. With the assistance of measurement, these approximations are used to develop a model of the sound source in the time and frequency domains. The contribution of jet structure and vocal tract geometry to sound source characteristics is then discussed. Model predictions of the resulting acoustic field are compared to acoustic measurements.