

Appendix C: Annotated Bibliography

ABD-EL-MALEK, S. (1939). Observations on the morphology of the human tongue. *Journal of Anatomy*, 73: 201-210.

One of the best descriptions of the muscles of the tongue, based on dissections and experimental work. Most writers quote him. Contains a very good description of the septa of the tongue, usually not found in most anatomy books in such detail. The median, paramedian and lateral septa are described. Diagrams and plates support a very detailed description of the muscles of the tongue. Unfortunately, no attempt is made to suggest the way in which the muscles participate in the different movements of the tongue.

CLEMENTE, C.D. (1975). *Anatomy: a Regional Atlas of the Human Body*. Philadelphia: Lea and Febiger.

Beautiful, color illustrations created from clear, bold and complete drawings originally by the German anatomist Sobatta. Sequence goes from the pectoral region through the thorax, vertebral column and spinal cord, and, finally, the neck and head. Uses English rather than Latin labels, consistent with Gray's Anatomy. Illustrations with complex textural differences are often supplemented by schematic diagrams.

DABELOW, R. (1951). Vorstudien zu einer Betrachtung der Zunge als funktionelles System: II. Die Muskulatur und ihre bindegewebigen Insertionen (Preliminary studies of the tongue as a functional system: II. The musculature and its interdigitated insertion). *Gegenbaurs Morphologisches Jahrbuch*, 91: 33-76. (In German).

An anatomical investigation of human (as well as other mammalian) tongues, with many excellent photographs and diagrams. Disagrees with Abd-El-Malek (1939): "The [median] septum is no fibrous dividing wall but a complicated linkage of the transverse muscles. The longitudinal musculature consists of bow-shaped pieces which are shortest near the surface and get longer as they get farther towards the depth. Those even deeper are completed by styloglossus fibers." (Quote taken from English abstract.)

DIAMOND, M.C., SCHEIBEL, A.B. and ELSON, L.M. (1985). *The Human Brain Coloring Book*. New York: Barnes and Noble.

Good source for illustrations, and coloring in if you desire! Drawing by hand is another good method of appreciating how structures connect.

DICKSON, D.R. and MAUE-DICKSON, W. (1982). *Anatomical and Physiological Bases of Speech*. Boston: Little, Brown & Co.

Designed for both beginning and advanced students. Contains useful background information at the outset, then the same coverage as Dickson and Maue (above), but in greater textual detail, and with an additional chapter on the nervous system. Much attention given to basic principles of structure and function of neuromuscular system in order to better understand the physiology. Many invaluable diagrams and photographs.

HARDCASTLE, W.J. (1976). *Physiology of Speech Production: an Introduction for Speech Scientists*. London: Academic Press (London) Ltd.

Includes several excellent schematic diagrams of complicated muscle interactions and

concrete discussion of physiological correlates of traditional speech sound categories (i.e. stop, fricative, tap, trill, etc.). Several chapters are organized around muscles involved in particular actions, their attachments, innervation, etc.

HILL, K. (1964). The musculature of the tongue. *UCLA Working Papers in Phonetics*, 1: 22-39.

Simple overall description of the suprahyoid muscles, the intrinsic muscles of the tongue, the extrinsic muscles of the tongue, and the connective tissue structure of the tongue. Explanations in the text are very thorough, intelligible and helpful for comprehending the composition of the tongue and surrounding framework. Fourteen figures and an extensive annotated bibliography.

KAHANE, J.C. and FOLKINS, J.W. (1984). *Atlas of Speech and Hearing Anatomy*. Columbus: Charles E. Merrill.

A unique and comprehensive book of photographs from anatomical specimens. Some are fiberoptic while others come from dissections and photomicrographs. Actual preparations are largely favoured over drawings, but occasionally drawings and illustrations are taken from the literature to clarify certain anatomical concepts. Fascinating, and essential for this course.

MATT, M. and ZIEMIAN, J. (1990). *Human Anatomy Coloring Book*. New York: Dover.

Designed for use by high school teachers, but nevertheless another useful source for clear and easy-to-adapt illustrations. Entertaining and instructive guide to the human body—bones, muscles, blood, nerves, and how they work.

MIYAWAKI, K. (1974). A study of the musculature of the human tongue: observations on transparent preparations of serial sections. *Annual Bulletin, Research Institute of Logopedics and Phoniatics, University of Tokyo*, 8: 23-50.

Thorough description of muscles of the tongue. Then three tongues dissected in three planes: sagittal, coronal and transverse. Sections made transparent, revealing the direction of the muscle fibres very clearly. Complete series of drawings then made from the sections. The paper also contains a mini-bibliography relating to the tongue.

NETTER F. H. (1997) *Atlas of Human Anatomy*. 2nd edition. East Hanover, N.J. : Novartis.

Beautifully illustrated and extraordinarily detailed anatomy atlas. We recommend that you have this atlas on-hand during dissection.

PERNKOPF, E. (1989). *Atlas of Topographical and Applied Human Anatomy*. Vol. 1, Head and Neck. Philadelphia: Williams & Wilkins.

Pages 136-141 have very useful pictures of the tongue, its muscles, and the area around it. No text.

SEIKEL, J. A., KING, D.W., and DRUMRIGHT, D.G. (2000). *Anatomy and Physiology for Speech, Language, and Hearing*. San Diego: Singular.

A basic anatomy and physiology textbook aimed at the speech and hearing science student. Contains thorough explanations of muscular function as well as clear illustrations of the

muscles and bones.

STRONG, L.H. (1956). Muscle fibers of the tongue functional in constant [sic] production. *Anatomical Record*, 126: 61-79.

An important article, illustrated with excellent photographs of sections of the tongue. Carries on the work of Strong and Gold (1950), investigating how the intrinsic tongue musculature would deform the tongue to conform to the outlines of palatograms. Rather naive about palatograms and tongue positions, confusing hypothesis concerning the action of the transverse and vertical muscles which are supposed to act in a special way in consonants. Interesting critical review of the anatomical literature, showing some of the nineteenth-century sources of Gray, Cunningham and Spalteholtz. Mentions existence of Abd-El-Malek (1939), but pays no attention to his work. The word “constant” in the title (and one line of the article) is a typographer’s error, corrected in an Erratum in a later issue; Strong intended “consonant”.

ZEMPLIN, W.R. (1997). *Speech and Hearing Science*. 4th edition. Boston: Allyn & Bacon.

Excellent descriptions of speech organs’ physiology and pathologies. Written for the speech science audience.