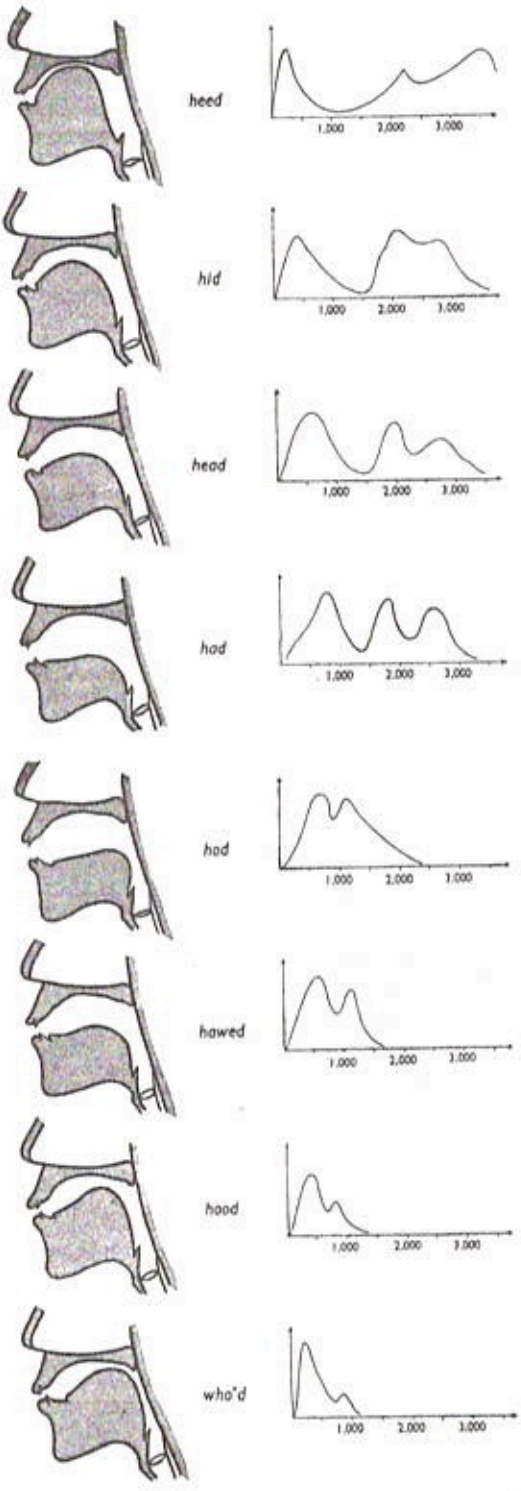


Figure 4.5. The positions of the vocal organs (based on data from X-ray photographs) and the spectra of the vowel sounds in the middle of the words *heed, hid, head, had, hod, hawed, hood, who'd.* (From Peter Ladefoged, *Elements of Acoustic Phonetics,* 1962. Tenth impression, 1974. Chicago: University of Chicago Press. By permission.)