Modal Vibrations of Violins/Violas/Cellos, etc.

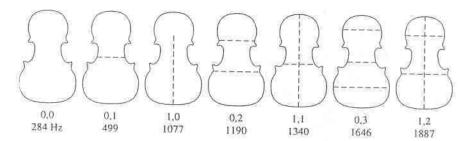


FIGURE 10.13. Modes of a violin air cavity. Mode frequencies are from Roberts and Rossing (1997).

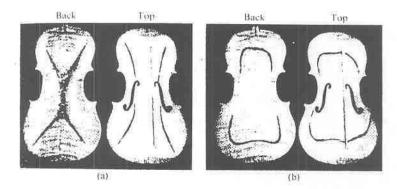


FIGURE 3.18. Chladni patterns showing two modes of vibration in the top and back of a viola (Hutchins, 1977).

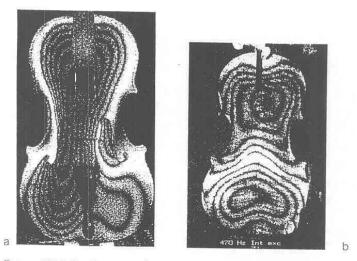


FIGURE 10.12. Interferograms of two air modes in violins using electronic TV holography. (a) A_0 mode excited by sound from a loudspeaker (from Saldner et al., 1996); (b) A_1 mode excited by applying a sound pressure internally (Roberts and Rossing, 1997).