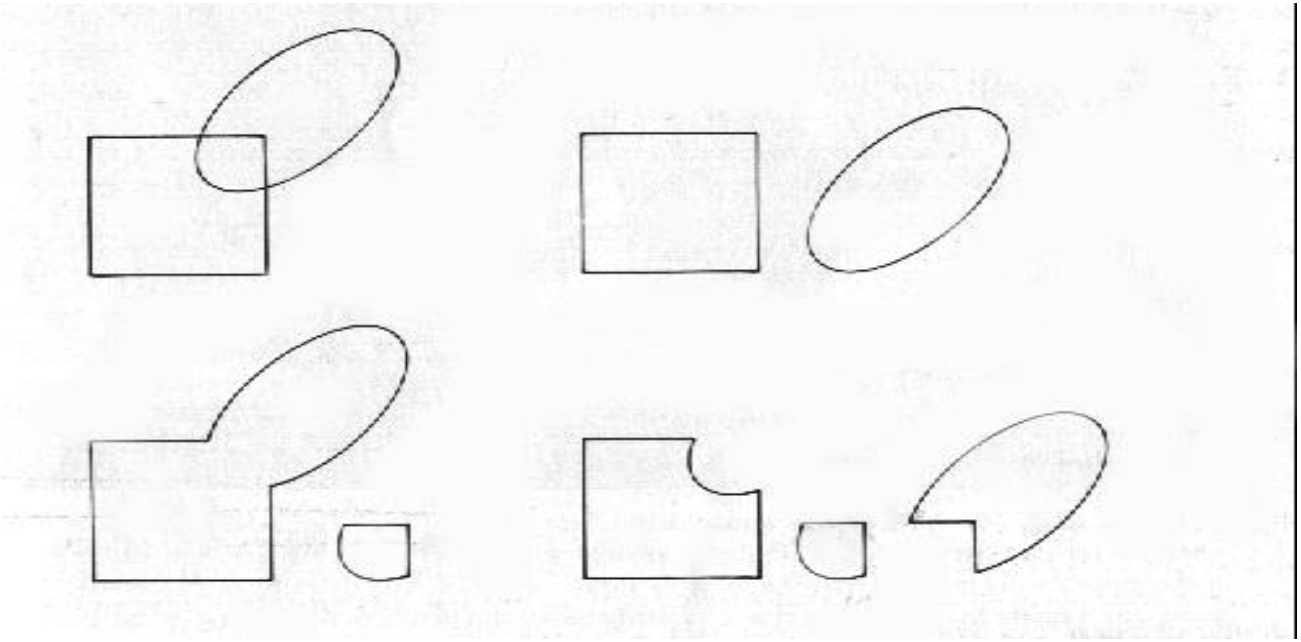
Perceptual advantage for congruence

An intermodal and intramodal study

Purpose of the study

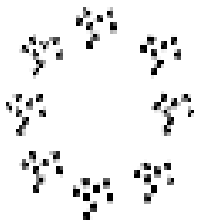
Examination of the hypothesis that perceptual sensitivity to congruence has an advantage over other known perceptual sensitivities

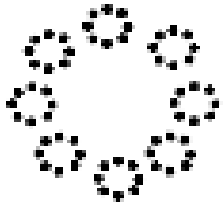
Sensitivity to good figure

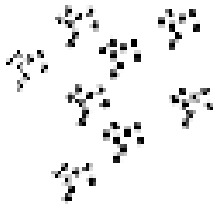


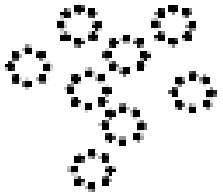
Global advantage

Stimuli in pilot experiment

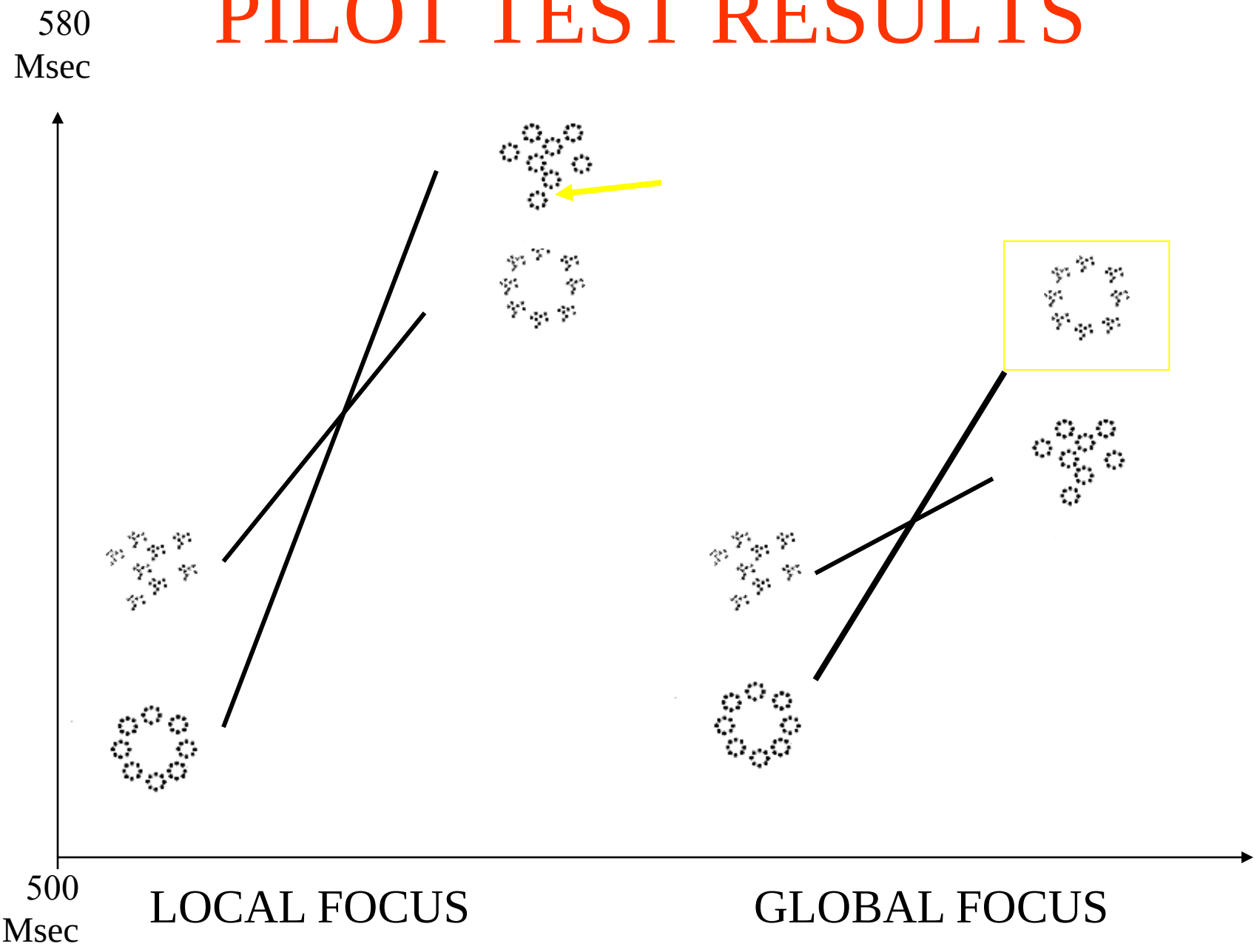




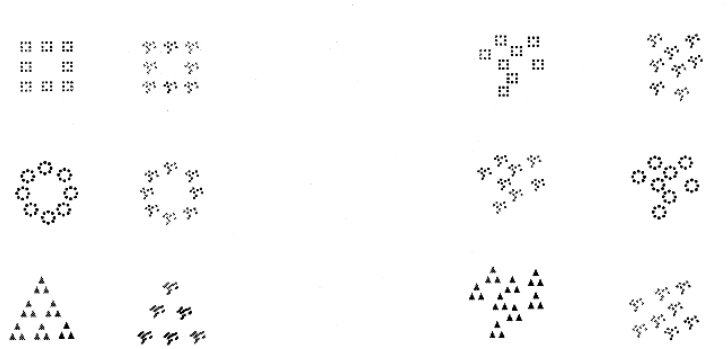




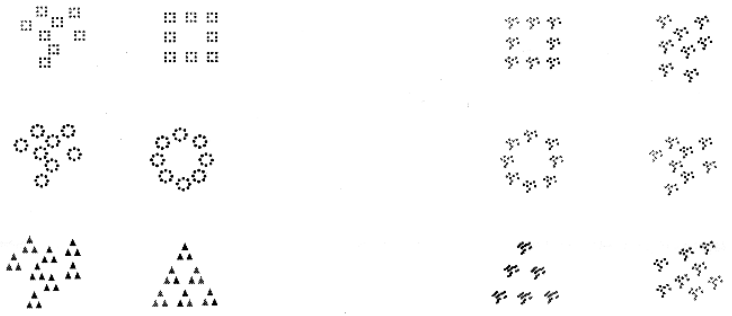
PILOT TEST RESULTS



Pilot experiment



Global focus



Local focus

Auditory consonance and dissonance

- Consonant complex sound

400 400 400

1600 1200 800 **400**

- Dissonant complex sound

20 390 10

820 800 410 **400**

2 SIMULTANEOUSLY :INTERVALS
HEARD COMPLEX SOUNDS

CONSONANT INTERVAL MADE OF DISSONANT SOUNDS

720 630 540 450 180 **90**

1080 990 900 810 360 **270**

VISUAL PARALLEL

CONSONANT INTERVAL MADE OF CONSONANT SOUNDS

700 600 500 400 300 200 **100**

600 400 **200**

VISUAL PARALLEL

DISSONANT INTERVAL MADE OF DISSONANT SOUNDS

700 613 455 400 319 211 **100**

677 417 **190**

VISUAL PARALLEL

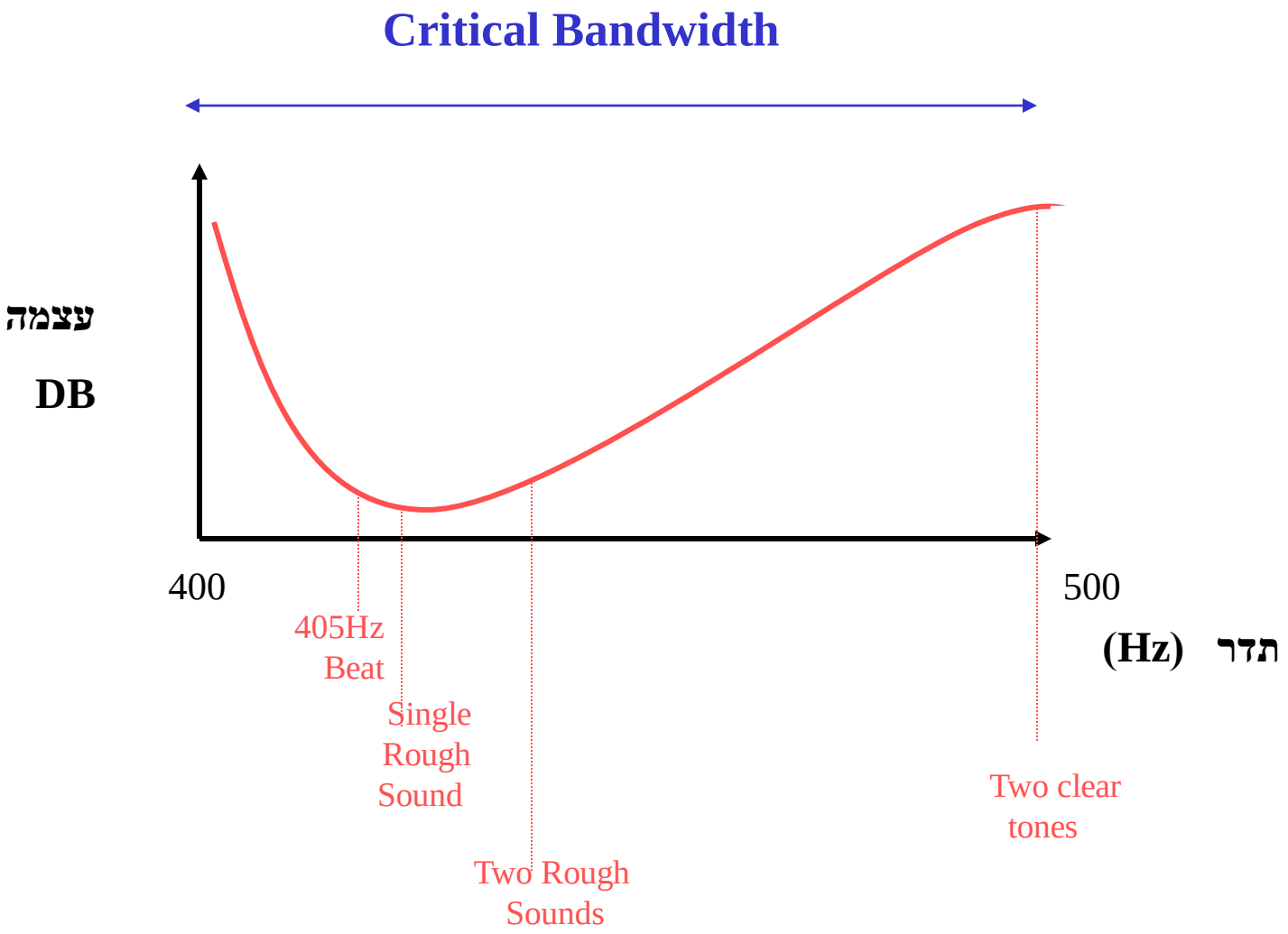
DISSONANT INTERVAL MADE OF CONSONANT SOUNDS

700 600 500 400 300 200 **100**

651 434 **217**

VISUAL PARALLEL

רוחב תדר קריטי –פעמות וחספוס



תדרי צלילים מורכבים בפסנתר

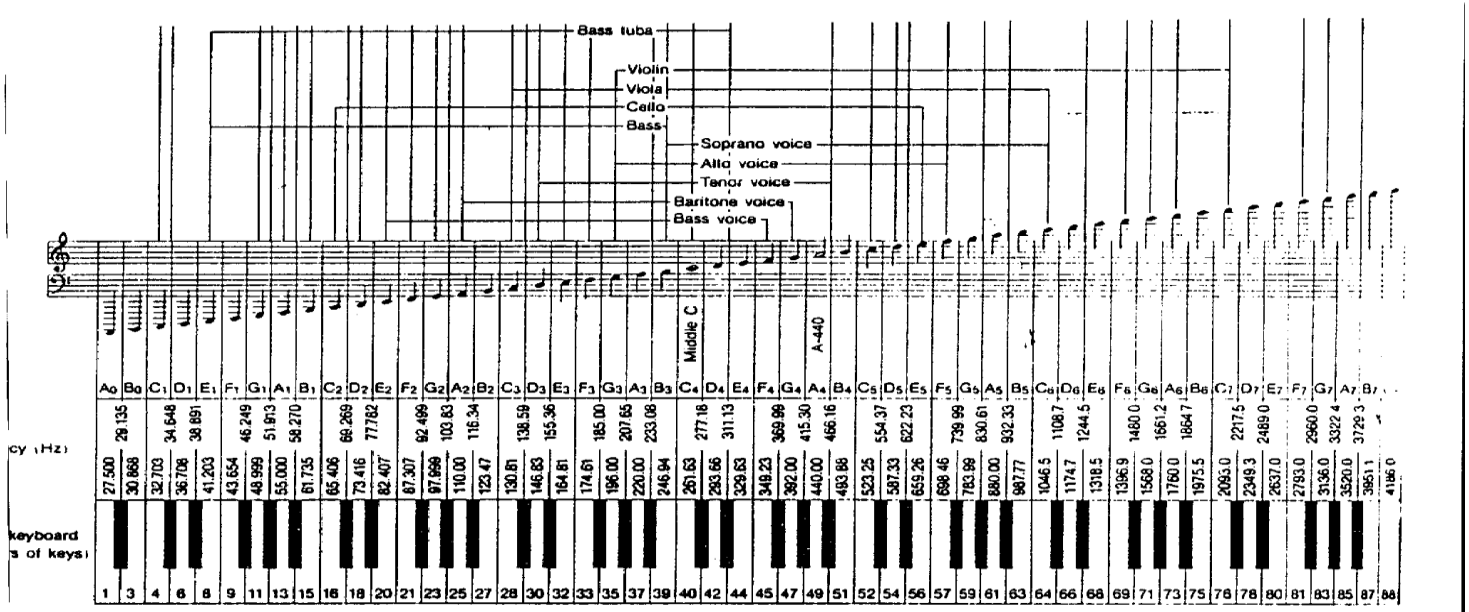


FIGURE 11.5 The piano keyboard showing the fundamental frequencies associated with each note and the ranges of various instruments. (From Conn, Ltd.)

or **overtones** of the fundamental frequency. In this example, the second harmonic has a frequency of