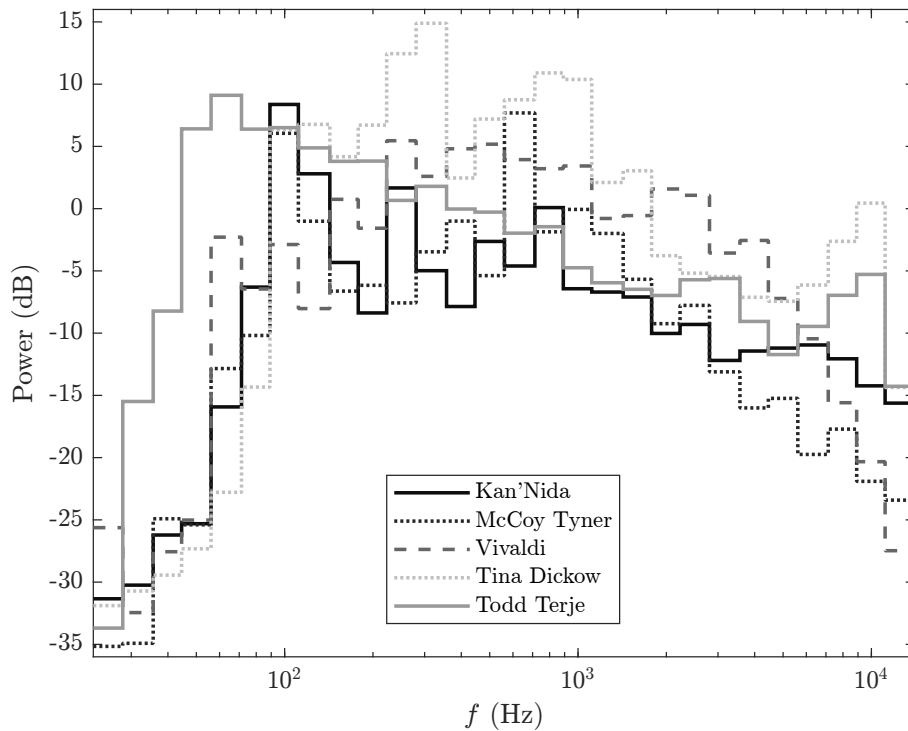
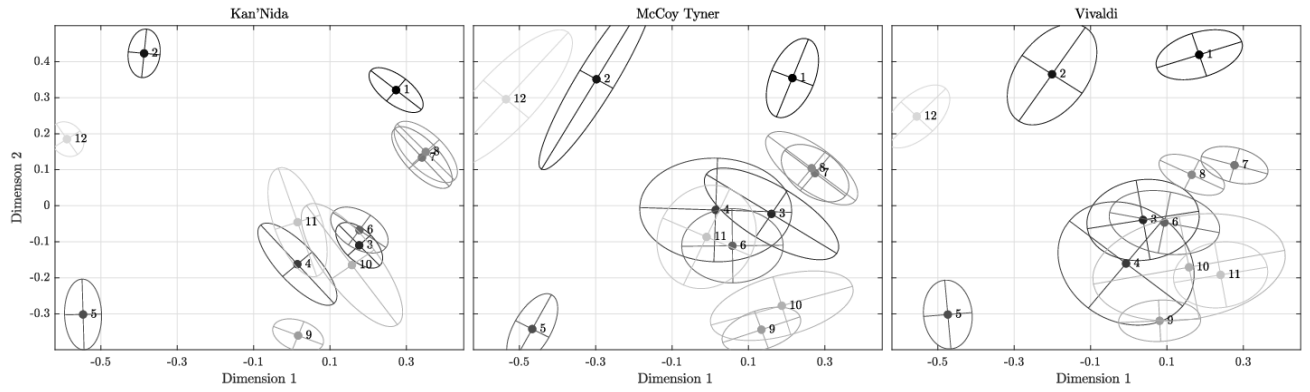


Supplementary material for the article:
*Third-octave analyses describing two perceptual dimensions
of sound reproduction and the resulting overall perceived
dissimilarity between loudspeakers or headphones*

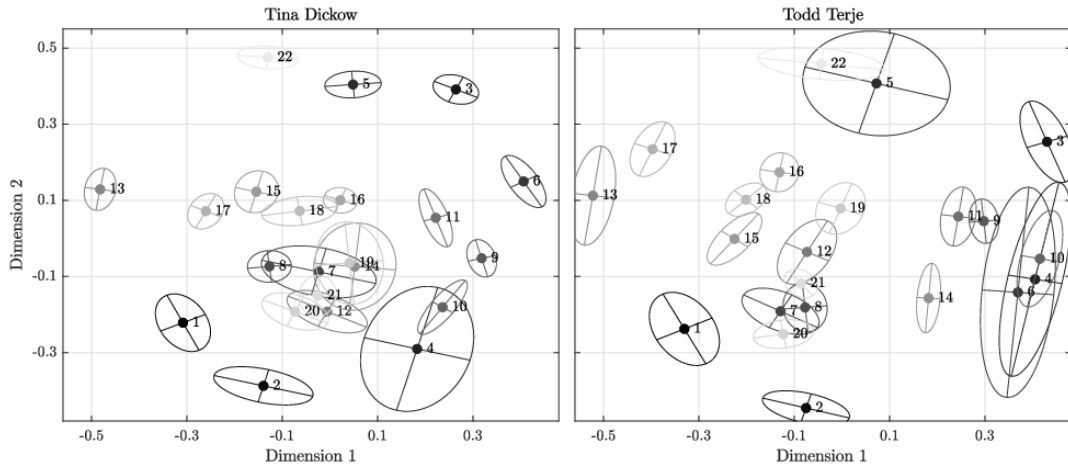
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Suppl. Fig. 1: Third-octave spectra of the five musical excerpts from the loudspeakers and headphones studies. The signals considered are the original excerpts, before being recorded on the audio devices that were compared. For the loudspeakers study, the original excerpts are monophonic. For the headphones study, the left channel of the excerpts was arbitrarily chosen here.



Suppl. Fig. 2: Two-dimensional spaces resulting from the MDS analysis of the perceptual dissimilarities obtained for the three musical excerpts in the loudspeakers study. Each number represents a loudspeaker. The ellipses are 95%-confidence ellipses estimated using a bootstrap method with 500 iterations.



Suppl. Fig. 3: Same as Suppl. Fig. 2 but for the headphones study

Suppl. Table 1: Comparison for 6 objective dissimilarities of their correlations with the perceptual dissimilarities: total number of significantly different correlations across studies (loudspeakers, headphones), musical excerpts and recording channels

Objective dissimilarities	Significantly different correlations with perception (N=10)
FFT <i>Log</i> / 3rd oct. <i>Ratio</i>	0
FFT <i>Log</i> / Gamma. <i>Ratio</i>	0
FFT <i>Log</i> / 3rd oct. <i>Log</i>	4: all headphones
FFT <i>Log</i> / Gamma. <i>Log</i>	8: all w/o McCoyR & Kan.R (loudspeakers)
FFT <i>Log</i> / Reference	3: all headphones w/o TinaL
3rd oct. <i>Ratio</i> / Gamma. <i>Ratio</i>	1: ToddR (headphones)
3rd oct. <i>Ratio</i> / 3rd oct. <i>Log</i>	5: all headphones & Kan.R (loudspeakers)
3rd oct. <i>Ratio</i> / Gamma. <i>Log</i>	8: all w/o McCoyR&L (loudspeakers)
3rd oct. <i>Ratio</i> / Reference	4: all headphones
Gamma. <i>Ratio</i> / 3rd oct. <i>Log</i>	4: all headphones
Gamma. <i>Ratio</i> / Gamma. <i>Log</i>	4: all headphones
Gamma. <i>Ratio</i> / Reference	4: all headphones
3rd oct. <i>Log</i> / Gamma. <i>Log</i>	0
3rd oct. <i>Log</i> / Reference	1: ToddL (headphones)
Gamma. <i>Log</i> / Reference	1: Viv.R (loudspeakers)