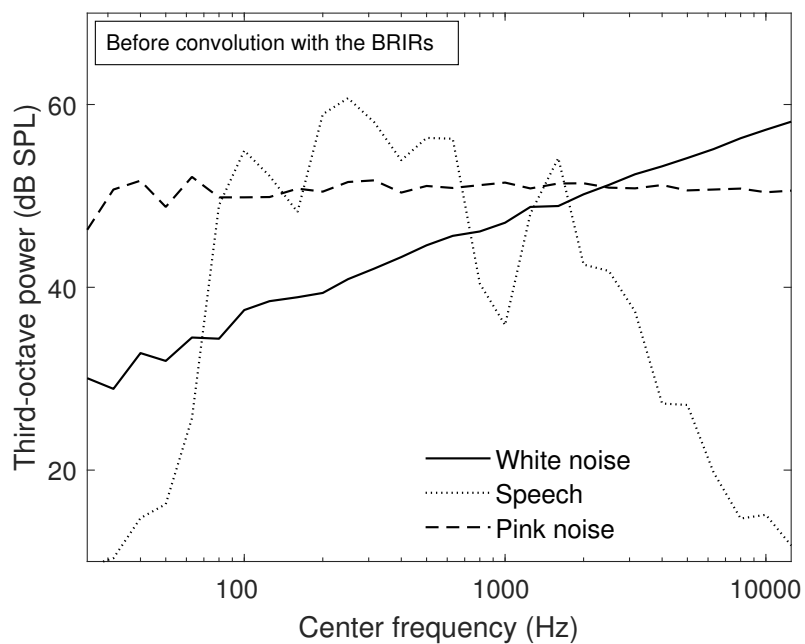
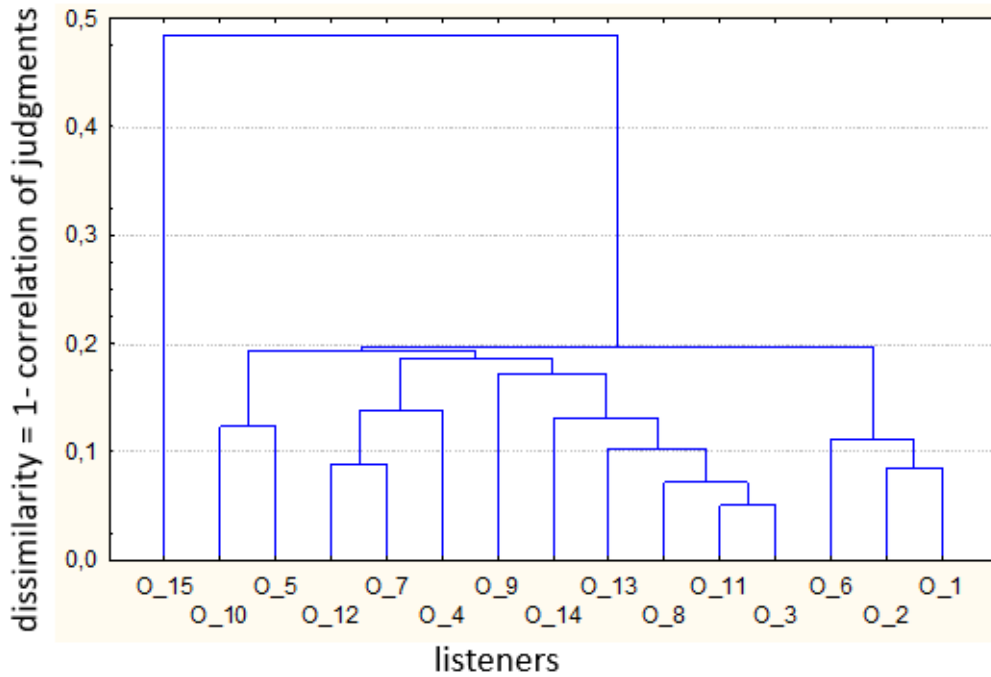


Supplementary material for the paper:
*Reverberation cues underlying virtual auditory distance
perception for a frontal source*

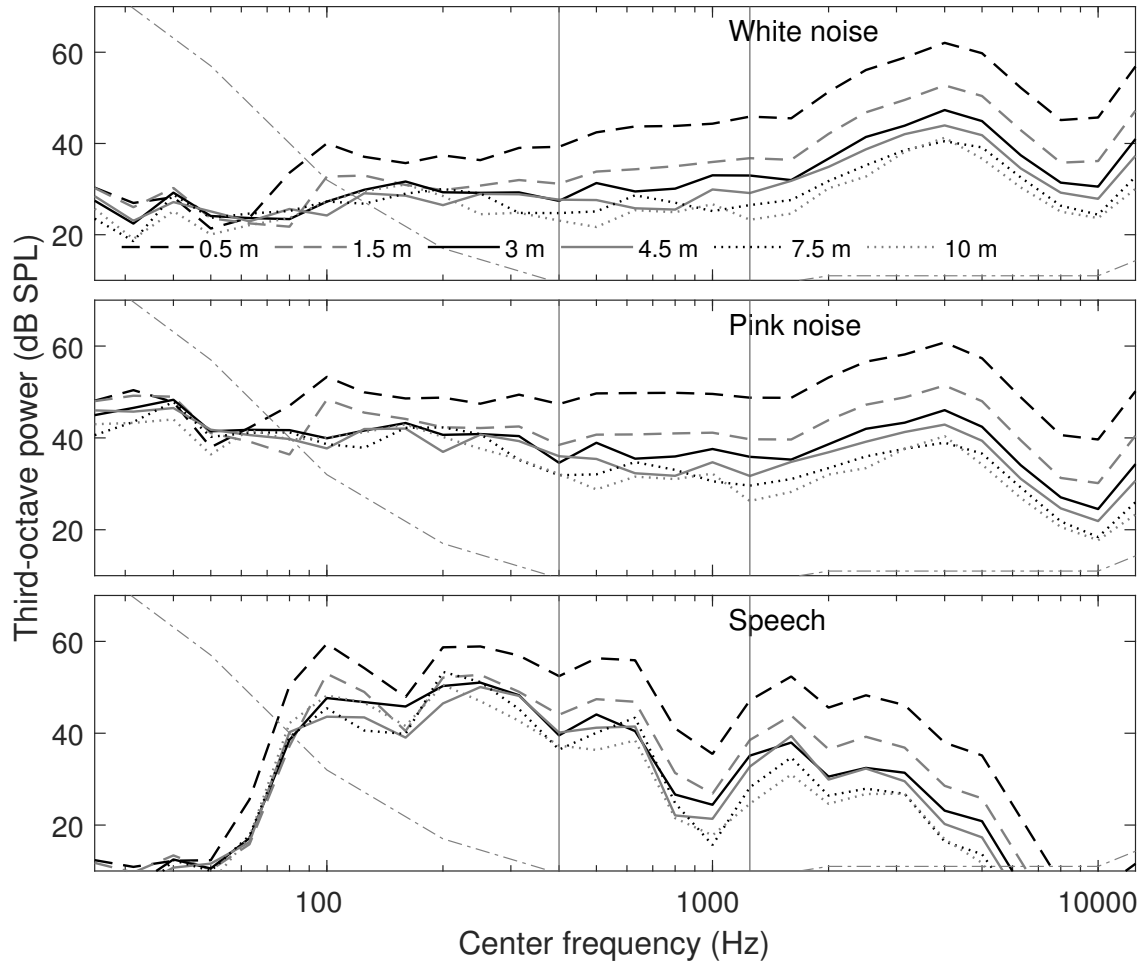
Mathieu Lavandier and Luna Prud'homme
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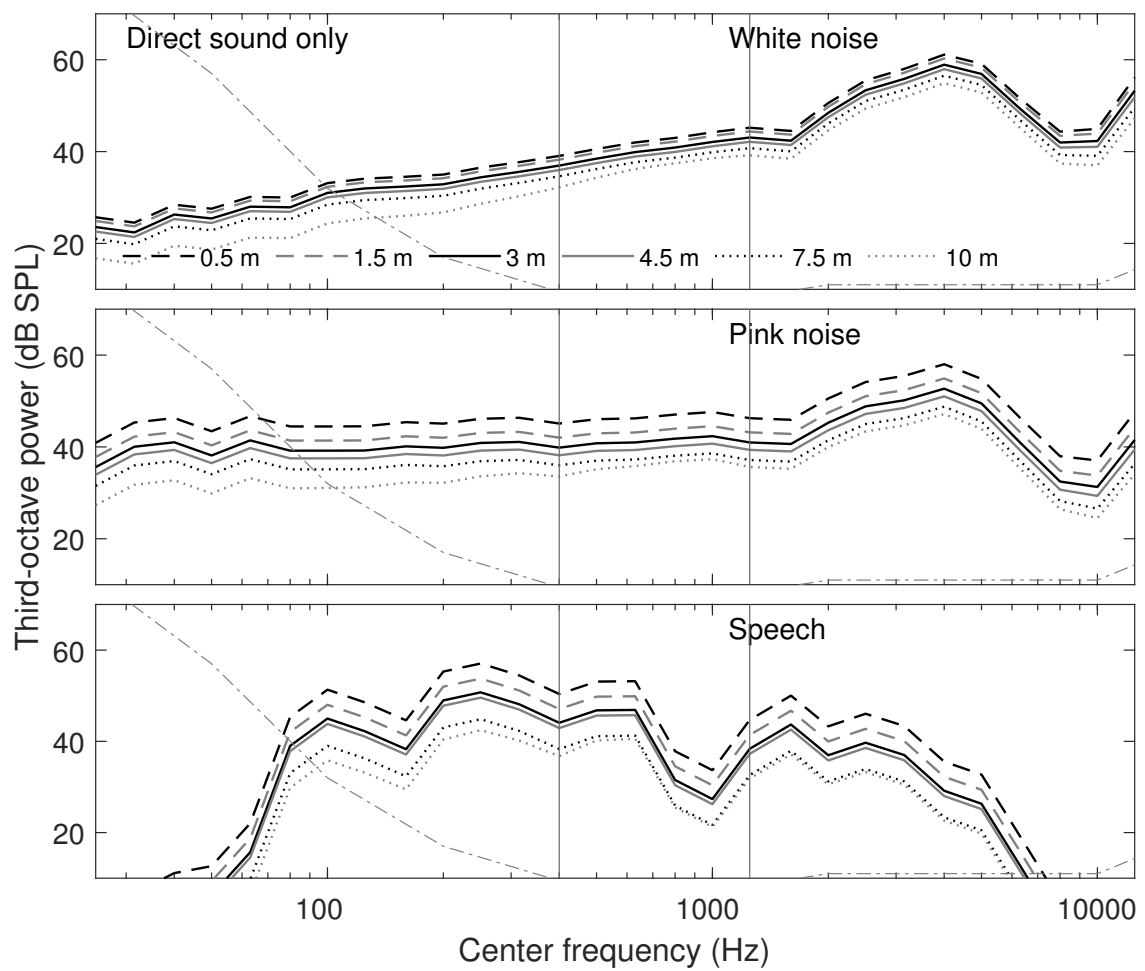
Suppl. Fig. 1: Third-octave spectra of the three original sounds at 67 dB SPL



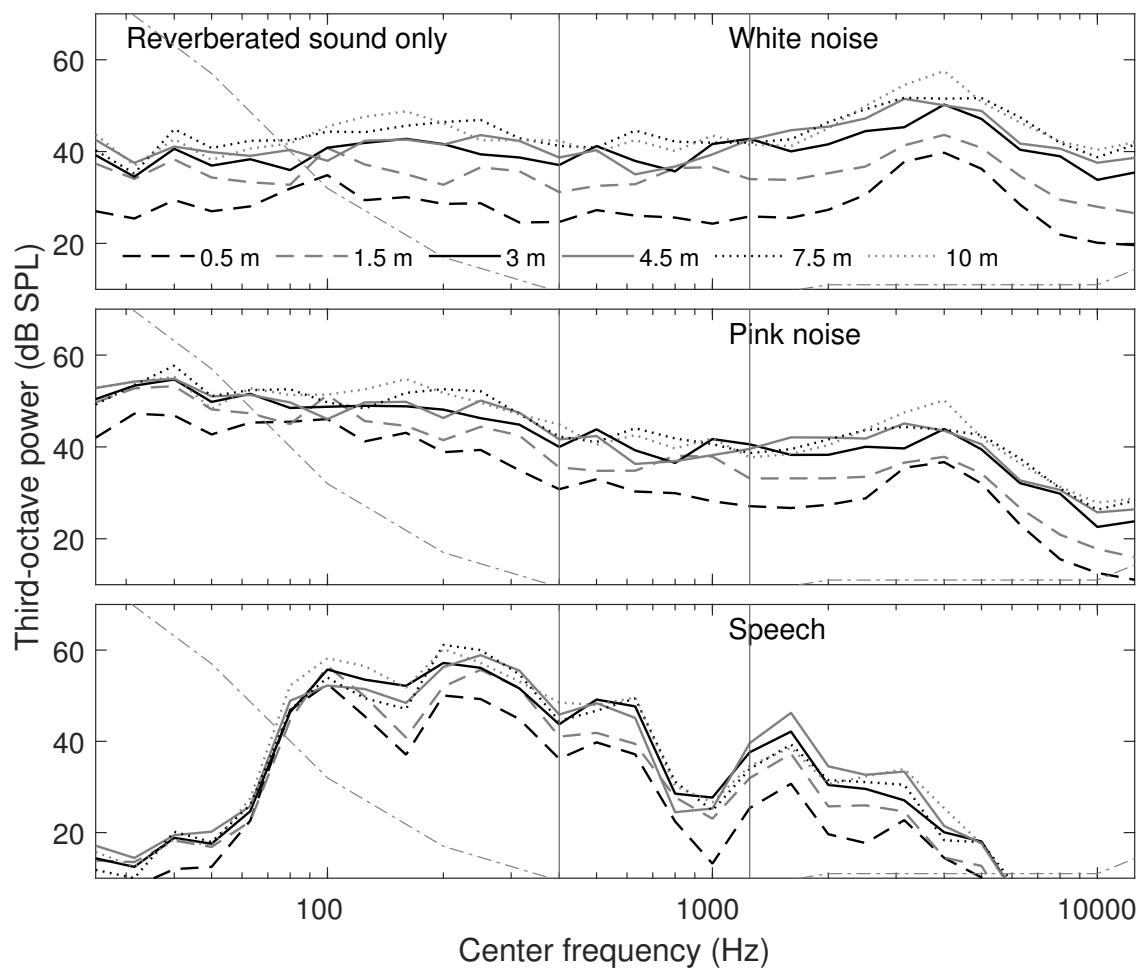
Suppl. Fig. 2: Dendrogram resulting from the hierarchical clustering of the individual data. Each number on the x-axis represents one of the 15 listeners. The height of the node connecting two listeners corresponds to the dissimilarity of their judgments, whereas the position of the listeners on the horizontal axis is irrelevant. A single group of 14 listeners is highlighted, with the presence of a single outlier (O_15). There would be different groups of listeners if one could isolate at least two groups of listeners having well correlated judgments within each group and uncorrelated judgments between groups. No such group appears here, any partition of the listeners “continuously” depends on the degree of similarity chosen to discriminate them, and the correlation across listeners is high (low dissimilarity). On the other hand, the distance estimates of listener O_15 are very dissimilar from those within the group. The data of this outlier were discarded for all subsequent analyses.



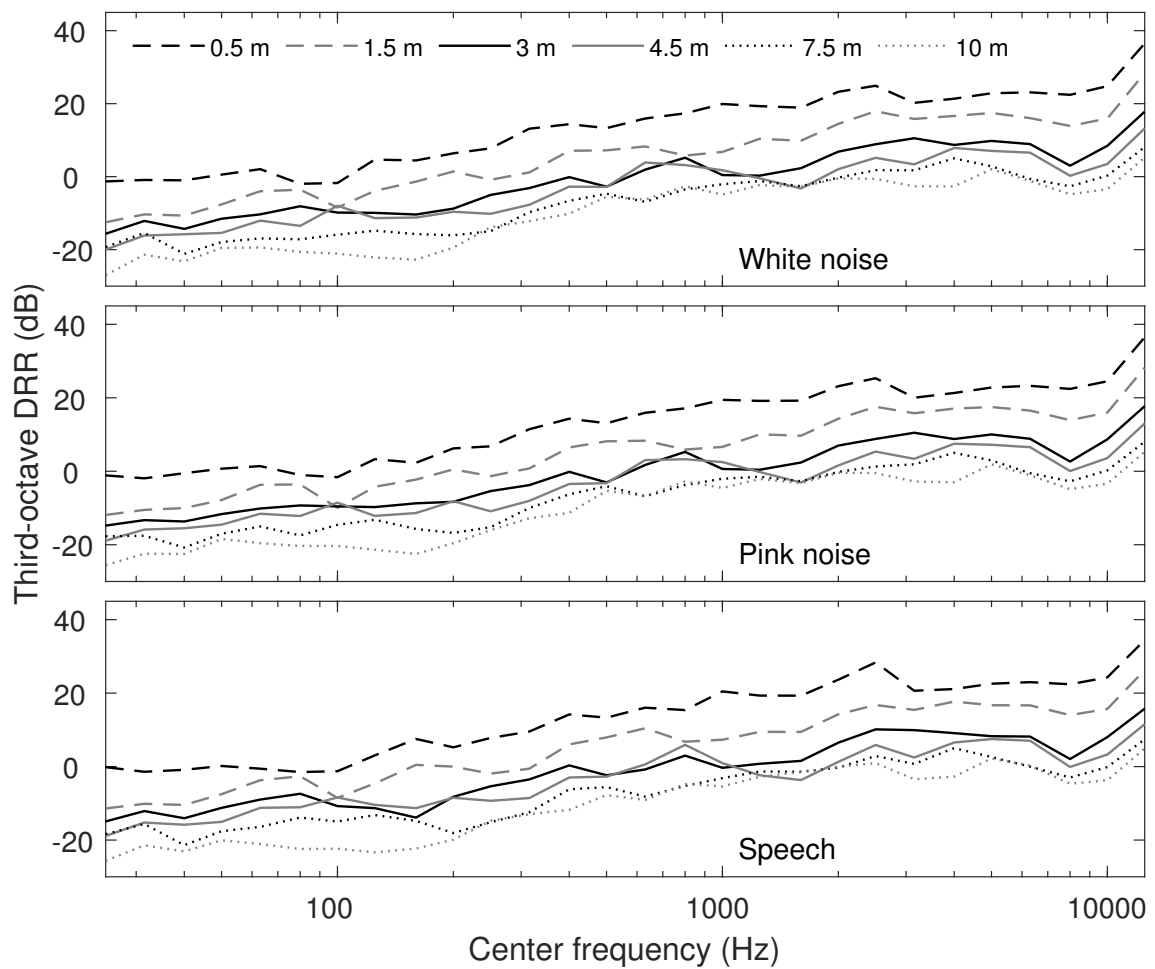
Suppl. Fig. 3: Third-octave spectra of the stimuli **before the broadband level equalization**, for the left ear and the three types of source simulated at 0.5, 1.5, 3, 4.5, 7.5 and 10 m. The dashed-dotted line represents the hearing thresholds, while the two vertical lines indicates the frequency limits 400 Hz/1250 Hz used in the computation of the low-/high-frequency levels and the spectral balance.



Suppl. Fig. 4: Same as Suppl. Fig. 3, but for the stimuli **after the broadband level equalization and considering only the direct sound**



Suppl. Fig. 5: Same as Suppl. Fig. 3, but for the stimuli **after the broadband level equalization and considering only the reverberated sound**



Suppl. Fig. 6: Third-octave spectra of the DRR of the equalized stimuli, for the left ear and the three types of source simulated at 0.5, 1.5, 3, 4.5, 7.5 and 10 m.