

**ACOUSTICS2008/2935**  
**Contextual influences: Perception of sentences in noise is facilitated similarly in young and older listeners by meaningful semantic context; neural correlates explored via functional magnetic resonance imaging (fMRI)**

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Meaningful semantic context has been demonstrated to improve comprehension of spoken sentences by young and old adults, especially in difficult listening conditions. Evidence for this benefit is based largely on data collected using SPIN sentences, highly structured sentences with a predictable or unpredictable final word. We asked young (14 participants, aged 18-25) and older adults (20 participants, aged 60-75) to report entire sentences which were less structured in nature and contained either a meaningful or anomalous global semantic context. Sentences were mixed with signal-correlated noise, at 9 signal-to-noise ratios (-6 to +2 dB), and also presented without noise. Comprehension by both groups benefited from meaningful context, without a clear overall difference in the amount of benefit obtained. We used fMRI to look at neural activity associated with deriving benefit from meaningful context. Whole-brain EPI data were acquired from young (16 participants, aged 19-26) adults using a sparse imaging design. Word-report data obtained in the scanner were used as intelligibility measures in data analysis. In addition to activity associated with meaningful context, we observe a large left inferior-frontal region in which BOLD signal correlated more strongly with the intelligibility of anomalous compared to coherent prose, presumably reflecting challenged semantic integration processes.