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**Detection threshold and prominence of background music with  
interfering speech**

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Spoken radio and television messages are often accompanied by background music. When automating identification of broadcast music for handling copyright exploitation, it may be questioned to what extent music at very low sound levels should be taken into account. Should it just be perceivable by listeners who attend to the speech, or should the music be present more prominently? We studied detection and level of prominence of music with interfering speech. For this, Dutch radio and television broadcasts were recorded and speech fragments without background music were selected. To the fragments, music was added with various level differences between speech and music. Subjects were presented with these stimuli and answered a random generic question about the speech after each stimulus. As a second task, the prominence of the background music had to be scored on a scale (including 'not present'). Results show that, on average, 50% of the music is detected if the level of the music is 45 dB lower than the speech. A threshold based on a criterion of 'moderate prominence' results in a level difference of 26 dB. This level happens to coincide with a detection threshold of 95%.