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**Role of temporal fine structure cues in speech intelligibility**

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A number of studies have investigated the role of two temporal features of the narrowband speech signals at the output of auditory filters in speech identification: temporal envelope (E) and temporal fine structure (TFS) cues. To assess the contribution of each feature to speech identification, speech stimuli were split into an array of contiguous analysis bands and processed using several techniques to remove, as far as possible, either E or TFS cues within each band. Overall, the outcome of these studies indicated that, after moderate to substantial training, high levels of speech identification measured in quiet could be obtained for normal-hearing listeners on the basis of E cues or TFS cues alone. The results obtained with TFS cues only may appear surprising, because it is generally considered that, at least for non-tonal languages, E cues carry most of the phonetic information required for speech identification in quiet whereas TFS cues play mainly a role in conveying the pitch cues required for the segregation of speech and background sounds. Further work assessing the extent to which TFS cues alone can convey useful linguistic information in addition to these pitch cues will be reviewed.