

Do listeners refine their spatial tuning over time in multitalker mixtures?

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Speech is a temporal signal in which information is distributed across time, and it is well known that auditory scene analysis evolves over time. However, little is known about how speech perception changes over time in complex listening situations (e.g. when multiple talkers compete for attention). There are some examples in the literature suggesting that, in multitalker mixtures, speech intelligibility improves from word to word when some defining feature of the target talker (e.g. location, voice) remains fixed. The results are consistent with the idea that listeners refine their selectivity over time when stable cues are available. Here, the behavioral evidence for this “buildup” effect is reviewed, along with some relevant physiological data. In addition, some new work is presented that explores the timecourse of the buildup, and the conditions under which it occurs.