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Interestingly, for the same fricatives, the quiet and noise conditions differ very little in the AV condition (93% vs. 87%). In contrast, for the Mandarin group, the presence of noise did not make a great difference in A and AV conditions.

Figure 1. Mean % correct responses with A, V, and AV input in quiet (Q: solid lines) and noise (N: broken lines) backgrounds by English (gray lines) and Mandarin (black lines) participants.

Mean percent responses for the incongruent AV condition are presented in Figure 2.

perceivers are primarily dependent on the A component, even when visual information is available (i.e. AV congruent stimuli). Nonnative perceivers make use of the available A and V information, and are able to use V information even in the absence of the A component.

Of particular interest are the results of the interdentals non-existent in Mandarin perceivers' L1. Their overall poorer performance in perceiving the interdentals across all input modalities compared to the natives indicates that they have not grasped these nonnative sounds. However, they did reveal a progressive increase in identification from the A, to V and AV conditions in both quiet and noisy backgrounds, relative to the native perceivers' superior A to V responses, suggesting that nonnatives might even surpass the natives in adopting visual information in speech perception. Given the previous finding that perceivers rely more on visual speech information when intelligibility is poor [3], Mandarin perceivers would conceivably resort to the visual information as an additional channel of input in perceiving the difficult nonnative sounds.

This leads to the crucial question as to whether nonnative speakers were simply attending to the visual information, or if