LETTER

Reply to Skoyles: Direct acoustic-to-articulatory links have functional significance and historical precedent

Skoyles (1) makes two useful contributions to thinking about motor involvement in speech perception. The first is to provide a valuable historical perspective on the findings of Yuen et al. (2), demonstrating that the notion of a direct acoustic-to-articulatory mapping has long-standing precedents from a variety of sources. The second is to hypothesize that this direct mapping may be critical for the acquisition of spoken vocabulary, a proposal that we note is consistent with evidence concerning the role of articulatory rehearsal processes in vocabulary acquisition (3). However, we disagree with Skoyles (1) that there is a fundamental difference between the "speech mapping" process that he proposes and our own account. Both theories are based on the notion that there is a direct mapping between acoustic and articulatory information, such that articulatory information is activated automatically whenever speech is heard. The only theoretical issue at stake is whether the activation of articulatory information co-occurs with speech comprehension—an issue that Yuen et al. did not (and could not) comment on but that we are currently investigating.

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