The perception of non-native consonant sequences by monolingual Mandarin speakers

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This study examines the perception of non-native consonant sequences by monolingual native speakers of Mandarin, a language with simple (CV) phonotactics. In experiment 1, an identification experiment, listeners heard non-native intervocalic consonant sequences (akta, aklu) that varied in sonority profile and phonetic dimension. The listeners reported an epenthetic vowel between two consonants, but to a varying extent for different sequences. We found that acoustic properties of C1 primarily influence the perception of an epenthetic vowel. In order to determine which acoustic factors played a role, in experiment 2, the same participants heard the non-native sequences in word-initial and intervocalic positions (ktapa, akta) and transcribed them in Pinyin. Different types of transcription errors, including epenthesis, metathesis, omission of C1 and C2, were preferred in word-initial vs. intervocalic sequences. The results of both experiments show evidence for perceptual assimilation in the perception of nonnative consonant sequences by monolingual Mandarin listeners.