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Dutch listeners' perception of Korean stop triplets

This study investigates Dutch listeners' perception of Korean stop triplets. Whereas Dutch distinguishes prevoiced and voiceless unaspirated stops, Korean distinguishes fortis, lenis, and aspirated stops. Here, perception of fortis, lenis, and aspirated bilabial (/pp/-p/-ph/), alveolar (/tt/-t/-th/), and velar (/kk/-k/-kh/) stops is investigated. In Dutch, VOT is the most important perceptual cue for initial stop voicing. Korean fortis stops fall within the VOT range of Dutch voiceless stops; VOTs of lenis and especially aspirated stops are longer than Dutch VOTs. Therefore, Dutch listeners were expected to distinguish fortis stops more accurately from the other two than lenis and aspirated stops from one another. In a phonetic categorization experiment, Dutch listeners categorized Korean stops in naturally recorded CVs as fortis/lenis, lenis/aspirated, or fortis/aspirated. Indeed, for all places of articulation, fortis stops were distinguished relatively accurately from the other two stops. The most difficult distinction was between lenis and aspirated stops (both outside the Dutch VOT range), the easiest distinction between fortis and aspirated stops (the former within the Dutch VOT range, the latter the most remote from Dutch VOTs). Thus, although all Korean VOT category boundaries are outside the Dutch VOT range, the distance from Dutch VOT values affected Dutch listeners' categorization.