

## **Casual speech processes: L1 knowledge and L2 speech perception**

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Every language manifests casual speech processes, and hence every second language (L2) too. L2 listening is pervasively influenced by first-language (L1) experience; in this study we examine how listeners deal with L2 casual speech processes, as a function of the casual speech processes found in their L1.

We compare two cases: a match case, in which a casual speech process affecting the L2 is also operative in the L1, and a mismatch case, in which such a process is found in the L2 but is absent in the L1. In each case we constructed stimuli in which a given phoneme (in sentence context) varied along a continuum from absent to present, and compared L2 listeners' judgements of these stimuli with those from native listeners hearing the same materials. The match case concerns /t/-deletion, which occurs both in Dutch (utterances of postbode 'postman' mostly contain no detectable /t/) and in German (the same holds for utterances of Postbeamter 'postal worker'). We report data from German learners of Dutch hearing Dutch. The mismatch case concerns /r/-insertion, a process occurring in British English (e.g., after the first word of law and order), but not in Dutch. We report data from Dutch learners of English hearing British English.

In the match case, L2 listeners in general mimicked Dutch L1 performance: in judging whether /t/ was present, they showed L1-like sensitivity to preceding acoustic context (/t/-deletion is more likely after /s/ than after /n/), to strength of acoustic evidence for the presence of /t/, and to lexical/syntactic support for underlying /t/. Only in one case did their judgements deviate from L1 responses: they were relatively more likely to report /t/ in verbal inflections (e.g., in rent 'runs'). In exactly this situation, patterns of /t/-deletion differ across German and Dutch: deletion of morphological /t/ is disfavoured in German but acceptable in Dutch. The L2 listeners were thus sensitive to this difference, and overgeneralized perceived deletion in the L2 precisely where the L1 would prohibit it.

In the mismatch case, L2 listeners deviated significantly from British L1 performance. In judging whether /r/ was present, they were influenced by orthography (more rice judgements in saw ice than in more ice) and by semantic context (more rice judgements in sentences where rice was more plausible than ice), while L1 listeners showed neither effect; further, their judgements revealed little sensitivity to the duration of /r/, although this was essentially the only factor determining L1 listeners' judgements.

Together these results suggest that the mapping between L1 and L2 is as important in the interpretation of casual speech processes in speech perception as it is in, for example, categorisation within a phoneme repertoire. Unfamiliar casual speech processes are quite difficult to adapt to in L2. Casual speech processes that are already familiar from the L1, however, are easy to adapt to in L2; it is even possible for subtle difference to be detected in their precise pattern of occurrence across L1 and L2, and to be accommodated to in L2 listening.