

Experience with Australian English affects perception of high rising terminal contours  
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While the influence of the first language (L1) on the perception of second language (L2) intonation variety has been investigated previously [1], to our knowledge, the role of experience with a specific L2 variety on the perception of L2 intonation has not been studied. In particular, the present study focuses on the perception of high rising terminals (HRTs), i.e., rising intonation contours in statements, by German learners of English and L1 English speakers with varying experiences with Australian English. HRTs have been reported frequently for Australian English [2,3,4], with specifics of the best contour for the perception of HRT being determined for Australian English L1 listeners [6]. HRTs also occur in German, though less often [4,5], and it is less well established how the acoustic realisation of HRTs versus questioning intonation differ [4]. In the present study, we compared the perception of Australian HRTs by German L2 learners with limited or extensive experience with Australian English with that of Australian L1 listeners and American L1 listeners, the latter acting as an English L1 reference with less experience with Australian English.

In a categorical judgment task, 16 highly-proficient German learners of English with extensive experience with Australian English (i.e. had been living in Australia for at least six months), 24 highly-proficient German learners with limited experience (had never traveled to Australia), 24 Australian English L1 listeners, and 24 American English L1 listeners were asked to decide if auditorily presented sentences with rising contours were statements or questions. All sentences had the same elliptical syntactic structure ‘Got a NOUN’ (NOUN = e.g. *flower, piano*), that could be interpreted either as a statement “I have got a NOUN.” or as a question “Have you got a NOUN?”. Nineteen sentences, each with a different noun, were recorded by a female Australian English speaker. The sentences were then manipulated along three phonetic variables, each with two levels: low vs. high rise onset, low vs. high rise offset and early vs. late rise onset. In total, 152 trials (19 nouns x 8 intonation contours) were presented to each participant in random order.

The highest proportion of ‘statement’-answers was given by American L1 listeners (56%,  $z = -7.7$ ,  $p < .001$ ; compared to Australian L1 listeners as the intercept), followed by German learners with limited experience (50%,  $z = -3.8$ ,  $p < .001$ ), and German learners with extensive experience (41%,  $z = -1.8$ ,  $p = .07$ ), and Australian L1 listeners (31%). Further analyses that included phonetic variables revealed that a low rise onset led to more ‘statement’-answers for the Australian L1 listeners compared to all other participant groups ( $z = 3.4$ ,  $p < .001$  for German learners with extensive experience,  $z = 2.9$ ,  $p < .01$  for German learners with limited experience, and  $z = 6.3$ ,  $p < .001$  for American L1 listeners).

The results suggest an influence of experience with Australian English on the perception of HRT: participants with more experience with Australian English, tended to respond with a lower proportion of ‘statement’-answers, which was consistent with the Australian L1 listeners. The fact that listeners with limited experience had higher proportions of ‘statement’-answers could indicate that listeners first establish a phonological notion of HRT before they acquire the phonetic realization. The finding that the Australian L1 listeners’ showed more nuanced responses with a preference for giving ‘statement’-answers when the rise onset was at a low level (L\* L-H% or L\* H-H% compared to utterances with a high onset such as H\* H-H%) is in line with [7]. Since neither height of rise offset nor timing of rise onset influenced performance as strongly, the results suggest that low rise onset is likely the most decisive factor determining the perception of Australian HRT. No comparably strong preference was found for the L2 listeners or the American L1 listeners (see also [6]).

## References

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