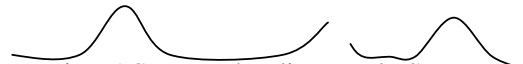


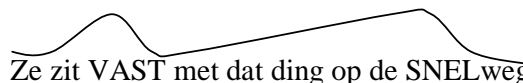
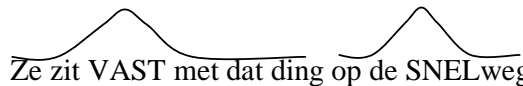
Predicting boundaries from ToDI transcriptions

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Boundaries of intonational phrases need not obviously be marked by pauses. Our expectation in situations in which they are not is that they are marked by a boundary tone, such as H%, to signal the separation between the preceding and the following portion of speech. The boundary tone will cause some characteristic change in the pitch contour at the location of the boundary. An example is the peak caused by a final H% in (1).

- (1) 
 Ze zit VAST met dat ding op de SNELweg
 ‘She has got stuck with that vehicle on the motorway’
 or ‘She must be on the motorway with the vehicle’

A closer look at data from Dutch suggests that the above generalization is often true, but that there are exceptions either way. First, a low valley immediately after an accent peak does not induce a boundary after *VAST* in (2). Second, absence of a clear pitch movement nevertheless results in a boundary after *ding* in (3).

- (2) 
 Ze zit VAST met dat ding op de SNELweg
- (3) 
 Ze zit VAST met dat ding op de SNELweg

Where (1) is ambiguous, due to the interpretation of *vast* as an adjective ‘stuck’ or as an adverb ‘therefore probably’, (2) means ‘She has got stuck with that vehicle on the motorway’, while (3) means ‘So she must be on the motorway with that vehicle’. The adjectival meaning of *vast* is best triggered by the presence of a boundary and identity of pitch accents in the two intonational phrases. The adverbial meaning is most likely to be triggered by the absence of an intonational boundary.

We designed an experiment with artificial two-accent intonation contours having identical pitch accents in the two positions. We varied the length of the first phrase (2), the presence of the medial boundary (2), and the type of pitch accent (3). Source sentences were

- (4) Ze zit vast met dat ding op de snelweg ‘She has got stuck (with that vehicle) on the motorway’
 Ze zit vast op de snelweg or ‘She must be on the motorway (with that vehicle)’
- Hij zit alleen met die man in ’t café ‘He is alone (with that man) in the pub’ or
 Hij zit alleen in ’t café ‘The problem is he’s (with that man) in the pub’

The presence or absence of the contours is determined on the basis of ToDI transcription. The contours are %L H*L (L% %L) H*L L%, %L H*L H(% %L) H*L H%, and %L L*H (% %L) L*H H%. The predictions are that, regardless of the location of the greatest pitch change, the absence of a boundary induces the adverbial reading and the presence of a boundary induces the adjectival meaning. The results will be argued to support the analysis underlying the ToDI transcription system.