

## **Are Dutch /v/ and /f/ merging?**

Hans Van de Velde  
UiL OTS

Final (obstruent) devoicing is a well known phonological process in Dutch (see e.g. Booij 1995). In the 20<sup>th</sup> century, a change in progress is observed in standard Dutch as spoken in the Netherlands: prevocalic voiced fricatives (gradually) change into voiceless fricatives (Van de Velde 1996, Van de Velde, Gerritsen & Van Hout 1996). In a follow-up study of regional variation in standard Dutch pronunciation it was observed that /v/ is devoicing all over the Dutch language area (in Flanders too), showing regional differences in strength of devoicing (Van de Velde & Van Hout 2001). It looks like Dutch is losing the contrast between /v/ and /f/, resulting in an apparent merger of these phonemes.

The acoustic analyses of the same data (Kissine, Van de Velde & Van Hout 2003, 2004 and forthcoming) revealed interspeaker differences in acoustic properties of the devoicing process, which are not in line with previous phonetic studies of Dutch fricatives in laboratory conditions (Slis 1985, Slis & Van Heugten 1989). In order to fully understand the devoicing of /v/ in Dutch we decided to involve its voiceless counterpart /f/ in the study.

Data are taken from an experiment in which the word initial fricatives /v/ and /f/ are presented in a carrier sentence, keeping the linguistic environment constant (preceded by an unstressed schwa and followed by a stressed central vowel). This experiment is part of a large sociolinguistic study of standard Dutch pronunciation. The subjects are 160 Dutch language teachers and stratified for community (the Netherlands vs. Flanders), region (4 in each community), age (2) and sex. The subjects had to perform the reading task twice. The following acoustic measurements were performed:  $f_0$  extent in the fricative (i.e. voicing extent), the intensity of the friction noise, the duration of the fricative, the duration of the syllable, the duration of the following vowel, the mean  $f_0$  at the vowel onset and the  $f_0$  slope at the vowel onset.

The study of realizations of both /v/ and /f/ in exactly the same context shows that speakers differ in the acoustic implementation of the /v/-/f/ contrast. An inventory of different strategies in maintaining the /v/-/f/ distinction will be presented, with special focus on regional differences. Finally, we will consider whether /v/ and /f/ are merging in standard Dutch.