

In this paper, we report on studies that document the influence of Finnish on Fenno-Swedish. We show that differences between Fenno-Swedish and Central Standard Swedish (a) in VOT and (b) in the quantity contrasts, result from the influence of Finnish. Central Standard Swedish, the variety of Swedish spoken in and around Stockholm, has one series of stops that is prevoiced in utterance-initial position, voiced in intervocalic and final position and another series of stops that is post-aspirated in word- initial position, variably pre-aspirated or unaspirated in intervocalic position, and final position (Helgason & Ringen 2008). In contrast, Fenno-Swedish, the variety of Swedish spoken in Finland, is known to have a stop contrast that differs from Central Standard Swedish in that there are no aspirated stops (Kuronen & Leinonen 2000). But beyond this, there has been little information in the literature about the nature of the stops in Fenno-Swedish.

VOT. In order to investigate the nature of the laryngeal contrast in Fenno-Swedish, 12 native speakers of Fenno-Swedish (6 males and 6 females) were recorded in Turku, Finland. The data show that in utterance-initial position, the two-way contrast is realised as a contrast between prevoiced and unaspirated stops. Word-medially and finally, the contrast is that of fully voiced stops and voiceless, unaspirated stops. Fenno-Swedish is thus another Germanic language, like Dutch, Afrikaans and Yiddish, that has a contrast between stops with vocal cord vibration and plain unaspirated stops. Two aspects of the Fenno-Swedish contrast suggest influence from Finnish. First, the voiceless unaspirated stops are produced with VOTs very similar to those reported for the Finnish voiceless unaspirated stops by Suomi (1980). Second, variation was observed for some speakers of Fenno-Swedish in the production of /b d g/, with many tokens being completely voiceless and overlapping phonetically with tokens of /p t k/. In Finnish, /b d g/ are marginal and do not occur in most varieties, and thus the occurrence of voiceless /b d g/ tokens in Fenno-Swedish suggests influence from Finnish. Fenno-Swedish thus appears to pattern with other examples of influence (on a language or individual speaker) from a language with a different system of laryngeal contrasts, such as Dutch (van Alphen & Smits 2004), Canadian French (Caramazza & Yeni-Komshian 1974), and Brazilian Portuguese (Sancier & Fowler 1997).

Quantity. Swedish is a quantity language in which quantity is contrastive only in stressed syllables. Most varieties of Swedish allow only one of two basic quantity patterns: a short vowel in the stressed syllable must be followed by a long consonant (or by two qualitatively different consonants) and a long vowel in the stressed syllable must be followed by a short consonant. The varieties in which these restrictions apply do not allow light (short or monomoraic) stressed syllables. Central Standard Swedish adheres to this quantity scheme, and this is also the dominant pattern in Fenno-Swedish. However, we found several systematic durational differences between the two varieties, most of which can be summarised by stating that in Fenno-Swedish short segments are shorter and long segments longer than in Central Standard Swedish. This is explained as partly due to the qualitative differences between long and short allophones in Central Standard Swedish, which may reduce the reliance on durational cues to uphold the quantity contrast. In Fenno-Swedish, by contrast, long and short vowel allophones are qualitatively very similar and contribute very little to upholding the quantity contrast. A further explanation lies in influence from Finnish, in which vowels and consonants have a binary quantity contrast independent of each other. This influence from Finnish comes from the fact that

most Fenno-Swedish speakers are bilingual, that is, they speak and hear Finnish on a day-to-day basis. Thus, speakers of Fenno-Swedish have learned to make more accurate durational distinctions than is needed in CS Swedish. The effect is an apparent exaggeration of the durational opposition in Fenno-Swedish as compared to Central Standard Swedish.

References

- Caramazza, A. & Yeni-Komshian, G. H. (1974). Voice onset time in two French dialects. *Journal of Phonetics*, 2, 239-245.
- Helgason, P. & Ringen, C. (2008). Voicing and aspiration in Swedish stops. *Journal of Phonetics*, 36, 607-628.
- Kuronen, M. & Leinonen, K. (2000). Fonetiska skillnader mellan finlandssvenska och rikssvenska. *Svenskans beskrivning 24*. Linköping Electronic Conference Proceedings. URL: <http://www.ep.liu.se/ecp/006/011/>.
- Sancier, M. & Fowler, C. (1997). Gestural drift in a bilingual speaker of Brazilian Portuguese and English. *Journal of Phonetics*, 25, 421-436.
- Suomi, K. (1980). Voicing in English and Finnish stops. Publications of the Department of Finnish and General Linguistics of the University of Turku 10. Ph.D. Dissertation.
- Van Alphen, A., & Smits, R. (2004). Acoustical and perceptual analysis of the voicing distinction in Dutch initial plosives: The role of prevoicing. *Journal of Phonetics*, 32, 455-491.