

Devoicing in post-focal constituents in Donegal Irish

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Past studies of focus on f_0 in Donegal Irish (DI) (O'Reilly, Dorn & Ní Chasaide, 2010; Dorn & Ní Chasaide, 2011; Dorn, 2015) have shown that the same pitch accent type (L*+H) is used in focal accents (narrow and contrastive) as in neutral declaratives, which in DI typically consist of a sequence of rises (L*+H L*+H L*+H %). Also observed were pitch adjustments over the entire phrase, e.g., extended pitch range on the focal item, de-accentuation and suppression of the pitch range of post-focal material – similar findings reported for English (Xu & Xu, 2005).

In these data, further phonatory features emerged which relate to the realization of focus, and specifically to the post-focal material. For the Donegal Irish varieties Rann na Feirste (RF), Baile na Finne (BF), Gleann Cholm Cille (GCC), Ros Goill (RG) the final syllable of the IP devoices, in a way that is dependent on the location of the focal accent. The target sentence, *Bhí Méabh 'na luí ar a'leabai* /vʲi 'mʲew nʲə 'lʲi əɾ ə 'lʲabʲi/ 'Méabh was lying on the bed', contains three potentially pitch accentable syllables (**A1**: Méabh /mʲew/, **A2**: luí /lʲi / and **A3**: lea /lʲa/. Our analysis showed that in around 25% of the data (n=70), the phrase-final syllable /bʲi/ was completely devoiced (n=54), or partially devoiced with a breathy-voice offset (n=16), when either narrow (nf) or contrastive focus (cf) occurred on the phrase-initial constituent (A1) (80%) (Figure 1a), or less frequently when it occurred on the phrase-medial constituent (20%) (Figure 1b).

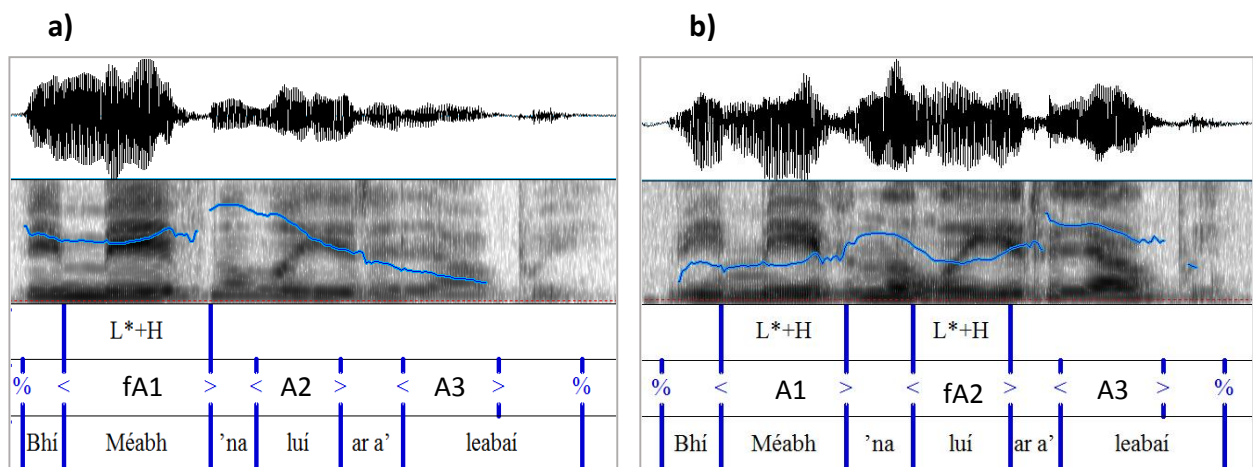


Figure 1: Right panel (a): example of phrase-final devoiced syllable after focal A1 (fA1) (sound file: RF-RMD-cf-Meabh-2). Left panel (b): example of phrase-final devoiced syllable after focal A2 (fA2) (sound file: RF-MNG-cf-lui-3).

This phenomenon was observed in each of the four local Donegal Irish varieties (RF, BF, GCC and RG) for three out of four speakers per variety. A somewhat similar finding was reported by Andreeva et al. (2003), who observed devoicing in final vowels of Bulgarian, when narrow focus occurred on the first content word in the phrase: they suggested that it is the relative distance of the nuclear accent to the phrase boundary that affects the degree of devoicing at the end of the utterance.

A linked finding, from explorations of the voice source correlates of focus in Irish English, was that the mode of phonation became progressively breathier in the post-focal portion of the phrase, indicating that post-focal deaccentuation involves not only f_0 , but also voice source parameters (Ní Chasaide, et al., 2011; Yanushevskaya et al., 2010). We would therefore tentatively suggest that the devoicing of final syllables in post-focal condition in Donegal Irish is the culmination of a voice source adjustment which affects the entire post-focal portion, going from modal voice → breathy voice → breath (voicelessness), and that this may ‘explain’ the greater tendency for the final syllable to be fully devoiced when focus is early in the phrase (on A1), than when it occurs later (on A2).

References

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