A GP account of movement epenthesis in LIS

Background. Traditional sign language (SL) phonology has established four phoneme-like categories into which every sign is decomposed in meaningless units: handshape, location, movement and orientation. These categories can be further subcategorized in terms of articulatory features (a.o. see Brentari (1998)). However, no systematic account of any SL phonology in terms of government phonology has ever been proposed in the literature. In this work we focus on the movement component of signs, which is normally analysed as the nucleus of the sign syllable (a.o. see Brentari (1998)).

Goal. Provide a GP analysis of movement epenthesis in Italian Sign Language (LIS). The empirical base of this work is the verbal domain of LIS.

Basic Facts. In this presentation, we will focus on signs with a repeated short path movement in LIS. Geraci (2009) showed that this specific movement is either an underlying movement (cf. (1)) or the result of epenthesis (cf. (2)). (see Brentari (1998) for a similar analysis of epenthesis in ASL).

(1)   WORK   (2)   SMOKE
       'to work'   'to smoke'

The underlying and epenthetic movement behave differently when the sign enters a compound. While signs with underlying movement retain the repeated short path movement (3), epenthetic signs lose it completely (4). This is shown in the verb system when a stem combines with the aspectual marker DONE.

(3)   WORKˆDONE   (4)   SMOKEˆDONE
       'have worked'   'have smoked'

New empirical evidence. We found that there is an additional phonological pattern of repeated path movement in compounds: the sign reduces the repetition to a single short path movement ((5) and (6)).

(5)   ASK   (6)   ASKˆDONE
   'to ask'   'have asked'

Formal account. We begin by establishing that the repetition of the path movement in the signs in question is specified at the level of phonological representation, and exclude the possibility that the repetition is due to prosodic/morphological reasons. When it comes to the level of phonological representation, the nature of the repetition continues to be ambiguous: it could stem from a phonological feature [repeated] belonging to a single nucleus which is additionally specified for the feature [path], but it could also be the case that the phonological representation of those signs contains two nuclei, each of which is specified for [path]. The proposal that will be put forward will rely on this ambiguity, in addition to empty nuclei, proper government (Kaye (2000)) and vowel/movement harmony. Signs that are produced with repeated path

movement in isolation and without it in compounds (like SMOKE) are analyzed as having a single empty nucleus: they surface without movement when their empty nucleus is properly governed, and with movement otherwise (7). The signs that lose just one of the movement (like ASK) will be analyzed as containing two nuclei, out of which the first one has featural content and the second one is empty — the (non)-appearance of the second movement is regulated by the interplay of movement harmony and proper government (8). Finally for the signs that preserve their repeated path movement (like WORK) two possibilities are left open: either the repeated path movement is ambiguous between the schwa and non-schwa movement (9), or there is some additional structural complexity (something that would be parallel to the complexity introduced by branching onsets or codas in spoken languages) that blocks proper government, forcing the empty nucleus to be realized.

(7)   SMOKE

(8)   ASK
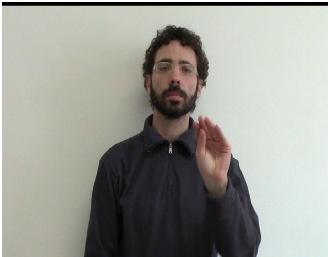
(9)   WORK

References

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