

## Variation in Sign Languages: Reexamining the Role of the Phonological Environment

Variation in the parts of ASL signs, i.e. phonological variation, has been explained largely by reference to the influence of the preceding and following signs (Liddell 2003; Johnson and Liddell 1989). In this paper, we summarize the results of a study of three ASL phonological variables: the sign DEAF; the location of a class of signs represented by the verb KNOW; signs produced with a 1 handshape (Lucas et al. 2001). For all three variables, multivariate analysis of more than 9,000 tokens extracted from conversations among 207 signers shows that the grammatical function of a sign, rather than features of the preceding or following signs, is the most important influence on a signer's choice among variants. Other recent work on sign language variation leads to a similar conclusion (Hoopes 1998; Mulrooney 2002). Even where lexical frequency and grammatical function interact, as in Schembri et al.'s (forthcoming) study of location variation in Australian Sign Language, features of the preceding and following signs play a relatively minor, albeit still significant, role. We suggest that the patterns of variation observed in recent studies may well be a consequence of the way morphology functions in a visual-gestural modality. In contrast to the spoken languages where variation has been extensively studied, sign language morphology is not normally a boundary phenomenon. Few affixes exist in sign languages. Rather, morphological distinctions are accomplished by altering one or more features in the articulatory bundle that makes up a hold or a movement segment or by altering the movement path of the sign. The immediate phonological environment does not have the major role in governing phonological variation in part because, in contrast to classic sociolinguistic variables like /t,d/ deletion and (ING) in English or /s/deletion in Spanish, the variables themselves are not affixes. Rather, the grammatical category to which the variable in question belongs, sometimes combined with lexical frequency, is consistently the first-order linguistic constraint. Although the immediate phonological environment sometimes plays a role in conditioning phonological variation in sign languages, recent studies in the language community have shown that its role has been considerably overestimated.

### References

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