

Phonological Variation in American Sign Language: 2 hands or 1?

Ceil Lucas, Amber Goeke, and Rebecca Briesacher
Gallaudet University

Robert Bayley
University of California, Davis

Phonological variation in American Sign Language (ASL) manifests itself in all of the parameters of signs, i.e. handshape, location, palm orientation, movement, and non-manual signals. Unique to sign languages is the fact that two articulators are available to signers, such that signs can be one-handed or two-handed. Some two-handed signs permit the deletion of one hand. Examples include DEER, WANT, STILL, NOW and LIVE. Furthermore, recent work by Lucas et al. (2001) and Schembri et al. (2006) has demonstrated the central role of grammatical category as a constraint on sign language variation both in ASL and in Australian Sign Language (Auslan). To wit, in analyses of the sign DEAF, of signs produced at the forehead which can be lowered, of signs with a 1-handshape configuration and of signs with either pinky or thumb extension, grammatical category emerges repeatedly as the first order constraint and in some cases, phonological constraints such as the handshape or location of the preceding or following signs are even thrown out as not significant. In the case of DEAF (produced in citation form with a 1 handshape that moves from the ear to the chin but that can be variably produced from chin to ear or as a contact on the cheek), for example, analyses have shown that the grammatical category of the target sign- noun, adjective, predicate, compound sign- plays a more significant role than the location of the preceding or following signs, contrary to earlier claims by researchers such as Liddell and Johnson (1989). Variation in two-handed signs has been studied by Frishberg (1975) and by Woodward and DeSantis (1977), who suggested that factors such as outward movement of the sign, its location and whether it incorporates complex movement help explain the variation. In addition, they suggest that Black signers tend to produce more 2-handed signs than White signers. Most recently, Goeke's (2006) examination of 611 tokens revealed phonological constraints to be the first order constraints, contrary to other recent studies of phonological variation. Goeke's (2006) data come from the NSF corpus created for the Lucas et al. study and was limited to 18 female informants from 3 sites (California, Maryland and Louisiana). This paper will examine approximately 2200 tokens from the four sites in the NSF corpus that had both Black and White signers (Boston, Louisiana, California and Kansas). In addition to region and ethnicity, tokens will be coded for age, social class and gender. Linguistic constraints include grammatical category, presence or absence of contact of the target sign with the body or the other hand and handedness status of the preceding and following signs (i.e. 2-handed or 1-handed). This paper will extend Goeke's (2006) analysis with the goal of getting a broader picture on the role of grammatical, phonological and social factors in 2-handed to 1-handed signs and in ASL variation in general.