Phonological Categories in Sign Language of the Netherlands

The Role of Phonetic Implementation and Iconicity

This thesis provides a phonological analysis of the lexicon of Sign Language of the Netherlands (SLN). It aims at a phonological representation that is constrained in its structure and limited in the number of phonological distinctions. The economy of this model contrasts with earlier models, mostly based on American Sign Language, which proposed an abundance of phonological features. The reduction is achieved in two ways. First, fewer phonological contrasts are needed by removing the form elements that are predictable on phonetic grounds, on the basis of perception and articulation. Phonetic Implementation Rules account for these predictable elements. The second strategy, called Semantic Prespecification, is novel, and does justice to the iconic character of many signs and to the idiosyncratic nature of their phonetic components. The phonetic elements that bear meaning due to their iconic motivation are prespecified in the lexicon.

The analysis is presented along the lines of the traditional division into handshape, location and orientation. Movement is treated as the dynamic part of these components. A phonetic database (SignPhon) was used to assess the relative frequency of form elements, which is reflected in the model as relative complexity of the representations. For each component the distinctive features are provided that are needed for a formal description of SLN lexical signs, together with a characterization of the Phonetic Implementation, and a discussion of the semantically motivated elements. With the semantically motivated prespecified phonetic elements, the distinctive features in conjunction with their phonetic interpretation account for all surface forms of SLN.

This study is of interest to linguists studying sign languages, and to researchers interested in the issue of iconic motivation and linguistic structure.