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Abstract

Should an alphabetic writing system be developed for American Sign Language, one must wonder about the feasibility as well as the nature of 'letters' and their organization in the signed medium. Any insight on how deaf children decode written signs will demonstrate their mastery of the phonological awareness. The nature of their processing will reveal a relationship between the phonological structure of ASL and print. Subject to investigation, the ASL-phabet is a tool under development aimed at making decoding/word identification a reality among deaf children. Both successes and errors in reading written signs will be considered in terms of what is known for reading development in general. For the vitality of written signs, written words in general must be efficient and user-friendly. Thus it is necessary to understand graphemes involved and how different phones are grouped into phonemes for the purpose of reading development in the signed language.

Given that the ASL-phabet has 32 graphemes divided into 22 handshape representations, 5 location representations, and 5 movement representations (Supalla, Wix, and McKee, 2001), the influence of Stokoe and his colleagues (1960; 1965) is marked. The spaces in a string of a word are reserved for the three parameters of handshape, location, and movement. This suggests that the clusters of graphemes belonging to the individual parameters are necessary for the signed medium. Owing to the existence of the parameters in the signed language phonology, the organization for written signs can be described as simultaneous, yet written in sequence. The handshape grapheme(s) precedes the location grapheme and the location grapheme precedes the movement graphemes(s). The implications for processing include how deaf readers can 'sound out' the strings of graphemes and connect them to the signs that they know. The existence of written words representing more than one sign (comparable to how 'wind' may sound different for 'winding a clock' and 'blowing wind', yet written the same) will be considered as well. The decoding process as described will point out the existence of the phonological structure in the signed medium that makes up their knowledge critical to any reading development experience.

Moreover, a distinctive order of ASL graphemes exists for each parameter, not across parameters. According to one parameter, the handshape graphemes are ordered based on how features of one handshape are related to another thus making connections between different handshapes. The value of tapping into phonetic features for remembering the handshape order (and for the other parameters) will be considered based on deaf children's learning behavior in the classroom. These children must also learn and master letter identification skills if they are to develop the decoding/word identification skills. The designation of the handshape/location parameters as a signed language's equivalent to consonants and the movement parameter with vowels (Brentari, 2002) will be subject to examination based on how the ASL graphemes are learned. According to English, the consonant letters are easier to learn as compared to vowels. Should there be a similar outcome concerning the ASL-phabet, the reading behavior of deaf children will demonstrate the psychological reality of consonants and vowels in the signed medium.

To fully appreciate the working relationship of the ASL-phabet and oral language competency that deaf children possess in the signed medium (i.e., phonological) and the distinction between language and print (i.e., sound), it is necessary to re-visit the previous efforts in putting ASL on paper. Those covering the sound properties of signed medium are subject to investigation. That is, Stokoe's notation system and SignFont (1989) are targeted for their representation of signed language at the word level. With these two systems, the number and order of graphemes and arrangements made in the string of a written word will be considered. Keeping in mind that the International Phonetic Alphabet has been developed for use with spoken languages (e.g., MacMahon, 1991), one or both systems for ASL may approximate the phonetic end more than that of phonemic as found with the ASL-phabet.

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