

## **Categorical perception in French sign language**

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Signs are composed of four phonological classes (handshape, location, orientation and movement), and it is still unclear whether these sign subcategories are stored categorically or continuously in the signers' mind. Some studies on American Sign Language (ASL) do not show any categorical perception (CP) effect (Newport and Supalla, 1982; Morford et al., 2008; Best et al., 2010) while others show a CP effect in handshape (Emmorey et al., 2003; Baker et al., 2005). We use a new experimental design to investigate CP in two major dimensions in French Sign Language (LSF), namely handshape and location. Differently from previous studies, we exploit the visuo-gestural modality of sign languages by presenting our stimuli simultaneously instead of sequentially, in addition to recording reaction times (RTs) to test for differences across participants.

The analysis of accuracy in native and early signers shows a significant effect in the phonemic pair in handshape, but not in the allophonic pair. In location, no effect is found. These results are in line with Emmorey et al. (2003); however, when looking closer, the answer is not that clear. Our analysis of RTs, on the other hand, shows interesting results as there is no effect in handshape at all, but there is a significant effect in location in both phonemic and allophonic pairs.

In addition to discussing the results and their implication with respect to CP in sign language, we also discuss various methodological points for psycholinguistic studies in sign language.