12.00 – 12.30

Aurore Paligot: *A Corpus Study of Weak Hand Lowering Across French Belgian Sign Language Registers*

In connected signing, the location of a sign may be lowered or heightened when compared with the production of the sign in isolation (figure 1). Until now, sign lowering (SL) has been studied from a double perspective. Sociolinguistic studies (Lucas et al. 2002, Schembri et al. 2006) have emphasized the influence of both external (e.g. sex, age and gender) and internal factors (e.g. grammatical category, phonetic environment) on location variation, whereas phonetic studies (Mauk et al. 2008; Tyrone and Mauk 2010, Ormel et al. 2013) have focused on the role of internal factors (e. g. signing rate, phonetic environment and phonological distinctions) on variation. Russell et al. (2011) have reduced the methodological gap between the two approaches by analyzing natural conversational data specific to sociolinguistic studies with continuous measures of hand height, a technique of phonetic studies which enables a finer-grained analysis of SL phenomena.

By employing a similar approach, we propose to investigate two aspects of SL which have currently been unexplored. First, we focus on weak hand lowering (WHL) by analyzing location variation in symmetrical signs, such as the French Belgian Sign Language (LSFB) sign "HERE". As showed in figure 2, the weak hand of these signs may be articulated at the same height or lower than the strong hand in LSFB. Second, we investigate the correlation of WHL with register variation in LSFB. Based on the results of a small-scale study (Paligot and Meurant 2013), we expect that formal contexts will disfavor the use of WHL. By tackling these two aspects, we aim to get a better understanding of SL from both internal and external perspectives. We will focus on the following questions: (1) Which features of the phonetic environment contribute to WHL in LSFB? (2) How does the use of WHL vary across multiple settings?

Our corpus is made up of the recordings of four signers in four different settings that vary according to their formality level. The first two settings – a spontaneous dialogue and a narrative monologue – consist of studio recordings produced within the framework of the Corpus LSFB (Meurant and Sinte 2013) which have been selected in order to study the influence of interactivity on variation. The signers have also been recorded in two natural settings – an online video and a conference (two signers) or a course (two signers) – which vary according to the audience.

A first annotation of the tokens of symmetrical (non-alternating) signs is conducted with ELAN. Each token is then coded for the distance between the hands which is determined manually by reporting the difference between the heights of each hand in pixels. The preceding and following signs are coded for the number of active hands (one-handed vs. two-handed signs).
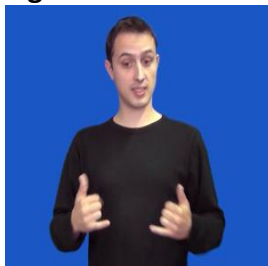
Figure 1
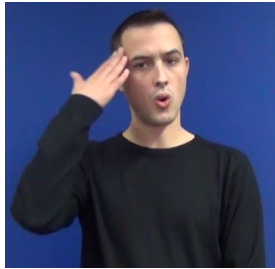
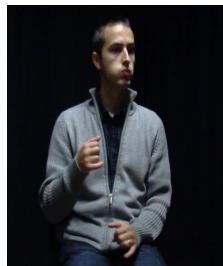*OTHER produced in isolation*

OTHER produced in connected signing

Figure 2

HERE produced with both hands at the same height

HERE produced with the weak hand lower than the strong hand

References

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