

Pragmatic gestures at the gesture-sign interface. Nonmanuals and palm-up gestures among older Belgian French speakers and French Belgian Sign Language signers

It is now assumed that both speakers and signers use gestures in language interaction, as these units are an integral part of linguistic communication (Sweetser 2009). In order to compare spoken and signed communication, Vermeerbergen & Demey (2007) recommend confronting sign languages with speech in combination with gestures. It is also admitted that, in contrast with spoken languages (SpLs), sign languages (SLs) offer the unique property to grammaticalize both manual and nonmanual gestures (Herrmann & Steinbach 2013). This paper aims to foster the knowledge on these issues by studying the palm-up gesture in combination with nonmanuals (including, among others, facial displays, gaze, head moves, and shoulders' moves), comparing their use in SpLs and SLs. The comparison will provide new insight into the hypothesized differences between grammaticalized (or, even pragmaticalized – Degand & Evers-Vermeul 2015) gestures and nonmanuals used in SLs, on the one hand, and co-speech gestures and expressive or interactive nonmanuals used in both SpLs and SLs, on the other hand.

In SpLs, the palm-up family of gestures (called 'Open Hand Supine' in Kendon 2004 and 'Palm Up Open Hand' in Müller 2004) comprises gestures with the following kinetic features: an open lax handshape with extended (not spread) fingers, a supine forearm, and an upward facing of the hand. Their shared semantic theme is assumed to be linked, at some point, to a 'giving/offering', or 'readiness to receive' core meaning (Müller 2004). The three-fold classification of their uses in context (Kendon 2004) includes: (i) the palm presentation gestures; (ii) the palm addressed gestures; and (iii) the lateral palm gestures. These co-speech gestures are said to be pragmatic gestures (Kendon 2004), as they contribute to the meaning of the utterance in fulfilling a modal (e.g. by intensifying the expressive content), a performative (e.g. by highlighting a question), or a parsing function (e.g. by marking the discourse's structure) in combination with the verbal utterance and its context. Pragmatic gestures, in the same manner than verbal pragmatic markers (Aijmer & Simon-Vandenberghe 2011) are also said to be multifunctional: for instance, one single palm-up gesture can at the same time have a modal and a parsing function (see Ferré 2011). Research on palm-ups in SLs is mostly based on Kendon's (2004) work, whose palm-up functions have also been found in some of the SLs studied (Engberg-Pedersen 2002; Colin *et al.* 2003; Kooij *et al.* 2006; Zeshan 2006; Halvorsen & Guri 2011; van Loon 2012; McKee & Wallington 2012). These functions include the expression of modality, backchannel signal, addressee's involvement, turn initiating or ending, and pause filler. Some palm-ups seem to have undergone grammaticalization from gesture into SL, making them liable to be used as connective, negative marker or question particle, among other possibilities (van Loon 2012).

As stated in Kendon (2004: 265), the more extensive and salient the nonmanuals are, the more expressive the information conveyed by the gesture may be. In line with this view, the present paper will study the use of palm-ups and the co-occurring nonmanuals in both Belgian spoken French and French Belgian Sign Language (LSFB). To the best of our knowledge, only McKee & Wallingford (2012) propose a first table of comparison between a SL and a SpL. Our purpose is to go a step further by: (i) comparing the frequency of palm-ups per minute with regard to the number of signs in LSFB and to the number of words and gestures in spoken French, (ii) studying the alignment of the palm-ups with nonmanuals in scope and timing in both modalities, (iii) investigating the nonmanuals that are layered with palm-ups in order to see the functions that such combinations fulfill in each language, (iv) carrying out the first cross-linguistic study on the use of palm-ups between a spoken and a signed language in elderly people; and (v) building an interoperable model for the annotation of pragmatic gestures and their functions in both SpL and SL.

The approach is a corpus-based method of video data analysis (using the ELAN software) and follows from a form-based approach to gesture and sign. The corpus data comprise four samples of (audio and) video data (duration: approx. 20 min.) that are made up of interviews with two hearing French-speaking women (75 and 84 y. old; CorpAGEst corpus) and two deaf LSFB-signing men (75 and 84 y. old; LSFB corpus). The data are elicited through face-to-face interviews with a family member in SpL (task: talking about some major steps of aging in their past life) and with a moderator in SL (task: explanation of a past memory).

The underlying main hypothesis is that there would be an imbalanced use of manuals and nonmanuals between the four speakers, as well as differences in terms of scope/alignment and timing of the nonmanuals layering palm-up gestures (see Herrmann & Steinbach 2013), to convey similar pragmatic meaning in use. In particular, we expect more structuring, expressive and interactive nonmanuals than pragmaticalized gestures in the two oldest people, as well as a less strict alignment of nonmanuals and palm-ups in their interactions, taking for granted that there is an increasing need for a certain gestural economy with advancing age (Feyereisen & Havard 1999) (due to age-related physiological and cognitive changes, such as arthritis or the slowing of information processing).

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