

Language: English, ASL

The focus of this contribution is to foster discussion on a critical theoretical issue in sign language communicative aspects, raised by the analysis of spontaneous signed discourse, the identification of boundaries between different signs, thus segmenting (and further identifying) the signed continuum. The issue is closely linked to the identification of specific semantic and pragmatic functions in the use of crystallized lexical signs and the use of 'productive' *ad hoc* highly iconic structures. The issue of segmentation is relevant not only from a theoretical point of view but also from the point of view of annotation, transcription of sign language video recordings and also in automatic sign recognition (Brentari and Wilbur 2008; Gonzalez and Collet 2011; Hanke et al. 2012).

The question has been raised in the last decades in vocal language research promoting new ways of looking at linguistic units and at the principles of discreteness. In sign languages not only we observe similar issues at stake, but we deal with a inherently multilinear, multimodal and simultaneous communication system, that intensifies the question about the identification of the unit and impose a strong focus on pragmatic functions for its achievement.

We present the results of three parallel experiments lead on the basis of the same 45 seconds video recording of a narrative (The Egg and Jerry) in Italian Sign Language. The video prompt has been analysed by different deaf signers in order to identify the borders of each sign. 15 different annotators were divided into three groups performing different annotating operations: a) cutting video sequences, b) glossing, c) transcribing using SignWriting. No time limit was imposed on annotators who participated individually.

The choice of different metalinguistic operations linked in one case directly to the video (segmentation), and in the other cases indirectly portrayed by gloss annotation and transcription (segmentation and identification) is a way of observing from different angles the same underlying process involved in any basic analysis of signed discourse, thus unavoidable for anyone dealing with sign language data, especially in spontaneous discourse contexts (other than in experimental and lexical based elicitation procedures). Moreover the difference among operations that involve the use of a different language (glossing) and those that do not require translation procedures (video cutting, transcription in SW) reveals possible different language specific segmentation strategies and different metalinguistic operations.

A comparison of specific problems in segmentation and identification has been drawn showing that: a) segmentation is always a probabilistic and not categorical operation, as has been observed for speech in vocal language research; b) there are specific kinds of semantic/pragmatic units that pose peculiar challenges to the agreement among annotators, mostly the presence of HIS and hypoarticulated signing, and that require a more complex view in order to define what is a signed lexico-semantic and pragmatic unit; c) confidence degrees increase in the case of lexicalized units; d) sequences bearing a strong pragmatic function are perceived as unsegmentable (acting in a similar way to multiword expressions in vocal languages), if segmentation is aimed at preserving the identification of a specific semantic minimal unit.

Cited references

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