

# ISCH COST Action IS1006 SignGram



## Work plan for STSM to Deafness Cognition and Language Research Centre (DCAL), University College London

**Sign action number:** IS 1006

**Title of the action:** Unraveling the grammars of European sign languages: pathways to full citizenship of deaf signers and to the protection of their linguistic heritage

**Action short name:** SignGram COST Action

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## STSM Title: Generating and testing hypotheses in the grammatical description of buoys

### *Background*

Signs are articulated with two hands, while speakers have only one mouth to utter words with. The symmetry of the two hands makes simultaneous articulation possible in sign languages and there are indications that from below the level of single signs up to the structuring of discourse, the two hands contribute to communication in a fashion unparalleled in spoken languages. Both manual simultaneity (where the two hands express different information, as in the case of two different signs or classifiers representing two separate entities) and dominance reversals (switching

dominance from the one hand to the other during signing) make use of the availability of two articulators. The fact that these characteristics have not been included in most grammatical descriptions of signed languages indicates that more knowledge is needed in this domain (but see Hendriks 2008 for a counter-example).

A type of manual simultaneity, the perseveration of the non-dominant hand while the dominant hand continues signing, has been shown to serve as a marker of prosodic constituent boundaries (Sandler, 2002). Furthermore, holds on the non-dominant hand can also have important discourse functions, such as topic maintenance and contrast. Liddell (2003) calls such constructions 'buoys' because they guide discourse "by serving as conceptual landmarks" (p. 223). However, it has been suggested by earlier studies (eg. Miller, 1994) that manual holds may also show syntactic relations to the signs articulated by the dominant hand.

While examples of bimanual constructions have been described for several sign languages (see for example Frishberg, 1985; Liddell, 2003; Liddell, Vogt-Svendsen & Bergman, 2007; Hendriks, 2008), systematic, fine-grained structural and functional analyses are still lacking, despite the apparent ubiquity of these phenomena in sign languages. Yet, there is no question that descriptive grammars should address the issues raised by the two-handed nature of signing. Partly, because it is at the core of the modality difference between sign and speech, but also because it is challenging for second language learners. To date, teachers have no reliable advice to give to learners of sign languages as to which hand to use when signing: while the usual advice to 'use the same hand you write with' is true in general, we do see signers who sign with their other hand or switch hands frequently. Anecdotally, it also appears that second language learners and interpreters overuse certain simultaneous structures.

At the same time, these constructions pose a challenge to descriptive grammars of sign languages for at least three reasons. First, due to their modality-specific nature, there is no precedent in the descriptions of spoken languages as to how to deal with them. Second, it is not always clear to which part of the grammar these constructions belong: are they a discourse phenomenon, or are they also part of syntactic constructions, in a given case? Third, there seems to be individual variation in their use, which makes it difficult to elicit these structures. The project proposed here aims to begin to address this issue by laying the foundations for a more detailed linguistic analysis of a type of manual simultaneity, namely buoy constructions.

### *Goal of the STSM*

The aim of the STSM is twofold: 1. To test a specific hypotheses regarding buoy constructions, and 2. To explore other the linguistic properties that are relevant to the description of buoys. The research stay will also serve to foster collaboration between the two research groups (DCAL/UCL and RU) and to explore the possibilities of future collaboration.

### *Research questions & methodology*

Buoys have a distinct phonetic form, and appear to fulfill grammatical functions both within and above the level of the sentence. Thus by their nature, buoys are relevant to several levels of linguistic description: phonology, morphology, syntax and discourse. The overarching question I will address is as follows:

Which notions of grammar are relevant in the description of buoys?

This question will be approached by a study of the available literature as well as collaboration with researchers at the host institute (dr. Kearsy Cormier and dr. Pamela Perniss). Based on the findings, an annotation scheme will be developed and tested on a set of buoys I have selected in the Corpus NGT (prior to the start of the STSM). The annotation scheme will then be evaluated by assessing the process of annotation and the quality of the outcome. Where necessary, adjustments will be made.

The annotation phase will also serve to answer two specific questions regarding the status of the held hand in buoys. First of all, whether the hand can be analyzed as a morpheme. My hypothesis is that only morphemic elements can serve as a source for buoy constructions. This will be evaluated by a morphophonological analysis of each instance. Secondly, I will try to answer the question which syntactic roles manual holds may fulfill, and whether a role remains constant when a buoy is held over multiple clauses.

#### *Relevance to the COST Action*

The project will contribute towards the development of a grammar blueprint by providing new, concrete dimensions for the detailed linguistic analysis of buoy constructions and a specification of the areas in the blueprint where these need to be addressed. The testing of the morphemic status of buoys will specifically contribute to the work of WG1 (phonology/morphology) while the analysis of syntactic roles is relevant to WG2 (syntax).



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