

**«International Workshop 2»**  
**Number Systems in Sign Languages**  
National Museum of Ethnology, Osaka, Japan  
September 27, 2013

Abstract

**Mini-workshop on Number Systems in Sign Languages**

**SAGARA Keiko**

University of Central Lancashire

This workshop will discuss the strategies used to express number in approximately 30 sign languages from around the world. Exploring similarities and differences between the way in which number is expressed in different sign languages, the workshop will include discussion of lexicalisation processes, numeral incorporation, and influence of iconicity on the forms and strategies that can be found. The workshop is based on data collected for the sign language typology project, which has been running for the past two years at the iSLanDS Institute (University of Central Lancashire) and seeks to document linguistic diversity across sign language number systems in a typologically informed way. In line with the research procedures for the typology project, data have been collected using questionnaires and elicitation exercises. A database has been compiled to show the cross-linguistic expression of number, and this will be demonstrated and discussed during the workshop in relation to the articulation and structure of cardinal numbers across the sign languages that have been studied so far.

Analysis has revealed that several number signs show evidence of having undergone a process of lexicalisation, historically starting from the combination of free forms via compound formation (Liddell and Johnson 1986), and resulting in numeral signs that are synchronically monomorphemic. Sometimes more and less fused forms co-exist: the number ‘25’ in ASL can be signed in at least two different ways, as separate signs (TWO FIVE) or as a lexicalised sign (TWENTY-FIVE). Findings also include similarities across sign language numeral systems in the use of numeral incorporation (Liddell 1996), i.e. the production of a sign for countable units such as time (“year”) and money (“yen”), together with a simultaneous numeral handshape. A further consideration is the use of iconicity in signed number systems. Iconic structures have been found to exploit the physical resemblance between linguistic items and their meanings (Taub 2001:8), and are of particular interest to this workshop.

**References**

Liddell, S. K. (1996) ‘Numeral incorporating roots & non-incorporating prefixes in American Sign Language’ in *Sign Language Studies*, vol. 92, pp. 201-226

- Liddell, S. K. and Johnson, R. E (1986) 'American Sign Language compound formation processes, lexicalization and phonological remnants' in *Natural Language and Linguistic Theory*, vol. 4, no. 4, pp. 445-513
- Taub, S. F. (2001) *Language from the Body: Iconicity and Metaphor in American Sign Language*. New York: Cambridge University Press