

# Sociolinguistic variation and change of British Sign Language number signs

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## Introduction

Dialect levelling is "a process whereby differences between regional varieties are reduced, features which make varieties distinctive disappear, and new features emerge and are adopted by speakers over a wide geographical area." (Williams & Kerswill, 1999:149)

British Sign Language (BSL) has a large amount of regional variation (Brien, 1992), in particular signs for numbers. For examples, see below:

### Traditional variants of the number SIX in BSL



Bristol London Manchester

Recent anecdotal evidence suggests that this variation may be undergoing dialect levelling.

## Research Questions

- 1) Is there a correlation between signers' variant choice for numbers and their background (age, gender, etc.)?
- 2) Is there evidence of dialect levelling taking place?
- 3) What does this tell us about the future of BSL dialects?

## British Sign Language Corpus Project

Data was analysed from the BSL corpus project which contains a collection of naturalistic and elicited language data from 249 Deaf individuals from eight regions across the UK (for more detail see Schembri, 2008).

Deaf fieldworkers recruited Deaf signers (exposed to BSL before the age of 7 years old) who have lived in the local community for at least 10 years.



Participants were filmed in pairs taking part in four activities.

- a warm-up narrative task
- free conversation (30 minutes)
- an interview on language attitudes
- a **lexical elicitation task** with 101 concepts (e.g. days of the week, colours and numbers).

## Methodology

Number sign data was analysed from the lexical elicitation task in which signers were shown the numerals 1-20 in a fixed random order (see right) and asked to produce their own variants for each of the numerals.

5, 19, 15, 2, 14, 1,  
7, 16, 11,  
4, 18, 6, 13, 17, 10, 3,  
9, 20, 12, 8

## Methodology (cont.)

Number sign variants were coded with the following information:

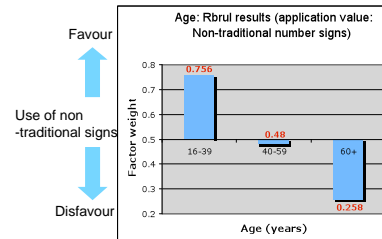
- Age** (16-39, 40-59, 60+ years)
- Gender** (male or female)
- Ethnicity** (White, Asian, Black)
- School location** (attended a school locally or non-locally)
- Language background** (have Deaf or hearing parents)



Number variants were also coded as 'traditional' or 'non-traditional' for the region of the signer (with guidance from our Deaf fieldworkers).

## Results

Three significant factors were found to influence signers' choice of non-traditional number signs: **age, school location and language background.**

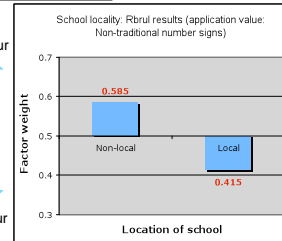


**The most important factor was age.**

Younger signers favour non-traditional number signs compared to older signers.

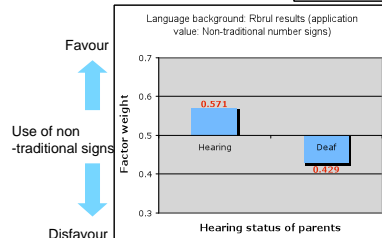
**Second most important factor was school location.**

Signers who attended school locally favour traditional number signs compared to signers who attended a school non-locally.



**Also language background was important.**

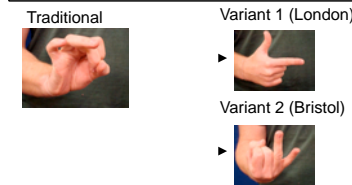
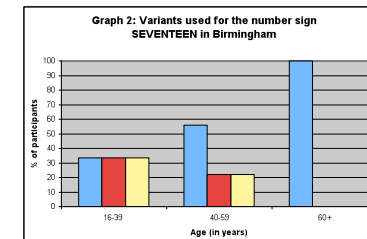
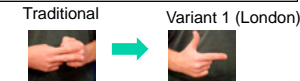
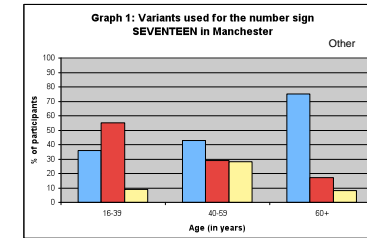
Results suggest that signers with Deaf parents use more traditional number signs than signers with hearing parents.



## Discussion

Results suggest that there has been a reduction in the use of traditional number signs diachronically.

**What variants are younger signers using instead of traditional signs?**



In graph 1, traditional Manchester number signs (blue bar) are used by a small number of young signers.

Instead, younger signers are using variants traditionally associated with the London area (red bar).

This is not the case for younger signers in other regions.

In Birmingham, there is a reduction in the use of the traditional flexing movement for the numbers THIRTEEN to NINETEEN in younger signers compared to older signers (Graph 2).

Instead, younger signers prefer to use a side-to-side movement to represent the 'teen' numbers with no particular preference shown for handshape.

The two favoured variants (shown to the left) are traditionally associated with London or Bristol areas.

## Conclusion

Younger signers are using fewer traditional number signs than older signers suggesting that dialect levelling is taking place.

Younger signers in Manchester who use non-traditional number signs tend to favour the London number signs while younger signers in Birmingham show no preference between the Bristol and London number sign variants.

Our research does not tell us the reasons for this change.

## References:

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ESRC Deafness, Cognition and Language Research Centre