MOTHER-FATHER or FATHER-MOTHER?

Compounds with variable order in **RSL** and **STS**

Vadim Kimmelman
vadim.kimmelman@uib.no

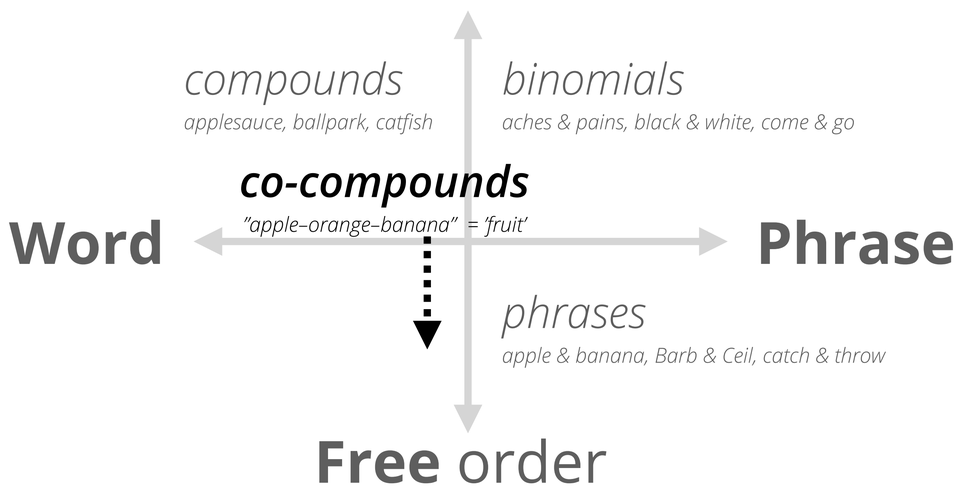
Carl "Calle" Börstell
carl.borstell@uib.no

UNIVERSITETET I BERGEN

Introduction

Compounds, words with more than one lexical morpheme, are an important morphological phenomenon that is almost universal [1]. Signed languages are no exception and make use of compounds extensively [2,3,4].

A key criterion in the definition of compounds is that **the order of the elements is fixed** [1], which has also been argued for compounds across researched signed languages [2].



Co-compounds

Co-compounds have coordinated and "equal" parts, and **the whole refers to a hyperonym**/grouping of the parts (e.g. *"father–mother"* = 'parents'). Co-compounds are observed cross-linguistically in spoken languages, but have also been noted for signed languages [5,6,7].

Interestingly, in most languages, **co-compounds have a fixed order of elements**, but **there are some exceptions**, like Lezgian and Yakut [7].

Research aims

Noting that ***"father–mother"* = 'parents'** is a cross-linguistically common co-compound form, we note that combining the signs for FATHER and MOTHER to express the meaning 'parents' exists in our two researched languages: **Russian SL** (**RSL**) and **Swedish SL** (**STS**).

This compound is found in several unrelated signed languages, some of which appear to use a fixed order (e.g. ASL & BSL) while others do not (e.g. Czech SL) [5,8]. In general, co-compounds are found across signed languages, sometimes with fixed ordering [2, 9]. We find that **the co-compound denoting 'parents' in RSL and STS shows variable ordering of elements**, with **variation within and across signers in the choice of form**.

>>> *In this study we investigate possible factors influencing this variation.*

Methodology

Data & sample

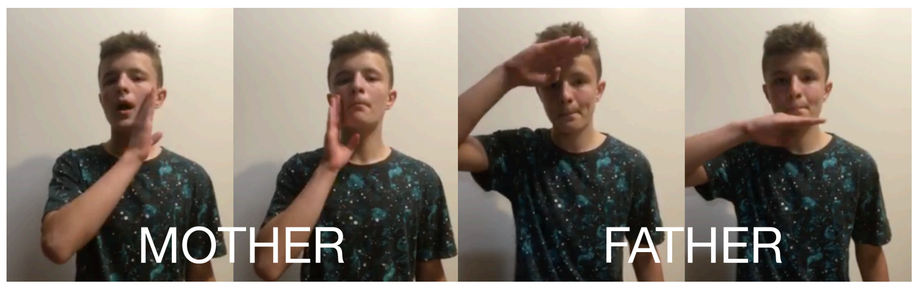
Two unrelated signed languages: **Russian SL** (**RSL**) and **Swedish SL** (**STS**).

For **RSL**, we use a database of lexical variation that contains ≈19,000 signs for ≈100 concepts produced by more than 250 RSL signers from different regions [10]:
→ **97 occurrences** of 'parents' of either order.

For **STS**, we used data from the dictionary (images) & corpus (usage) [11,12]. The STS corpus consists of ≈90,000 sign tokens:
→ **167 occurrences** of 'parents' of either order.

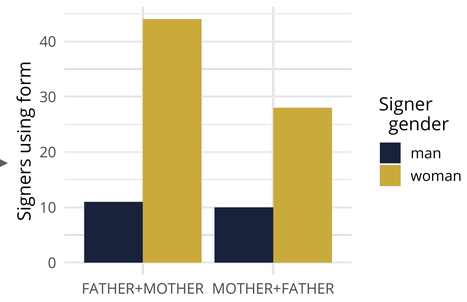
Results

Russian Sign Language

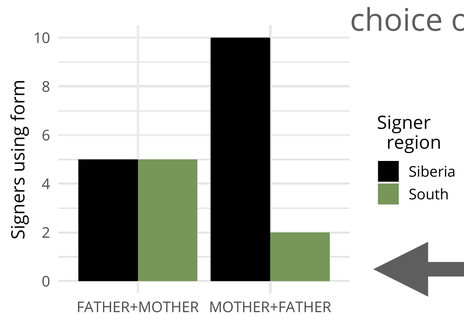


RSL signs **MOTHER** & **FATHER**

In **RSL**, there is a small (non-significant) effect of gender: both **men and women prefer the FATHER+MOTHER order**, but in women this preference is stronger.

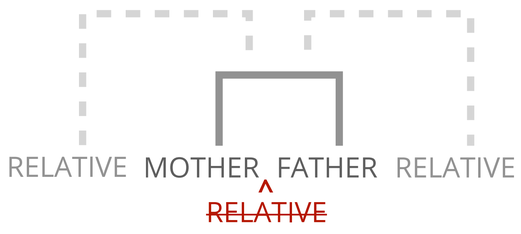


Age does *not* seem to **influence the** choice of **order** variant.



Signers from the South of Russia **prefer the FATHER+MOTHER order**, whereas **signers from Siberia prefer the MOTHER+FATHER order**.

Occasionally, the RSL compound includes an **additional element**: **RELATIVE**. This sign only appears **before *or* after the MOTHER/FATHER sequence**, never in between.

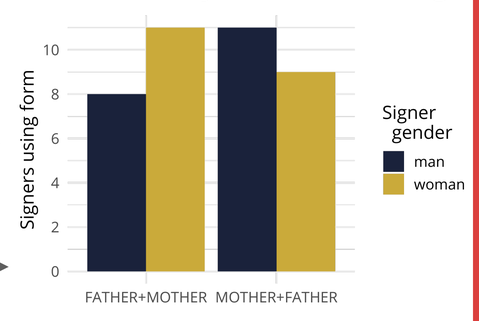


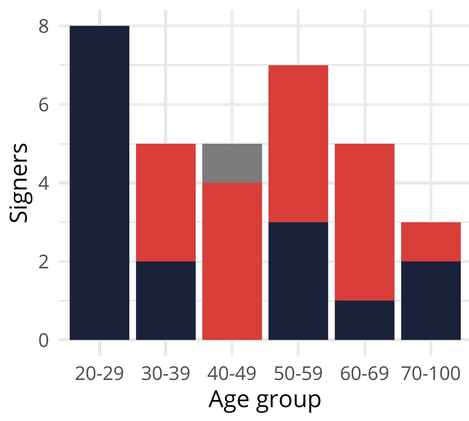
Swedish Sign Language

STS signs **MOTHER** & **FATHER**

In **STS**, we observe that **whereas most signers** (n=27) are **only attested using a single order**, **some** (n=6) **use both orders**.

Men prefer the MOTHER+FATHER order, whereas **women prefer the FATHER+MOTHER order**. The difference in distribution between men and women is **non-significant** (p≈.051).





With regard to age, **signers in the youngest age group** (20–29) **have a preference for FATHER+MOTHER**, whereas older age groups show more variation.

However, the youngest age group is heavily skewed towards women in the STS corpus.

Conclusion & Outlook

RSL & STS combine signs **MOTHER & FATHER** for 'parents', but the **order varies**!

Age, region & gender may influence form, but there is **variation** even **within signers**!

<u>Needed</u>: More cross-linguistic research on co-compounds & ordering across SLs!

[1] Lieber, Rochelle & Pavol Štekauer (eds.). 2011. The Oxford handbook of compounding. Oxford: Oxford University Press. **[2]** Santoro, Mirko. 2018. Compounds in sign languages: The case of Italian and French Sign Language. Paris: EHESS (PhD dissertation). **[3]** Liddell, Scott K. & Robert E. Johnson. 1986. American Sign Language compound formation processes, lexicalization, and phonological remnants. Natural Language and Linguistic Theory 4. 445–513. https://doi.org/10.1007/BF00134470. **[4]** Lepic, Ryan. 2015. The Great ASL Compound Hoax. In A. Healey, R. Napoleão de Souza, P. Pešková & M. Allen (eds.), Proceedings of the 11th High Desert Linguistics Society Conference, vol. 11, 227–250. Albuquerque, NM: University of New Mexico. **[5]** Richterová, Klára, Alena Macurová & Radka Nováková. 2016. Kinship terminology in Czech Sign Language. In U. Zeshan & K. Sagara (eds.), Semantic Fields in Sign Languages, 163–208. Boston, MA/Berlin & Lancaster: De Gruyter Mouton & Ishara Press. https://doi.org/10.1515/9781501503429-005. **[6]** Klima, Edward S. & Ursula Bellugi. 1979. The signs of language. Cambridge, MA: Harvard University Press. **[7]** Wälchli, Bernhard. 2005. Co-compounds and natural coordination. Oxford: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199276219.001.0001. **[8]** Vercellotti, Mary Lou & David R. Mortensen. 2012. A classification of compounds in American Sign Language: an evaluation of the Bisetto and Scalise framework. Morphology 22(4). 545–579. https://doi.org/10.1007/s11525-012-9205-1. **[9]** Meir, Irit, Mark Aronoff, Wendy Sandler & Carol Padden. 2004. Sign languages and compounding. In S. Scalise & I. Vogel (eds.), Cross-disciplinary issues in compounding, 301–322. Amsterdam/Philadelphia, PA: John Benjamins. **[10]** RSL Lexical Database. 2022. https://rsl-research-explore.garagemca.org/. **[11]** Öqvist, Zrajm, Nikolaus R. Kankkonen & Johanna Mesch. 2020. STS-korpus: A Sign Language Web Corpus Tool for Teaching and Public Use. In E. Efthimiou, S.-E. Fotinea, T. Hanke, J. A. Hochgesang, J. Kristoffersen & J. Mesch (eds.), Proceedings of the LREC2020 9th Workshop on the Representation and Processing of Sign Languages: Sign Language Resources in the Service of the Language Community, Technological Challenges and Application Perspectives, 177–180. Marseille: European Language Resources Association (ELRA). **[12]** Svenskt teckenspråkslexikon. 2022. Stockholm: Sign Language Section, Department of Linguistics, Stockholm University. https://teckensprakslexikon.su.se/.