

Linear order: a minimal syntactic tool expressing the modifier and the modified

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Central Taurus Sign Language (CTSL) is a village sign language that emerged spontaneously in the absence of a conventionalized language model and it currently has 36 deaf signers. It is a vantage point into observing the structure, or lack thereof, of a language in its infancy (Ergin, 2017; Ergin et al., 2018). This study investigates the emergence of word order patterns in CTSL by exploring the use of concatenation as a minimal syntactic tool to express modification (Jackendoff & Wittenberg, 2017). Previous research in emergent signed systems and homesign systems provide evidence for early conventionalization of linear sequencing of the modifier and the modified (Sandler et al., 2005). 12 deaf CTSL signers participated in this study. We used a controlled elicitation task with video clips designed to reveal how participants distinguish between members of the same semantic category. These clips involved either objects that differ by size or location, or characters that differ by their appearance. In our responses we coded the order of the modifier relative to its head and, identified four different configurations:

Simple modification (SM): Single modifier is used. **CTSL:** TWO WOMAN SIT / WOMAN HAT THROW-BALL
Conjoined modifiers (CM): Multiple modifiers modify the same head. **CTSL:** MAN BEARD GLASSES / MAN BOOK GO
Semantic embedding (SE): A second modifier modifies the first modifier. **CTSL:** MAN SHIRT RED / MAN THROW-BALL
Conjoined modifiers combined with embedding (CE): Multiple modifiers modify the same head, and one of them itself has a modifier. **CTSL:** MAN BALD SHIRT RED LAUGH / MAN SIT

A total of 134 instances of modification were observed. 72.06% of all instances used head-modifier order, we take this to be the dominant order. A logistic regression revealed that when signers used multiple modifiers to modify a single element, they followed the dominant word order more strictly than they did in simple modification constructions ($\beta=-.98$, $SE=.50$, $p<.05$). We see therefore that with increasing complexity, there is significant conventionalization and less variation in the use of the dominant word order. Briefly our results suggest that purely semantically based principles can determine the linear order of constituents. The principle here is that a semantic modifier must follow what it modifies as closely as possible, even when the pragmatics are clear. For instance, MAN BEARD SHIRT RED can only be interpreted as ‘man with the beard and red shirt’ and not the anomalous ‘red man with the bearded shirt’, and this would be the case regardless of the order of the elements. Yet the head-modifier order appears to have conventionalized anyway. We see that a dominant word order pattern is present even in the initial stages of an emerging signed system, and greater semantic complexity calls more strongly for conventional order.

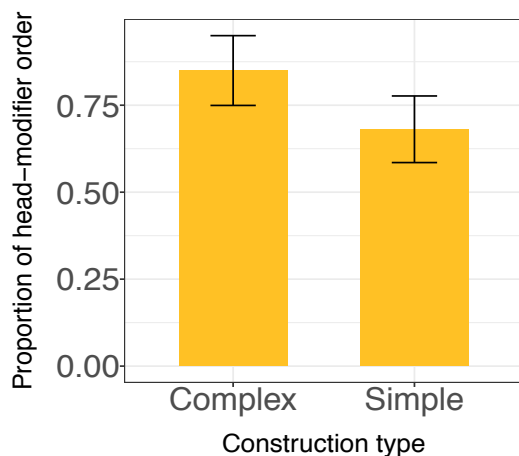


Table 1
Summary of all modification cases

	SM	CM	SE	CE
Number of cases	94	15	12	13
%head-modifier word order	68.08%	93.33%	75%	84.62%

Figure 1. Proportion of head-modifier order for complex and simple modification constructions

References

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