From meaning to form and back in American Sign Language verbal classifier morphemes

Background. While not too common in spoken languages, verbal classifiers are abundant among sign languages. Unlike in lexical signs, where handshapes fulfill a phonological role, in classifier constructions, they take on morphological status. Benedicto & Brentari (2004) analyze the movement component of American Sign Language (ASL) classifier constructions as the verbal root and the handshape component as the classifying morpheme, which is affixed to the root. In (1a) e.g. the movement root combines with the 1-handshape classifying long thin objects.

(1)



a. type2-classifier+BREAK 'the pencil breaks'



b. type3-classifier+BREAK
'he/she breaks the pencil'

B&B propose that surface form is derived from meaning in the following way: classifier handshapes are instantiations of functional heads F1 and F2 (part of UG) that determine the external or internal position of the argument that lands in their specifier through a structural agreement relation. Consider the minimal pair in (1): the handshape in (1a) yields an unaccusative structure while the one in (1b), combining with the same root, yields a transitive structure. Crucially, B&B claim that ASL handshape morphemes can be grouped into types that correlate with argument structure and that ASL classifier predicates "enter into a systematic argument structure alternation system" (p.745) (Table 1).

Table 1. Correlations between classifier	types and argument stru	lcture as proposed by Ben	edicto & Brentari (2004)

Alternation 1	Type1-classifier (F1)	Type2-classifier (F2)
	→Unergative	→Unaccusative
Alternation 2	Type3-classifier (F1+F2)	Type2-classifier (F2)
	→Transitive (1b)	→Unaccusative (1a)

Goal. While B&B's account has interesting theoretical implications, the examples provided are limited and raise questions about generalizability/productivity. Furthermore, B&B overlooked the fact that alternation 2 actually comprises two verb types. Based on Reinhart (2000, 2002), I provide an analysis of verb type 3 that emphasizes the link between the presence of an instrument and the presence of an agent in the verb semantics and which is in conflict with an unaccusative analysis of the Type2-classifier alternate of this verb (Table 2).

Alternation 1	Type1-classifier (F1)	Type2-classifier (F2)
	→Unergative	→Unaccusative
Alternation 2	Type3-classifier (F1+F2)	Type2-classifier (F2)
	→Transitive (1b)	→Unaccusative (1a)
Alternation 3	Type3-classifier (F1+F2)	Type2-classifier (F2)
	→Transitive	→ ¬Unaccusative

Table 2. Alternative proposal for correlations between classifier types and argument structure.

Therefore, a study was designed to find empirical evidence for correlations between classifier types and argument structure on the rationale that the presence of an agent (syntactically and/or semantically) rules out an unaccusative analysis.

Methodology. Suggested correlations were tested empirically in a novel computer-based experiment. 14 native signers saw video clips of signed classifier constructions and were asked to match them to videos of acted-out agentive and non-agentive interpretations ("form mode"), or vice versa ("meaning mode").

Results (Fig.1). We see highly significant (p<0.001) interaction effects of the agentive interpretation with classifier type. Additionally, there is a significant difference (p<0.001) between the results for verb type 2 and those for verb type 3. The results confirm the general existence of systematic correlations between argument structure and classifier type in ASL, but –contra B&B2004- support the distinction between verb types 2 and 3. Combined, theory and experiment argue against an analysis of Type2-classifier morphemes as constituting one class.



Fig. 1. Results for 14 native signers in both modes of presentation.

References

Benedicto, E. and D. Brentari (2004). Where did all the arguments go? Argument-changing properties of Classifiers in ASL. In: *Natural Language and Linguistic Theory*, 22(4), 743-810. Reinhart, T. (2000). *The Theta System: syntactic realization of verbal concepts*. UiL-OTS

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