

NON-CANONICAL ARGUMENT STRUCTURE IN CLASSIFIER PREDICATES IN FOUR SIGN LANGUAGES

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Sign language classifiers are meaningful handshapes that combine with classifier predicates (verbs of movement or location) to classify arguments. For various sign languages (SLs), researchers have argued that the argument structure of these predicates is dependent on the type of the classifier [1-3]. For American Sign Language (ASL), Benedicto & Brentari [3] formulated the following generalization: whole-entity classifiers occur in unaccusative predicates; body-part classifiers occur in unergative predicates; handling classifiers occur in transitive predicates. They further proposed that classifier morphemes are manifestations of functional heads directly responsible for the assignment of thematic roles to the corresponding argument. In this paper, we test their generalization by investigating argument structure of classifier predicates in four unrelated SLs: Russian Sign Language (RSL), Sign Language of the Netherlands (NGT), German Sign Language (DGS) and Kata Kolok (KK). We demonstrate that while the suggested relation between classifier type and argument structure generally holds for these SLs too, there is a number of systematic exceptions from this relation.

Methodology: We compared four SLs: RSL, NGT, DGS, and KK. These languages are not historically related; moreover, while RSL, NGT and DGS can be analyzed as Western urban SLs, KK is a village sign language [4]. For all four languages, we analyzed retellings of the Canary Row cartoons [5], as previous research has shown that narratives based on these stimuli produce a large number of classifier predicates. The original cartoon consists of 8 small episodes; KK and DGS signers narrated all 8 episodes while RSL and NGT signers narrated 4 episodes per person. Table 1 summarizes the number of signers and episodes per language analyzed in this study. We browsed the data for classifier predicates and annotated the type of classifier, as well as their argument structure.

Results: We found that all three SLs tend to encode the relation between classifier type and argument structure in the way previously suggested for ASL. Specifically, classifier predicates with whole-entity classifiers are mostly intransitive (1), and those with handling classifier predicates are mostly transitive (2). Crucially, however, we also identified three systematic exceptions to this pattern.

- **Exception 1:** In all four SLs, whole-entity classifier predicates are used to describe both agentive (3) and non-agentive (1) events; it may thus be problematic to analyze all such predicates as unaccusative. Note however, that, based on corpus data alone, it is not clear how to distinguish between unaccusative and unergative intransitives.
- **Exception 2:** In all four SLs, whole-entity classifiers can be used in clearly transitive contexts (4). It is unclear what governs the choice between handling and whole-entity classifiers in such cases.
- **Exception 3:** In all four SLs, handling classifiers are not only used to describe an Agent moving a Theme (as predicted in [3]) (2), but also to describe a person moving while holding an object (5), or a person moving due to holding on to a moving object (6). This has been previously described for RSL [6], but it equally holds for NGT, DGS, and KK.

In addition, we found some less systematic exceptions specific to RSL, DGS, and KK, which we do not discuss further for the sake of space.

Conclusions: We conclude that the suggested relation between classifier type and argument structure of the classifier predicate [1-3] also holds for RSL, NGT, DGS, and KK. Still, our data clearly suggest that this neat one-to-one relation can only be considered a tendency, as we discovered systematic violations in all three SLs. Given the systematic and cross-linguistic nature of these violations, we argue that any approach to classifier predicates should account for them. In [6] we developed a formal approach to argument structure of classifier predicates in RSL; it appears that this account can be extended to NGT, DGS and KK. Further research on other sign languages is required to find out whether this approach would have a more general applicability. In addition, further research is required to find out how signers make the choice between classifier types when multiple options are available.

Language	# of signers	# of episodes
RSL	14	56
NGT	20	80
DGS	12	48
KK	4	32

Table 1: Signers and episodes per sign language

Examples: Signs are glossed in SMALL CAPS. CL – classifier, we – whole-entity, hl – handling. ix – index (a pointing sign); + - simultaneity. The relevant classifier predicate is illustrated by the snap shot.

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|--|---|-------|--|--|-------|
| | (1) IX CL(we)-FALL HEAP FALL
'He fell on a heap (of trash).' | [RSL] | | (4) BANANA CL(we)-HOLD
'(He) is holding a banana.' | [KK] |
| | (2) COIN CL(hl)-TAKE
'(She) took out a coin.' | [RSL] | | (5) CAT <...> CL(hl)-FALL
'The cat falls while holding (the bird).' | [NGT] |
| | (3) CL(we)-RUN+CL(we)-RUN
'(The cat) is running (after the bird).' | [KK] | | (6) CL(hl)-MOVE
'(He) swings on a rope.' | [NGT] |

References:

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Row. Animated Cartoon. Time Warner, New York. [6] Kimmelman, Vadim, Roland Pfau & Enoch O. Aboh. Event coordination in Russian Sign Language classifier predicates. Presented at GLOW 2017, March 15-17.