

On the nature of classifiers in Russian Sign Language

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Classifier predicates (CLPs) in sign languages (SLs) are predicates of movement/location; the handshape in such predicates is the classifier referring to some semantic properties of an argument of the predicate (usually the theme) [1]. Different types of classifiers are distinguished: whole-entity classifiers refer to the moving theme as a whole; body-part classifiers refer to body parts; handling classifiers refer to a hand holding and moving an object. Classifiers in SLs are clearly similar to verbal classifiers in spoken languages [1,2]. Within formal linguistics, classifiers have been analyzed in various ways (see [1] for an overview). In this paper, we assess analyses previously put forward in the literature as applied to whole-entity and body-part classifiers in Russian Sign Language (RSL) and argue against most of them and in favor of the predicate modifier analysis, with implications for other SLs.

Method: The RSL data were collected from the on-line RSL corpus [4], as well as through various elicitation tasks (picture description, acceptability/felicity judgements) with 5-7 native signers (depending on the task) in Moscow. We excluded handling classifiers as our previous research has shown that they behave differently from other types and should probably not be analyzed as classifiers at all.

Analyses: ① Classifiers in RSL are not incorporated nouns. The main argument developed by [5] also applies to RSL: the shape of the classifier does not coincide with the shape of non-incorporated nouns (compare the sign CAR and the classifier CL_{we}(CAR), fig. 1-2). In addition, the classifier does not saturate the argument slot of the predicate (see next paragraph).



Figure 2. CAR



Figure 2. CLP CL_{we}(CAR)-RIDE

② Although no formal analysis in terms of Pronominal Argument Hypothesis [6-7] has been proposed, such an analysis, namely that classifiers themselves are arguments, is implied in [8]. We, however, argue that classifiers in RSL are not pronominal arguments because the full NPs that they cross-reference behave like arguments, not adjuncts. For instance, CLPs do not license a freer word order than plain verbs, the full

NP can be a quantifier (1), and topicalization out of the full NP argument is possible (2) – all unexpected if the full NPs were adjuncts.

③ It has been suggested that classifiers in American SL (ASL) are argument-introducing functional heads [3]. The argument is partially based on the fact that whole-entity CLPs are unaccusative, body-part CLPs unergative and handling CLPs transitive in ASL. Disregarding the handling CLPs (see above), it is still clear that the generalization does not hold for RSL: both whole-entity and body-part CLPs can be intransitive or transitive (3,4).

④ Classifiers in RSL could be considered agreement markers, as suggested for other SLs [1]. However, this account faces some problems. First, the same noun can be used with different classifiers (5). Second, some verbal meanings are only expressed with certain classifiers (e.g. ‘to jump’ with the CL_{we}(TWO-LEGGED), but not CL_{we}(LONG)), even when the referent is compatible with different classifiers. Third, the classifier always cross-references the theme argument, and not the subject, which is typologically highly unusual [9].

⑤ We thus propose that classifiers in CLPs in RSL are predicate modifiers (see [10] for a similar account for ASL but without explicit motivation). Similar to some indefinites and some types of incorporation in spoken languages [11], the classifier is a predicate of the <e,t>

type which does not saturate the theme argument of the verb of movement, but restricts the reference of this argument (6). This explains why the same noun can occur with different classifiers (as long as the noun is semantically compatible with the meaning of the classifier, which can have a meaning like ‘long’, ‘two-legged’, ‘tree’, etc.). Morphologically, the classifier is a root which combines with the verbal root to form a compound. The verbal root selects the theme argument which explains why the classifier can only restrict this argument (see [12] for a very similar analysis of lexical affixes in Salish). A final advantage of this analysis is that we can unify the use of classifiers in CLPs with the use of classifiers in other lexical items (the so-called frozen lexemes containing the same handshapes). [3] analyzed the latter as root compounds and the former as agreement, but we argue that the same compound analysis is applicable to all cases, at least for RSL.

Conclusion: We have provided arguments for analyzing classifiers in RSL as predicate modifiers, and against other possible analyses of these morphemes. The same tests can be applied to other SLs in the future to test the generalizability of our arguments.

Examples: IX - pointing sign; POSS – possessive pronoun. CL_{we}(LONG) – outstretched index finger; CL_{we}(TWO-LEGGED) – bent index and middle fingers; CL_{bp}(LEG) – bent index finger.

- (1) NOBODY CL_{we}(LONG)-MOVE-1
‘Nobody is moving towards me.’
_____top
- (2) GIRL IX-a, POSS-a SISTER IX-b CL_{we}(TWO-LEGGED)-MOVE
‘This girl, her sister is moving.’
- (3) a. CHAIR CL_{we}(CHAIR)-MOVE
‘A chair moves.’ (unaccusative)
b. IX-1 CHAIR CL_{we}(CHAIR)-MOVE
‘I moved a chair.’ (transitive)
- (4) a. POSS-1 LEG CL_{bp}(LEG)-MOVE
‘My leg moves.’ (unaccusative)
b. IX-1 LEG CL_{bp}(LEG)-MOVE
‘I move my leg.’ (transitive)
- (5) a. GIRL CL_{we}(LONG)-MOVE
‘A girl moves.’
b. GIRL CL_{we}(TWO-LEGGED)-MOVE
‘A girl moves.’
- (6) [[MOVE]] = $\lambda x \lambda e [\text{move}(x,e) \ \& \ \text{theme}(x)]$
[[CL_{we}(TWO-LEGGED)]] = $\lambda x [\text{two-legged}(x)]$
[[CL_{we}(TWO-LEGGED)-MOVE]] = *Restrict*($\lambda x \lambda e [\text{move}(x,e) \ \& \ \text{theme}(x)]$, $\lambda x [\text{two-legged}(x)]$)
= $\lambda x \lambda e [\text{move}(x,e) \ \& \ \text{theme}(x) \ \& \ \text{two-legged}(x)]$ (*Restrict* defined as in [11: ch. 1])

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