

Nominalizing Clauses: Evidence from ASL and a New Typology of Embedding



Itamar Kastner
itamar@nyu.edu
New York University

Kathryn Davidson
kathryn.davidson@gmail.com
University of Connecticut



Research Question	Clausal Complements	Sentential Subjects
-------------------	---------------------	---------------------

How does natural language delimit propositions so that it may refer back to them?

- We examine **clausal complements** (propositions in object position) and **sentential subjects** (propositions in subject position).
- Research on spoken languages implicates the **embedding verb** but also a **determiner** heading the embedded clause.
- We hypothesize that **American Sign Language uses loci** in space where some spoken languages use determiners.
- ✓ We are **correct for clausal complements**, but the situation with **sentential subjects is more complicated**: signer preferences fall into one of two categories.
- ✓ Some clear parallels with spoken languages but room for **future study**, especially comparing ASL with other sign languages.

Nominalization: A New Typology

Some predicates can take both an individual (DP) and a proposition (CP) as their complement. For example:

CP: Explain [_{CP} that there is a problem]
= say there is a problem

DP: Explain [_{DP} the problem]
= explain the reason for the problem

CP: Observe [_{CP} that they are unhappy]
= make the observation

DP: Observe [_{DP} the patients]
= look at the patients

DP: Observe [_{DP} the ritual]
= carry out the ritual
(see Marantz 1984, Kratzer 1996 on the special relationship between V and Obj)

Overt D languages may use a D head preceding a CP to disambiguate two kinds of complements of a verb, and must use it for sentential subjects (Hebrew, Greek, Persian).
In **Covert D languages** only one reading is available for a structurally ambiguous verb of this sort, and sentential subjects also require no D head (English, German). [Kastner 2013]

The typology in action.
English:

- He explained [_{CP} that the building collapsed].
- He explained [_{DP} the fact that the building collapsed].

Hebrew:

- hu hisbir [_{CP} še-ha-binyan he explained COMP-the-building karas].
collapsed.
'He explained that the building collapsed.'
- hu husbir [_{DP} et ze he explained ACC DEM [_{CP} Se-ha-binyan karas]].
COMP-the-building collapsed
'He explained the fact that the building collapsed.'

This interacts with different classes of **matrix verbs** (Cattell 1978, Kastner 2013), allowing different embeddings.
Response stance: accept, agree, verify.
Non-stance: know, forget, remember.
Volunteered stance: think, hope, believe.

Current Research
ASL:
We tested each type of these verbs in consultation with 4 Deaf native signers

Verbs that only take clausal complements allow the complement in object position, **not localized**:

- MOTHER SAY/THINK BROTHER LIKE SALAD.
'My mother says/thinks that my brother likes salad.'

Verbs that take both DPs and CPs **prefer the CPs to be localized**:
Clausal complement in neutral space:

- * IX_a EXPLAIN BUILDING_b COLLAPSE
- IX_a EXPLAIN [BUILDING_b COLLAPSE]_c
- IX_a EXPLAIN IX_c/THAT_c [BUILDING_b COLLAPSE]_c
'He explained that the building collapsed.'

The **DP reading**, "explain why", is only available with the WHY/HOW signs.

- IX_a EXPLAIN WHY/HOW BUILDING_b COLLAPSE
'He explained why/how/the fact that the building collapsed.'

The preference for localization holds for: REALIZE, FORGET, REMEMBER, ACCEPT, AGREE, VERIFY, EXPLAIN.
Signer variation with: HOPE, REALIZE.

Sentential subjects are preceded by the same D discussed earlier (Hartman 2012, Kastner 2013, Lohndal 2013).
Prediction based on previous typology: Sentential subjects will be associated with a locus in space.

Results: variation among signers
Variant I: Preference for locating sentential subjects

- * IX_a DRINK TEA SURPRISE IX₁
- [IX_a DRINK TEA]_c SURPRISE IX₁
- [IX_a DRINK TEA]_c IX_c/THAT_c SURPRISE IX₁
'That she drinks tea surprises me'

Variant II: Preference for not locating sentential subjects:

- IX_a WATER_a SAFE DRINK SURPRISE IX₁
- * [(WATER_a) IX_a WATER_a SAFE DRINK] SURPRISE IX₁
'That the water is safe to drink surprised me'
- BUILDING COLLAPSE SURPRISE IX₁
- * [BUILDING COLLAPSE] SURPRISE IX₁
'That the building collapsed surprised me'

Conclusions

Finding: Spoken languages signal propositions using **determiners**.
Hypothesis: ASL, and possibly other sign languages, use **space** to signal determiners.
Result: In clausal complements, associating the embedded clause with a **spatial locus is preferred**.
Consequence: Hypothesis supported. Room for more investigation into lexical semantics, additional sign languages and use of THAT or SELF.

Finding: If clausal complements can be introduced by a determiner, **sentential subjects** must be.
Hypothesis: ASL, and possibly other sign languages, patterns with a certain class of languages and sets off **sentential subjects in space**.
Result: Variation: signers either strongly prefer to locate sentential subjects in space or strongly disprefer.
Consequence: Additional elicitation materials need to be developed and variation **investigated further**.