

May 17, 2004

Clause types

Overview

- Distinguish syntactic form, semantic content, pragmatic use
- Message types in the Matrix
- Messages in MRS
- Parameters of wh questions
- HOOK.MSG
- Preview: Long distance dependencies

A three-way distinction (1/2)

1. Syntactic clause types
2. Semantic content (*message*) types
3. Speech act types
 - Clauses of different types express different kinds of semantic messages, which can be used in different speech acts.

A three-way distinction (2/2)

Clause type	Message type	Speech act
declarative	proposition	assertion
interrogative	question	query
imperative	outcome	command
exclamative	fact	exclamation
declarative	fact	—
interrogative	coerced fact reading	—

Why have a three way distinction?

- Theoretical clarity: syntactic structure, semantic content and illocutionary force are three different things.
- Ability to explore mismatches:
 - Many different clause types can express facts
 - Embedded clauses don't have illocutionary force

Why should this be implemented?

- Linguistic hypothesis testing (constructions pair form and meaning, what kinds of forms, what kinds of meanings, how do they map)
- Practical applications — Examples?

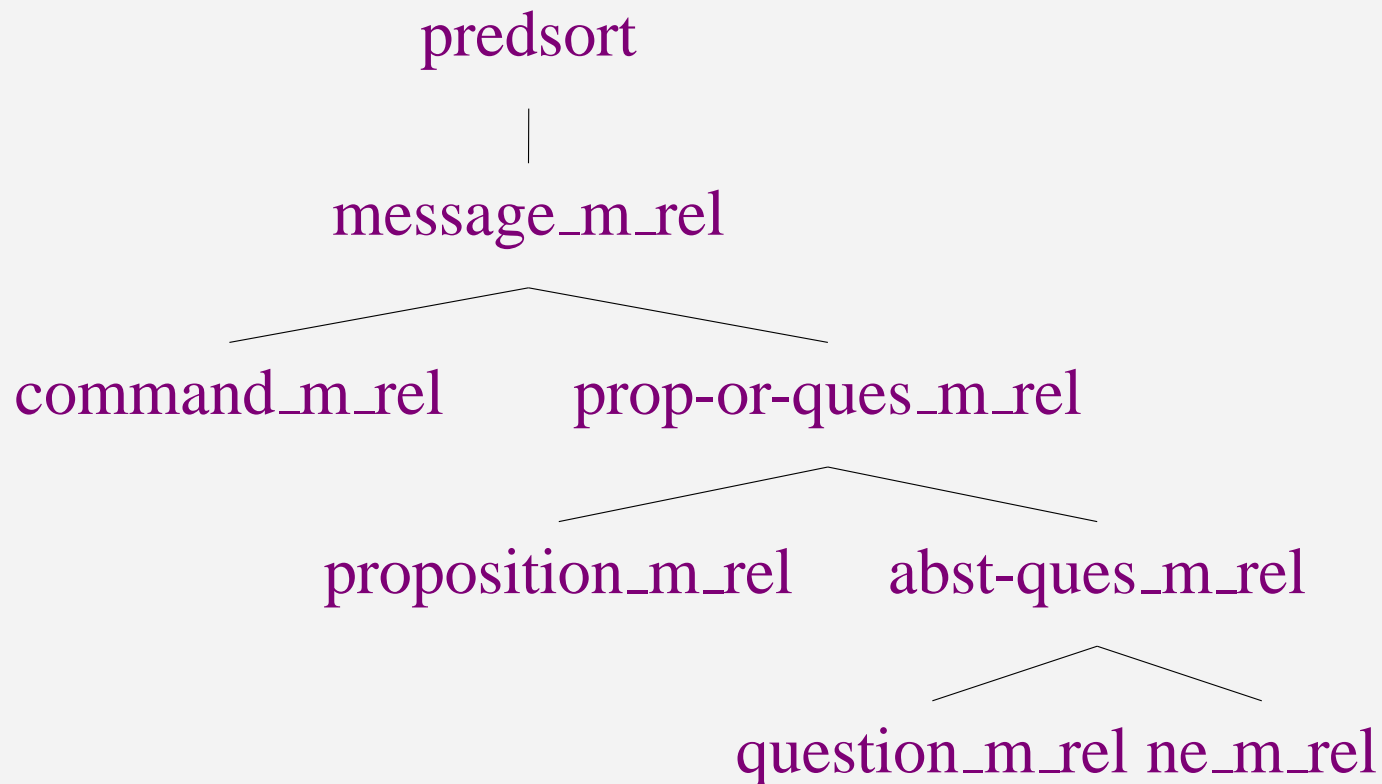
Messages in the Matrix (1/2)

- Implemented as another type of relation, with a PRED value distinguishing message types, a LBL, and a single handle-valued argument which points to the state of affairs.

```
basic_message := relation.  
message := basic_message &  
  [ PRED message_m_rel,  
    MARG handle ].  
no-msg := basic_message.
```

- The fourth HOOK feature, MSG, points to the message, if any, of a sign, for selectional restrictions.

Messages in the Matrix (2/2)



Example MRS with message

\langle h1, e2,
{ h1:proposition_m_rel(h5),
h6:def_q_rel(x9,h8,h7),
h10: _dog_n_rel(x9),
h11: _bark_v_rel(e2,x9)},
{ h5 qeq h11, h8 qeq h10 } \rangle

Questions always embed propositions (1/2)

- Provides a tenable formalization of the idea that questions are open propositions (Ginzburg & Sag 2000:108–109).
- Thus an MRS with a *question_m_rel* will always also have an *proposition_m_rel* as the argument of the *question_m_rel*.

Questions always embed propositions (2/2)

\langle h1, e2,
{ h1:question_m_rel(h5),
h5:proposition_m_rel(h6),
h9:def_q_rel(x12,h11,h10),
h13: _dog_n_rel(x12),
h14: _bark_v_rel(e2,x12)},
{ h6 qeq h14, h11 qeq h13 } \rangle

Messages on embedded clauses/no scope ambiguity

< h1, e2,
{ h1:proposition_m_rel(h5),
h6:pronoun_n_rel(x7:1sg), h8:pronoun_q_rel(x7,h9,h10)
h11:_know_v1_rel(e2,x7,h12), h12:proposition_m_rel(h15)
h16:def_q_rel(x19,h18,h17), h20: _dog_n_rel(x19),
h21: _bark_v_rel(e22,x19)},
{ h5 qeq h11, h9 qeq h6
h15 qeq h21, h18 qeq h20 } >

Parameters and wh thingies (1/2)

- Wh expressions are taken as marking the parameters of a wh question.
- Ginzburg and Sag argue that they are not quantifiers.

Parameters and wh thingies (1/2)

- If there are multiple questions a sentence, parameters have some freedom (subject to syntactic constraints) as to which question they go with:
 - Who wonders who saw what?
 - Who wondered about the answer to the question who saw what?
 - For which persons x and objects y , did x wonder who saw y ?
 - *For which persons x and y , did x wonder what y saw?
 - Who wondered what was seen by WHO?

Using HOOK.MSG

- The HOOK feature MSG records the message of the sign.
- If there is no message (i.e., the sign is non-clausal), the MSG value should be *no_msg*.
- Selecting predicates can check the MSG value, e.g.:
 - I know whether Kim left/*that* Kim left.
 - I believe that Kim left/**whether* Kim left.
 - I wonder whether Kim left/**that* Kim left.

Supplying MSG values

- Two basic strategies:
 - Cross-classify clause types with phrase types.
 - Provide non-branching rules which add a message value.
- Combinations of these strategies are possible.
- Convenience of each is going to depend on the language:
 - If subjects are realized after objects, it's convenient to have the head-subj rule be a type of clause.
 - If subjects can be realized before objects, less so.

Syntax of clause types crosslinguistically

- So far we've been dealing with propositions only, and primarily matrix clauses only.
- How does your language express matrix yes-no questions?
- How does your language express embedded yes-no questions?
- How does your language express embedded propositions?
- Find at least one verb that can embed a (finite) interrogative clause.
- Find at least one verb that can embed a finite declarative clause.

Preview: Long distance dependencies (1/2)

- Many languages allow dislocation of certain constituents to the (left) edge of a clause.
- In many languages, such dislocation is an option in the expression of wh-questions. Examples?
- HPSG doesn't treat these via movement, but rather by a feature SLASH.

Preview: Long distance dependencies (2/2)

- Distinguish bottom, middle and top of a LDD.
- Bottom: Something's missing, record that fact.
- Middle: Something's missing, pass up that information.
- Top: Head-filler construction pairs a filler with a constituent with a matching gap.