Clause Types and Their Internal Structure

March 11, 2004

Preview

- Quick review of last time
- INFL
- Empty Categories
- Exceptional Clauses
- Small Clauses
- Course evals (for real this time)

Last Time

- Last class we differentiated between Finite and Nonfinite clauses.
  - <u>Finite clauses</u>: a clause that contains a finite verb (I.e., a verb inflected for tense/agreement)
  - <u>Nonfinite clauses</u>: a clause that lacks a finite verb (I.e., if it is a verbless clause, or if it is a clause containing a tenseless and agreementless verb).
- Evidence was drawn from morphology, distribution of modals, distribution of complementizers, etc

Last Time (cont'd)

- Furthermore, we saw that finite clauses can be grouped into *Indicative* and *Subjunctive* moods.

- We also saw that ordinary clauses were actually S' constituents, not S.
  - I know [$_{S'}$that [$_S$you like fish]
  - I know [$_{S'}$ *e* [$_S$you like fish]

Structure of S

- I am anxious *that [Peter should finish by Friday]*
- I am anxious *for [Peter to finish by Friday]*

- The bracketed S of the first sentences consists of [NP M VP], our familiar expansion of S. The second is expanded as [NP *to* VP].

- We will argue that M and *to* are members of the category INFL (or I)

- Thus, the basic structure of ordinary clauses is:
  - S' → C S
  - S → NP I VP

Ordinary S

- Why the same category?
- Modals cannot co-occur with *to*:
  - *I am anxious for Peter can to finish
- VP ellipsis is possible after modals and infinitives, but not lexical verbs:
  - First people began to pour out of the building, and then smoke did…
  - First people began to pour out of the building, and then smoke began to…
  - *First people began to pour out of the building, and then smoke began…

Ordinary S (cont'd)

- INFL is the position which may be filled by the infinitive particle *to* or by modal auxiliaries. Hence INFL can be finite or nonfinite.

- The difference between finite and and nonfinite clauses is contained in INFL:
  - Finite clauses contain a finite INFL (with T/AGR properties)
  - Nonfinite clauses clauses contain INFL with no T/AGR properties

Ordinary S (cont'd)

- Are all ordinary clauses of the form [NP I VP]?
  - The committee may insist [that he should resign]
  - The committee may insist [that he resign]
- The second sentence lacks a modal, so does it lack an INFL node?

Ordinary S (cont'd)

- We will argue that INFL in the second sentence is 'empty'
- Recall, in many languages there is a connection between C and I. Clauses with a finite C must contain a finite I; with nonfinite C contain nonfinite I.

Ordinary S (cont'd)

- Our generalization:
  - Any clause which contains C contains a compatible INFL

- What does this mean for English?

Ordinary S (cont'd)

- An infinitive complement introduced by an overt complementizer like *for* must include an I constituent containing the infinitive particle *to*:

    - They are anxious [*for* you to make up your mind]
    - *They are anxious [*for* you make up your mind]

Ordinary S (cont'd)

- The same is true of *whether*. Recall that *whether* is [+WH, +/-FINITE]. If it is introducing an interrogative infinitive complement, *to* is required:
  - I don't know [*whether* to go there on my own]
  - *I don't know [*whether* go there on my own]

Ordinary S (cont'd)

- Subjunctive clauses in Standard English require an overt complementizer:
    - The committee may insist [*that* he resign]
    - *The committee may insist [he resign]
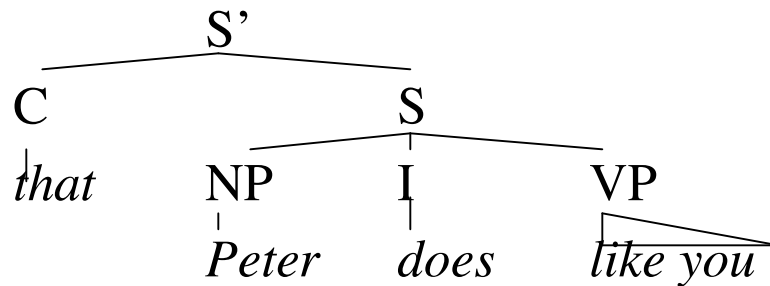- Here the INFL node seems to be empty.

Ordinary S (cont'd)

- What about indicative clauses?
  - I really think [that Peter *does* like you]
  - I really think [that Peter likes you]
- Another Generalization:
  - All ordinary clauses contain an I constituent, which may be either filled (by a modal if I is finite, or by infinitival *to* if I is nonfinite) or left empty

Characteristics of INFL

- We mentioned that INFL contains Tense/AGR features which need to agree with the subject NP, so we can say that an NP which is a *sister* of finite INFL is assigned Nominative Case.

INFL (cont'd)

```
              S'
        ╱          ╲
       C            S
       |         ╱  |  ╲
      that     NP   I    VP
               |    |    ╱◣
             Peter does like you
```

- NOM case assignment allows us to account for:
  - I really think [that he/*him does like you]
  - I really think [that he/*him likes you]
  - C.f.: I want [him/*he to go to the store]

INFL (cont'd)

- Internal structure of INFL:

  I → [αTNS, αAGR]

  [+TNS] → [+/- PAST]

  [+AGR] → [βNUM, γPER]

Non-finite Morphology

- Could -ing and -en forms be assigned by INFL? (….. No)
- Items in INFL never take either inflection:
  - *maying/*mighting/*canning
  - *mayen/*mighten/*cannen
- -ing and -en forms occur in clauses which already have INFL filled:
  - He *may* be working.
  - He *may* have thrown it away

Non-finite Morphology

- These are V-inflections. They attach only to verbs generated under VP (I.e., non-modal V). Modals are generated under INFL, not V.

Empty Subjects

- Consider these S's:
  - The president isn't sure [whether he should approve the project]
  - The president isn't sure [whether to approve the project]
- Is the subject NP optional or empty?

Empty Subjects

- Empty subject NPs are known as PRO.
- But why PRO and not Ø?
- PRO is syntactically active.
- Agreement:
  - The president is not sure [whether PRO to be a candidate/*candidates]
- Reflexives:
  - The president is not sure [whether PRO to vote for himself]

Empty Categories

- So far we've seen C, I, and NP be empty in the appropriate context. What about other categories?

    - She may come to the party, and in fact she probably will [$_{VP}e$]

    - They say she is very rich, but I don't think that she is [$_{AP}e$]

    - She was very ill, though nobody knew [$_{S'}e$]

Empty Cats. (cont'd)

- Generalization
  - $X^n \rightarrow e$ (any category can be left empty)

Unusual Clauses

- There are two clause types that do not have the status of S'
  - Exceptional Clauses
  - Small clauses

Exceptional Clauses

- These occur as complements to a small subset of verbs, especially 'cognitive' verbs (verbs of saying or thinking)
  - I believe [the president to be right]
  - I've never known [the Prime Minister to lie]
  - They reported [the patient to be in great pain]
  - I consider [my students to be conscientious]

Exceptional Clauses (cont'd)

- Usually of the form [NP *to* VP]. (I.e., they are nonfinite)
- They cannot be introduced by an overt COMP, even the nonfinite COMP *for*
  - *I believe [*for* the president to be right]
  - *They reported [*for* the patient to be in great pain]

Exceptional Clauses (cont'd)

- The subject of ECs behaves more like the object of the preceding verb than the subject of the following verb:
  - I believe [*him* to be right]
  - I've never known [*her* to lie]
  - I consider [*them* to be conscientious]

Exceptional Clauses (cont'd)

- Like the object of a regular verb, they can be passivized:
  - He is believed [_ to be right]
  - She has never been known [_ to lie]
- They can be a reflexive whose antecedent is in the main clause:
  - The president believe [*himself* to be right]
  - I've never known [*myself* to lie]

Exceptional Clauses (cont'd)

- If we assume ECs are S constituents, then we could say that passivization can apply across S, but not S':
    - We never intended [*that* to happen]
    - *That* was never intended [_ to happen]
    - We never intended [for *that* to happen]
    - *That* was never intended [for _ to happen]

Exceptional Clauses (cont'd)

- Then why not analyze the subject NP as the object of the main clause?
- Certain things only appear as the subjects of clauses: Subject Idiom Chunks and Expletives

Subject Idiom Chunks

- *The chips* are down
- *The cat* is out of the bag
- *The shit* hit the fan
- *The fur* will fly
  - The italicized portion has no independent meaning, and only takes on meaning in the context of the entire idiom. They can only be used in their idiomatic sense as subjects.

Pleonastics/Expletives

- *It* is raining
- *It* is a long way to Denmark
- *It* is time to leave
- *There* must have been some mistake
- *There* is a unicorn in the garden
  - These pronouns are semantically empty and cannot have their reference questioned (*What is raining?)

SICs/Pleonastics in ECs

- I believe [*the chips* to be down]
- I've never known [*the fur* to fly so quickly]
- They reported [*the cat* to be out of the bag]
- I consider [*the shit* to have hit the fan]
- I've never known [*it* to snow in summer]
- I believe [*there* to be no alternative]

Subjects of ECs

- The fact that the italicized constituents in the previous slide can only function as subjects provides strong empirical support to claim that they are subjects of the lower clause, rather than objects of the main clause.

An interesting case

- What about:

    – John pursuaded *Mary* to resign.

- Which clause is *Mary* a constituent of?

- Let's use these as evidence:

    – *We persuaded [*the shit* to hit the fan]

    – *We persuaded [*there* to be a strike]

S' or S?

- We persuaded *Mary* [PRO to resign]
- It seems likely that the bracketed constituent is S', not S.
- PRO cannot occur as the subject of an exceptional clause:
  - *The president believes [PRO to be right]
  - *I consider [PRO to be conscientious]

S' or S (cont'd)

- PRO can only occur as the subject of infinitival S'
  - – I wonder [whether PRO to stay at home]
- PRO can function as the subject of an infinitival S' complement, but not as the subject of an S complement:
  - – Peter persuaded Mary [$_{S'}e$ PRO to resign]
  - – Peter believes [$_S$Mary to be innocent]

S' or S (cont'd)

- It seems there's a clear distinction between [believe NP to VP] structures and [persuade NP to VP]:
  - Peter persuaded Mary *firmly/himself* [$_{S'}$*e* PRO to resign]
  - *Peter believed [$_S$Mary *firmly/himself* to be innocent]
- It seems that adjuncts and emphatic reflexives must be within the same S as the V they modify.
- (The theory behind reflexives is much more complex, however. This is a vast simplification.)

Semantic Differences

- Peter persuaded Mary to resign
- Peter believed Mary to be innocent

- Peter persuaded Mary [that she should resign]
- Peter believed [that Mary was innocent]

Semantic Differences (cont'd)

- Here *persuade* takes three arguments:
  - Subject NP
  - Object NP
  - Complement S'
- *Believe* is a two-place predicate:
  - Subject NP
  - Complement S

Semantic Differences (cont'd)

- The different semantic roles played by the postverbal NPs in the two infinitive constructions accounts for the fact that while active and passive complements of *believe* are 'cognitively synonymous', the complement of *persuade* show an obvious difference:

Semantic Differences (cont'd)

- I believed a specialist to have examined Peter
- = I believe Peter to have been examined by a specialist

- I persuaded a specialist to examine Peter
- ≠I persuaded Peter to be examined by a specialist

Control

- Predicates, like *persuade* which take an infinitival complement with a PRO subject whose reference is controlled by some NP in the matrix clause are known as Control Predicates

Small Clauses

- Small Clauses lack COMP and INFL
- They have the structure [$_{SC}$NP XP]
  - I consider [*Peter* extremely intelligent]
  - Could you let [*the cat* into the house]
- But again, how do we know the italicized constituents are subjects?

Small Clauses (cont'd)

- I consider [*it* time to leave]
- Why did you let [*the cat* out of the bag?]

- This suggests that the complements are subject + predicate structures, and therefore clauses of some sort

Small Clauses (cont'd)

- *Not*-initial and *alone*-final NPs only occur in subject positions:
  - *Joe kissed *not many girls*.
  - *Not many gorillas* have learned to tapdance.
  - *Call *Peter alone*.
  - *Peter alone* called.

  Cf:
  - I consider [*not many people* suitable for the post]
  - I consider [*Peter alone* suitable for the post]

Structure of SCs

- SCs are not S' constituents and therefore lack COMP. What does this mean?
  - *I didn't consider [*that/if/for/whether* it suitable]
  - *Let [*be* there light]
- SCs also lack an INFL node:
  - *I consider [your attitude *to/can* deeply offensive]
  - *Let [there*to/can* be light]

Similarities: ECs and SCs

- Subjects of small clauses share properties with subjects of exceptional clauses with respect to passivization, assigning objective case, reflexivization, and not permitting PRO:

  - I consider [*him* intelligent]
  - He is considered [__ intelligent]
  - I consider [*myself* intelligent]
  - *I consider [PRO intelligent]

Distribution of SCs

- Small clauses also can serve as complements to Ps:
  - *With [the Mariners on TV]*, what is the point of going out?
  - I don't want you preparing food *with [your hands dirty]*
  - *With [the cat out of the bag]*, there is not much point in trying to hide the truth anymore
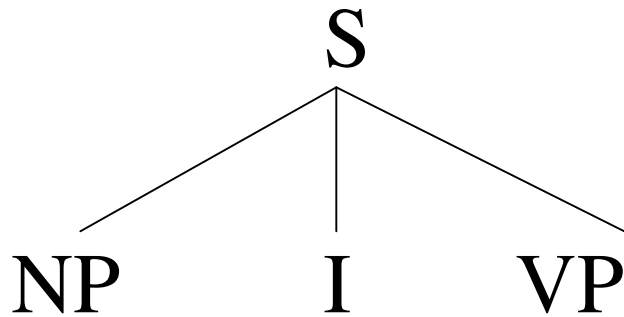
Summary of structures

- Ordinary clause:
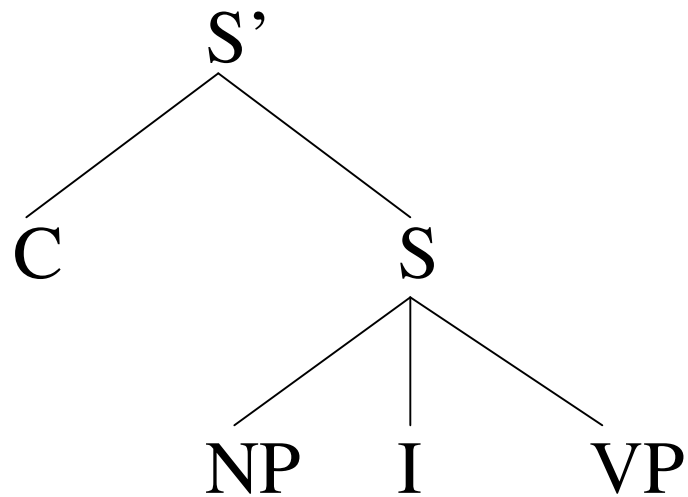
Structures (cont'd)

- Exceptional clause:

```
            S
         /  |  \
        /   |   \
      NP    I    VP
```

Structures (cont'd)

- Small clause:

```
        SC
       /  \
     NP     XP
```