

Structure of Clauses

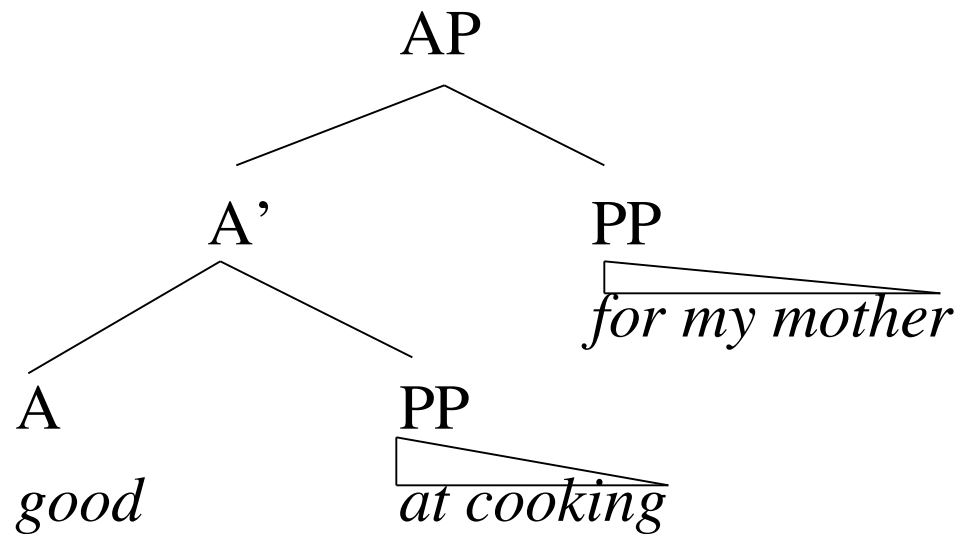
March 9, 2004

Preview

- Comments on HW 6
- Schedule review session
- Finite and non-finite clauses
- Constituent structure of clauses
- Structure of Main Clauses
- Discuss HW #7
- Course Evals

Comments on HW 6

What's wrong with this tree?



Comments (cont'd)

Applying diagnostics correctly

- Passivization
- Ellipsis/Pro-forms
- Optionality
- Finding heads of complex PPs

Review session?

- On Friday?
- When?

Finite and non-finite clauses

- There are many types of clauses, more of which will be discussed Thursday. But today we begin with finite versus non-finite clauses.
- Finite clauses: a clause that contains a finite verb (I.e., a verb inflected for tense/agreement)

Finite Clauses

- Tense/agreement marking in English:
 - Past tense: -(e)d for all persons and numbers
 - Present tense: -(e)s for 3rd person singular
 - ∅ for all other forms

∅ indicates a ‘null morpheme.’ There is no **overt** ending to mark tense in the relevant forms.

- These are **regular** endings. English also has irregular tense and agreement forms. For example:
 - He **thinks** about it/He **thought** about it.
 - I **am** a student/You **are** a student.

Finite Clauses (cont'd)

- English does not use separate markers for tense and agreement, though some other languages do (I.e., they might have one morpheme for person agreement, one morpheme for number agreement, and one morpheme for tense).
- Examples of overt inflection tense and agreement in English:
 - Present tense:
 - I/you/we/they *love* dogs
 - He/she/it *loves* dogs
 - Past tense:
 - I/you/he/she/it/we/they *loved* dogs

Nonfinite Clauses

- Nonfinite clauses: 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).

Nonfinite Clauses (cont'd)

- There are three main types of nonfinite verb-forms in English:
 - Uninflected infinitive forms which comprise simply the base or stem of the verb with no added inflection (such forms are frequently used after the so-called 'infinitive particle' *to*)
 - Gerund forms which comprise the base plus the *-ing* suffix
 - Perfect/passive participle forms which generally comprise the base plus the *-(e)n* suffix (though there are numerous irregular participle forms in English).

Distinguishing finite from nonfinite clauses

- Take the following examples:
 - I know [that you *hate* syntax]
 - I'd never known [you *hate* anything as much as syntax]
- Is the verb *hate* finite or nonfinite in these examples?

Distinguishing (cont'd)

- In this case, we can't tell just by looking at the overt morphology.
- Remember, in English second person forms of present tense carry no overt inflection (a 'zero' morpheme) and appear inflectionless.

Distinguishing (cont'd)

- There are a number of tests we can apply here:
 - We can change the subject of the clause from *you* to a third person singular subject like *Peter*, and see whether the verb remains invariable or requires a present tense *-es* inflection:
 - I know [that Peter *hates*/**hate* syntax]
 - I've never known [him *hate*/**hates* anything as much as syntax]
 - What does this test tell us?

Distinguishing (cont'd)

- A second test is to see whether the relevant verb form can be replaced by a past tense form carrying the overt past tense inflection *-ed*:
 - I knew [that Peter *hated*/**hate* syntax]
 - I'd never known [him *hate*/**hated* anything as much as syntax]

Distinguishing (cont'd)

- A third test involves modal auxiliaries. Remember from chapter 3, modal auxiliaries lack nonfinite forms, and are therefore intrinsically finite.
- If a clause can contain a modal auxiliary, it is finite; if a clause cannot contain a modal, it is nonfinite (this is in addition to the main verb, obviously):
 - I know [that you *will/might/could/should* hate syntax]
 - *I've never known [you *will/might/could/should* hate anything as much as syntax]

Subjunctives

- A clause that contains an invariable/uninflected verb is not necessarily nonfinite.
- Some finite verbs lack the morphological characteristics of regular finite verbs.
- The distinction here is indicative vs. subjunctive (sometimes referred to as *mood*).

Subjunctives

- Examples:
 - I know [that you *leave* for Hawaii tomorrow]
(indicative)
 - I demand [that you *leave* for Hawaii tomorrow]
(subjunctive)
 - C.f. I demand [that he *leave* for Hawaii tomorrow]

Subjunctives (cont'd)

- Also, the subjunctive form remains invariable in the past tense:
 - I know [that Peter *left* for Hawaii last week]
 - I demanded [that Peter *leave* for Hawaii the following day]
- Why do we call them finite, even if the verb form is invariable?

Subjunctives (cont'd)

- Universalist evidence:
 - Languages that have a richer inflectional system than English often inflect subjunctive clauses (I.e., German):
 - Wenn ich Millionär wäre...
 - Wenn du Millionär wärst...
 - See also the Spanish example in the text

Subjunctives (cont'd)

- English evidence:
 - Subjunctives and indicatives share certain morphosyntactic properties that distinguish them from nonfinite clauses.
 - Neither indicative nor subjunctive clauses can be subjectless, but nonfinite clauses can be:
 - *I know [that leaves for Hawaii tomorrow]
 - *I demand [that leave for Hawaii tomorrow]
 - I intend [to leave for Hawaii tomorrow]
 - ?I intend leaving for Hawaii tomorrow

Subjunctives (cont'd)

- More English evidence:
 - Subjunctive complement clauses pattern like indicative clauses with respect to case marking of overt subject pronouns:
 - I know [that *they*/**them*/**their* leave for Hawaii tomorrow]
 - I demand [that *they*/**them*/**their* leave for Hawaii tomorrow]
 - I want [*them*/**they*/**their* to leave for Hawaii tomorrow]
 - I don't like the idea of [*them*/*their*/**they* leaving for Hawaii tomorrow]

Subjunctives (cont'd)

- Even more English evidence:
 - Subjunctive complement clauses can be introduced by the overt complementizer *that* (more info about this later in the lecture)

Constituent structure of clauses

- So far we've used the following rule for clauses:
 $S \rightarrow NP M VP$
- But in these sentences the clauses contain something before the NP:
 - We know for certain [*that* the president will approve the project]
 - We would obviously all prefer [*for* the matter to be resolved amicably]
 - I couldn't really say [*whether* it will rain]

Clause structure (cont'd)

- These particles are called *complementizers*, which can be abbreviated COMP or C
- Emonds (1976) proposes C as a sister to the NP subject:
 $S \rightarrow C NP M VP$
- Bresnan (1970) proposes C and S form a larger constituent which she calls S':
 $S' \rightarrow C S$
 $S \rightarrow NP M VP$

Clause structure (cont'd)

- Evidence from Shared Constituent Coordination (with gapping):
 - I wonder whether [_SPeter likes fish] and [_SMary meat]
 - *I wonder [_S'whether Peter likes fish] and [_S'whether Mary meat]
- Gapping can only take place with conjoined S', not S. This presupposes the existence of S and S' as separate categories.

Clause structure (cont'd)

- What about this sentence?
 - We know for certain [??the president will approve the project]
- What is the ?? constituent? S or S'?

Clause structure (cont'd)

- Coordination can give us a clue:
 - We know [the president will approve the project] and [*that* Congress will ratify his decision]
- Since we know we can only coordinate constituents of the same type, what does this tell us?

Clause structure (cont'd)

- [_S' [_C *e*] [_S The president will approve the project]]
- Here *e* stands for an empty constituent

Main clauses

- Can main clauses contain overt complementizers in English?
 - *That the government may change its decision.
 - *Whether the Prime Minister will resign?

Main clauses (cont'd)

- Main clauses in English are indeed S' constituents, though languages like English are subject to a language-specific restriction that C in main clauses must be empty.
- Then why S'?
 - Universalist evidence: many languages do use overt C's to introduce main clauses.
 - Young children often misanalyze preposed auxiliaries as 'question particles' in English (This makes a nod to the notion of UG, that children are born 'knowing' that there is a C node)

Main Clauses (cont'd)

- Particularist evidence from English:
 - Inverted auxiliaries:
 - Your sister could go to college.
 - Could your sister go to college?
 - But does the inverted auxiliary occupy the C node? Or another node?

Main Clauses (cont'd)

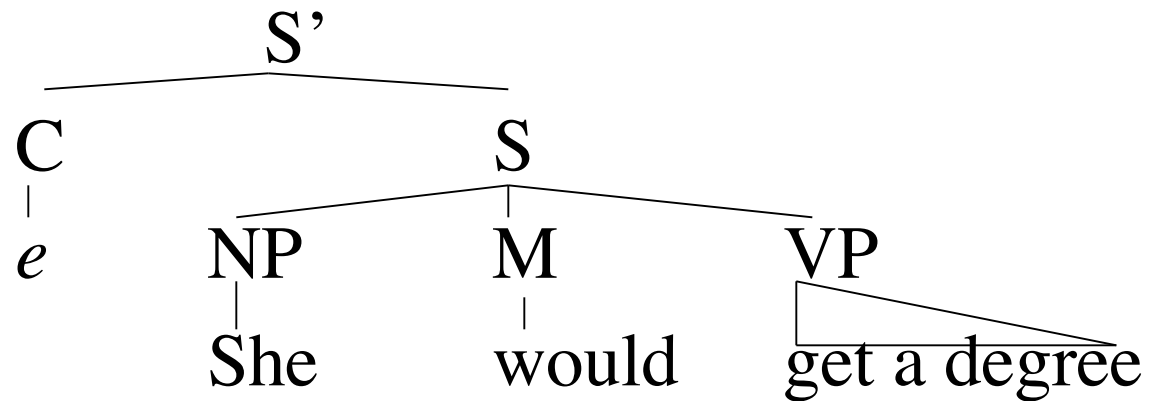
- If the inverted auxiliary occupies COMP, then other COMPs should be blocked:
 - Semi-indirect speech:
 - ‘Will I get a degree?’ Peter wondered?
 - Peter wondered *whether he would get a degree*
 - Peter wondered *would he get a degree*
 - *Peter wondered *whether would he get a degree*

Main clauses (cont'd)

- More evidence for auxiliaries moving to COMP from archaic subjunctives:
 - One must be vigilant, [*whether* it be at home or abroad]
 - One must be vigilant, [*be* it at home or abroad]
 - One must be vigilant, *[*whether be* it at home or abroad]

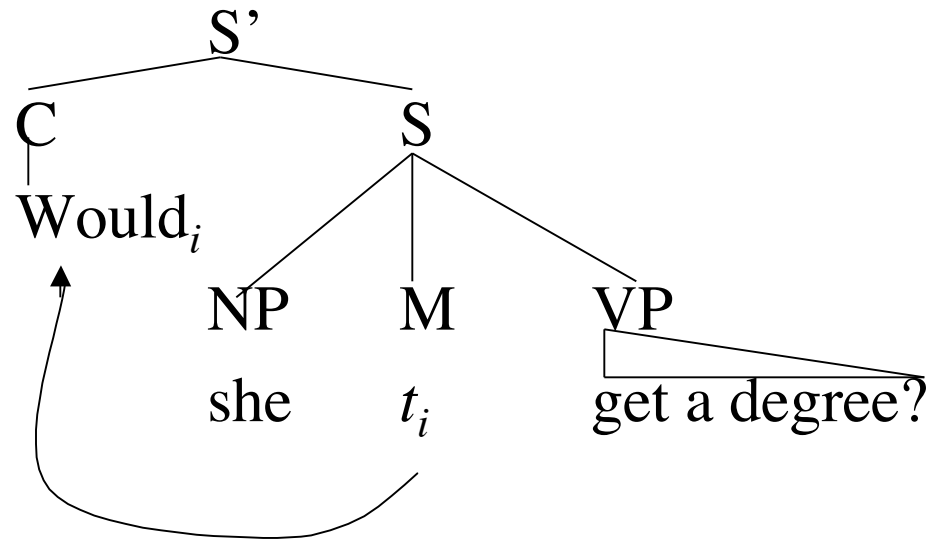
Main clauses (cont'd)

- What do these structures look like?



Main clauses (cont'd)

- After movement:



The particulars of this movement will be covered in detail next quarter.

Types of complementizer

- Different complementizers introduce different types of clauses (finite, nonfinite, WH/interrogative).
- *That* introduces finite, non-interrogative clauses:
 - I am anxious [*that* you should arrive on time]
 - *I am anxious [*that* you to arrive on time]

COMPs (cont'd)

- *For* introduces non-interrogative infinitive clauses:
 - I am anxious [*for* you to arrive on time]
 - *I am anxious [*for* you should arrive on time]
- *Whether* introduces interrogative complement clauses that can be either finite or nonfinite:
 - I don't know [*whether* I should agree]
 - I don't know [*whether* to agree]

COMPS (cont'd)

- *If* introduces interrogative clauses that are always finite:
 - I don't know [*if* I should agree]
 - I don't know [*if* to agree]

COMPs (cont'd)

- We can generalize these subcategorization restriction with our handy dandy system of feature matrices:
 - *That* [-WH, +FINITE]
 - *For* [-WH, -FINITE]
 - *Whether* [+WH, +/- FINITE]
 - *If* [+WH, + FINITE]

HW #7

- Section 5.6 presents two constraints on possible phrase structure rules, the Endocentricity Constraint (p.262) and the Modifier Maximality Constraint (p.263). Assume that our category inventory consists of N, V, D, A, ADV, and P. Further assume the X-bar schema given on p.254 (i.e., that the head and the mother of each phrase belong to the same category, although they may have different bar levels) and that 'maximal projections' are all X".
 - List 10 category-specific (i.e., no category variables like X or YP) phrase structure rules which are consistent with these constraints.
 - List 5 phrase structure rules given in earlier chapters of the textbook (either explicitly, or implicitly in trees) which are not consistent with the constraints. Cite a page number for each rule.
 - List 5 more phrase structure rules not (to your knowledge) used in the book, which are also inconsistent with the constraints.

HW #7 (cont'd)

- Section 5.7 generalizes across the category-specific rules and ends up with the following set of rules (for English):
 - $X'' \rightarrow (YP) X'$ (generalized specifier rule)
 - $X' \rightarrow YP X'$ (generalized attribute rule)
 - $X' \rightarrow X' YP$ (generalized adjunct rule)
 - $X' \rightarrow X YP^*$ (generalized complement rule)
- As Radford notes, these rules overgenerate: Not all categories can appear as specifiers, attributes, adjuncts, or complements of all other categories. Furthermore, even one category (say NP) can in general appear in some position (say complement of V), specific lexical items can create exceptions.

HW #7 (cont'd)

- Give five examples of ungrammatical strings which would be licensed by the generalized rules above. Each example should be different from the others in terms of which category is illicitly showing up in which position.
- Draw a tree for each example showing how the generalized rules are applied.
- Extra credit: What kind of constraints might you add to the system to rule out some of these ungrammatical cases? (Please limit your answers to two paragraphs.)

HW #7 (cont'd)

- Using the three tests given in Section 6.2, determine whether the italicized verbs in the following sentences are finite or non-finite:
 - I doubt that you *like* chocolate.
 - They always *eat* chocolate.
 - They tend to *eat* chocolate.

Summary

- Applying diagnostics correctly
- Finite Vs. Nonfinite verbs
- Indicative Vs. Subjunctive mood
- Main clauses have the status of S' (of the form C S), and depending on the clause type, C may be empty or full