

Grammars and Lexicons: 11-721
Homework 2
Due Wednesday, September 26, 2007

1 Constituent Structure – English

In this exercise we will examine the constituent structure of sentences (1)a and (1)b below:

- (1) a. Mary made John proud of himself.
b. Mary made John a picture of himself.

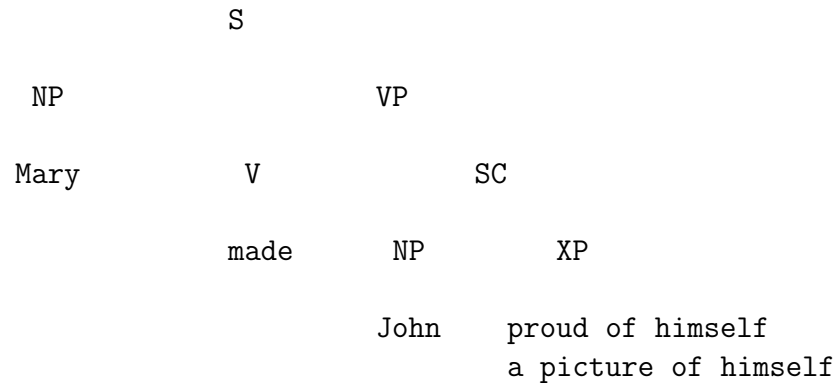
We will consider the two constituent structures below:

- XP can be AP (*proud of himself*) or NP (*a picture of himself*).
- SC is a *small clause* — an NP subject and a predicate that is an NP, AP, or PP.

Constituent Structure I:

	S			
	NP		VP	
Mary	V	NP	XP	
	made	John	proud of himself a picture of himself	

Constituent Structure II:



Applying tests for constituency: In the next few tasks you will apply tests for constituency and get grammaticality judgments from a native speaker of English. You can use your own grammaticality judgments if English was your first language or was the language of your primary school.

Task 1: Apply a movement test to *John proud of himself*.

Task 2: Apply a coordination test to *John proud of himself*.

Task 3: Apply a movement test to *John a picture of himself*.

Task 4: Apply a coordination test to *John a picture of himself*.

In this section of the problem, you will see how the reference of pronouns and reflexive pronouns relates to this constituency problem.

In English, a reflexive pronoun in a prepositional phrase can refer to either the subject or the object of the sentence. The indices i and j show what the pronoun refers to.

(2) John(i) told Bill(j) about himself(i/j).

A non-reflexive pronoun cannot refer to an element in the same clause. A star on an index shows that the pronoun can't refer to that index. For example, *him* in (3) cannot refer to *John* or *Bill*.

(3) John(i) told Bill(j) about him($*j/*i$)

However a non-reflexive pronoun can refer to an element in a different clause. The index j refers to someone who is not mentioned in the sentence.

(4) Mary(i) told John that Bill likes her(j/i).

Now consider the following sentences. Use the grammaticality judgements given, even if you don't agree with them. Be careful about the indices and the stars. Sometimes there is a star on one index, but not the other.

(5) a.* Mary made John proud of herself.

b. Mary(i) made John proud of her(i/j).

c. Mary made John proud of himself.

d. Mary made John(i) proud of him($j/*i$).

(6) a. Mary made John a picture of herself.

b. Mary(i) made John a picture of her($*i/j$).

c. Mary made John a picture of himself.

d. Mary made John(i) a picture of him($j/*i$).

Task 5: Fill in the following table. In each box, write:

Tree 1 if the test supports Tree 1

Tree 2 if the test supports Tree 2

Both if the test results are compatible with both trees

Neither if the test results are not compatible with either tree.

	Movement	Coordination	Reflexive	Pronoun
John proud of himself				
John a picture of himself				

Task 6: Which tree do you choose for *Mary made John a picture of himself*?

a. **Tree 1**

b. **Tree 2**

Task 7: Were some of your results inconsistent with the tree that you chose?

Task 7a: If so, why did you choose to ignore them?

2 Possessive Noun Phrases

In the last homework assignment, possessive pronouns like *his* were treated as determiners. However, possessors can be full noun phrases as in *the boy across the street's toy* where the possessor is *the boy across the street*.

The 's is a clitic, not a full word, but not a prefix or suffix. One of the things that makes it different from prefixes or suffixes is that it attaches to words that aren't related to it. In *the boy across the street's toy* the 's indicates that the boy is a possessor, but it attaches to *street*.

Task 1: Using the phrase structure rules below, draw two trees for *the wife of your friend's brother*, which has two different meanings. Assume that *of your friend* is an argument, not an adjunct. For the sake of simplicity, *your* is still treated as a determiner because it does not occur with 's.

Task 2: Using the phrase structure rules below, draw two trees for *We gave her dog biscuits*. The verb *give* should have three arguments: agent, theme, and recipient.

S --> N' ' VP

VP --> V N' ' N' '

PP --> P N' '

N' ' --> (Det) N'

N' ' --> NP 's N'

N' --> N (PP)

Det --> the

Det --> your

Det --> her

N --> N N

Task 3 (Extra Credit, five percent): When there is an NP consisting of NP 's N', what principle determines that the N-bar and not the possessor NP is the head of the whole NP? I'm looking for a syntactic principle, which might be found somewhere in Radford's book. A semantic principle is reasonable — *the boy's book* is a book, not a boy — but that is not the answer I'm looking for. The answer is very specific and pretty short.