Extra practice: Syntax trees

- These examples give you a chance to practice some of the recent topics in syntax
- An answer key is provided separately so that you can check your own work
- If you find that you have questions, you can:
 - Post in the W Sept 30 Forum on Sakai
 - Bring them to your recitation on Friday
 - Bring them to office hours
 - Email an instructor
 - Request them for review discussion in class on M Oct 5 (there's a Sakai Forum specifically for review requests!)
- (1) Draw a tree for the following sentence:

Louis wonders if Marcia knows the answer to his question.

(2) This sentence has two different meanings, which can successfully be represented as two different tree structures in our current X' model.

Charlotte met a friend of the drummer from Ohio.

- (a) Describe what the two meanings are.
- (b) Draw the two trees.
- (c) State which tree matches which meaning, and explain how you know.
- (3) This is the surface structure of a sentence:

Which cousin did George get a letter from?

- (a) What is the deep structure of this sentence?
- (b) Which syntactic rules have applied?
- (c) Draw trees for...
 - the deep structure
 - the outcome after *each* of the applicable rules has applied (in other words, show what happens step-by-step as the sentence is transformed)

ANSWERS:

(1) Draw a tree for the following sentence:

Louis wonders if Marcia knows the answer to his question.

Things to notice / think about before starting to draw the tree:

- Always start with the word category labels
- There is an embedded sentence (TP): Marcia knows the answer to his question
 - Draw this structure first
- Subject (NP) = Marcia; predicate (VP) = knows the answer to his question
- VP has NP (head = answer) and PP (head = to) inside it lots of possible structures here
 - Check for constituency!

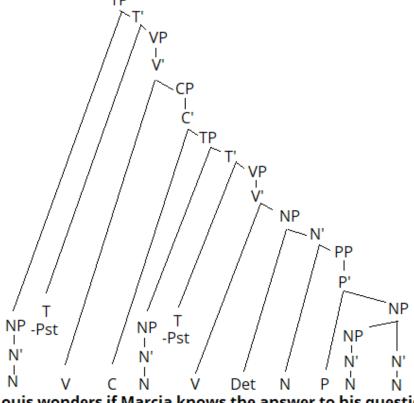
Marcia knows the answer to his question

Marcia knows $\underline{it} \rightarrow [the answer to his question]$ passes constituency test

Marcia knows <u>it</u> to his question \rightarrow [the answer] fails constituency test

so: the answer to his question is all a constituent (namely, a NP, because head is answer)

- Matrix (main) clause now looks like this: Louis wonders if TP
- Subject (NP) = *Louis*; predicate (VP) = *wonders if* TP
- Embedded sentence is complement to a C = if



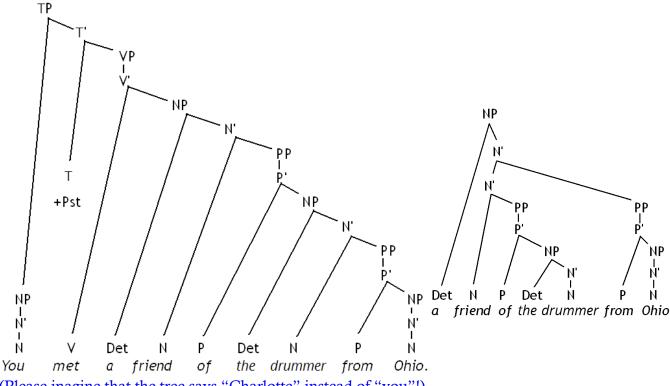
Louis wonders if Marcia knows the answer to his question

(2) This sentence has two different meanings, which can successfully be represented as two different tree structures in our current X' model.

Charlotte met a friend of the drummer from Ohio.

- (a) Describe what the two meanings are.
 - The friend is from Ohio; the drummer might or might not be
 - The drummer is from Ohio; the friend might or might not be
- (b) Draw the two trees.

(whole sentence, showing option 1 for the NP whose head is *friend*) (option 2 for this NP)



- (Please inagine that the tree says "Charlotte" instead of "you"!)
 - (c) State which tree matches which meaning, and explain how you know.
 - In tree #1, the PP from Ohio is inside the NP whose head is drummer. The group of words [the drummer from Ohio] is a constituent: Charlotte met a friend of his. This gives the meaning where the drummer is from Ohio.
 - In tree #2, the PP from Ohio is outside the NP whose head is drummer, but inside the NP whose head is *friend*. The group of words [the durmmer] by itself, leaving out [from Ohio], is a constituent: Charlotte met a friend of his from Ohio. This gives the meaning where the friend is from Ohio.

(3) This is the surface structure of a sentence:

Which cousin did George get a letter from?

(a) What is the deep structure of this sentence?

Here are some useful things to think about:

- When a question has a form of *do* as the fronted auxiliary, this is an outcome of *Do* Insertion, so the form of *do* was not present in the deep structure
- When you have a WH question, think about what a (full-sentence) answer to the question would look like, and this shows you where the WH phrase has moved from

So, the deep structure here would be:

+Q George (+Pst) got a letter from which cousin

(b) Which syntactic rules have applied?

All three have applied:

- *Do* Insertion provided the form of *do* to go in the T position
- Inversion moved the auxiliary in T (the form of *do*) up to the C position
- WH Movement moved the WH phrase from its original position inside the PP whose head is *from* up to the initial position in the sentence
- (c) Draw trees for...
 - the deep structure
 - the outcome after *each* of the applicable rules has applied (in other words, show what happens step-by-step as the sentence is transformed)

*** I've had several requests to do this one step-by-step in class on M Oct 5, so we'll do that.