1 Introduction

You midterm should be on 8\(\frac{1}{2}\)" × 11" paper computer printed or typewritten. You may draw your trees by hand on the same size paper, but draw them in ink.

The midterm is due at the start of class on Thursday October 29, 2015.

Work by yourself. No collaboration is allowed. Non native speakers may ask native speakers for help with judgments with their own constructed examples, but not for help on any of the technical material in the exam or for help in constructing the examples. Non-native speakers should remember that their judgments will not be scored; the only thing being scored is whether they draw the right conclusions from the judgments they give.

2 Trees

Draw trees for the following sentences, using the rules of Chapter 7. Here are the only rules you will need to use in your trees. Assume the part of speech
of the English possessive ending ('s) is D.

\[
\begin{align*}
CP & \rightarrow C' \\
C' & \rightarrow C TP \\
TP & \rightarrow \{ \text{DP} \ , \text{CP} \} \ T' \\
T' & \rightarrow T \ \{ \text{DP} \ , \text{AP} \} \\
\text{DP} & \rightarrow (\text{DP}) \ D' \\
\text{D'} & \rightarrow D \ N' \\
\text{NP} & \rightarrow N' \\
N' & \rightarrow N' \ PP \\
N' & \rightarrow \text{AdjP} \ N' \\
N' & \rightarrow \text{NP} \ N' \\
N' & \rightarrow N \ \{ \text{PP} \ , \text{CP} \} \\
\text{PP} & \rightarrow P' \\
P' & \rightarrow P \ (\text{DP}) \\
\text{AdjP} & \rightarrow (\text{DegP}) \ Adj' \\
\text{Adj'} & \rightarrow \text{AdvP} \ Adj' \\
\text{AdvP} & \rightarrow (\text{DegP}) \ Adv' \\
\text{Adv'} & \rightarrow \text{AdvP} \ Adv' \\
\text{DegP} & \rightarrow (\text{DegP}) \ Deg' \\
\text{Deg'} & \rightarrow \text{Deg} \\
\text{VP} & \rightarrow V' \\
V' & \rightarrow V' \ PP \\
V' & \rightarrow V' \ AdvP \\
V' & \rightarrow AdvP \ V' \\
V' & \rightarrow V \ (\text{DP}) \ \left( \{ \text{PP} \ , \text{DP} \ , \text{CP} \} \right)
\end{align*}
\]

Make sure your trees are readable whether you draw them by hand or with a computer. Readability considerations many of you have ignored in your homeworks include (a) size of the tree and the size of the print in the tree; (b) using a pencil; use a pen instead; and (c) reasonably spaced layout of the tree. If you draw your tree illegibly, you will receive no credit for it. Please use the tree website if you are having trouble drawing legible trees.
If you draw your tree by hand, draw it on a separate piece of paper as many times as it takes to resolve your layout issues. Then copy it to your final version neatly. Do not use any triangles in these trees. At all. You will be marked off for every node you omit by using a triangle.

If you posit a word with white space in it, put quotation marks around the proposed lexical item. For example, a tree claiming that \textit{John Smith} is a noun would look like this:

\[
\begin{array}{c}
\text{N} \\
\text{‘John Smith’}
\end{array}
\]

However, if you treat phrases that have a syntactic analysis, such as \textit{too happy}, as single words, you will lose points.

If you do not know the part of speech of a word, consider the fact that this is a take home midterm. Do a Google search and get examples of the usage of the word.

You do not have to give any syntactic arguments in this section but, before drawing your trees, you should make sure that the things your trees claim are constituents are in fact constituents. If an example is ambiguous, draw a tree for one of the readings but give an unambiguous paraphrase of the reading you are drawing the tree for. A paraphrase of a sentence $S$ is another sentence that has the same meaning as $S$. It is not a partial clue as to the meaning. Thus, for \textit{Cow injures farmer with axe}, \textit{Cow uses an axe to injure farmer} is a paraphrase, but \textit{The cow has the axe} is not. Paraphrases should not themselves be ambiguous. Thus, \textit{Cow uses an axe to injure farmer} is better than \textit{Cow injures farmer using an axe}, because \textit{Cow injures farmer using an axe} has the same ambiguity as \textit{Cow injures farmer with axe}.

(2.1) The Queen of Bohemia’s hatred for their kind reminded them that no English farmer should buy Bohemian cheese.

(2.2) The possibility that the citizens of Freedonia might revolt alarmed the ruling class.

(2.3) The precipitous fall in the price of three-legged cows threatened the livelihood of Transylvanian dairy farmers.

3 Parts of speech and embedded clauses

(3.1) Assign parts of speech in the following sentence. Assume that nouns may be modified by nouns, and assume that \textbf{Deg} is a part of speech.
(1) The precipitous fall in the price of three-legged cows threatened the livelihood of Transylvanian dairy farmers.

(3.2) Consider sentence (2) from the previous section, repeated here:

The Queen of Bohemia’s hatred for their kind reminded them
[CP that no English farmer should buy Bohemian cheese].

Determine whether the bracketed embedded clause is finite or non-finite. Give two arguments for your decision.

4 Complements, Adjuncts, and Xbar trees
[Ch. 6]

(4.1) Consider the following sentence.

(2) The day began with the report on the polar expedition.

Come up with two arguments of your own that the on-PP following the noun report is a complement or an adjunct of report. Then draw the tree for (2) in a way that is consistent with the analysis you argued for.

5 Binding Theory

Each of the following sentences has a pair of coindexed NPs. Consider each sentence and do the following:

1. Draw a tree according to the rules of Chapter 3, with the following rules replacing the NP rule and the VP rule:

\[
\begin{align*}
\text{NP} & \rightarrow \left\{ \left( D_{\text{NP POS}} \right) (\text{AdjP}^+) (\text{NP}^+) (\text{PP}^+) (\text{CP}) (\text{PP}^+) \right. \\
\text{VP} & \rightarrow (\text{AdvP}^+) \text{ V} (\text{NP}) (\text{NP}) (\text{PP}^+) (\text{CP}) (\text{AdvP}^+) (\text{NP}^+) (\text{AdvP}^+) (\text{PP}^+) (\text{AdvP}^+)
\end{align*}
\]

In the NP rules, POS is the part of speech of “’s”. So in the NP

John ’s book

there are three words and the middle word has part of speech POS.

Note your trees should have indices (is, js, and ks) consistent with the indices you are given below.
2. Find all the Binding theory violations in each of the following sentences, if any, and state what principle is being violated. Explain what the violation is (Principle A, B, or C), what NP causes it, and what the Binding domain is, if the Binding domain is relevant to the principle you’re invoking. Note: No judgments are given, but don’t draw any conclusions from that. That is, don’t assume the sentences are grammatical because there is no judgment given, and don’t assume they are grammatical or ungrammatical because your own judgments say so. Just tell us what the Binding Theory says.

(5.1) Lucy sent Sue [NP a picture of her].
(5.2) Randall lent him [NP Benny’s Volkswagen].
(5.3) Wiley remembered [NP Lois’s letter about her].
(5.4) [NP The brouhaha about her, Pomeranian] upset Nancy.

### 6 Phrase structure rules

Tzotzil is a Mayan language spoken in Mexico. Consider the following sentences, then answer the questions that follow. Glosses have been simplified and the orthography altered from the original source. (Data from Aissen 1987.)

(3) 'ispet lok'el 'antz ti t'ule.
   “The rabbit carried away (the) woman.” (Assume lok’el is an Adv).

(4) 'ibat xchi’uk smalal li Maruche.
   “(the) Maruch went with her husband.” (Maruche is a proper name.)

(5) Pas ti 'eklix’a’une.
   “The church was built.”

Answer the following questions about Tzotzil. Do not break apart words in your analysis.

(6.1) What is the NP rule for Tzotzil?
(6.2) What is the PP rule for Tzotzil?
(6.3) Using the same constraints on VP as discussed in the Irish problem of Chapter 4, p. 145, Challenge Problem 3, consider whether Tzotzil can have a VP. Explain why or why not, being sure to explain the similarity to, or difference from, the Irish case. If you cannot posit a VP don’t do so. If you can, what is the VP rule for Tzotzil?

(6.4) What is the TP rule for Tzotzil? Make sure your answer is consistent with your answer to the previous question.

(6.5) What is the subject of sentence (4)?

(6.6) Is ti ’eklixa’une a subject or an object in sentence (5)?

(6.7) Does the verb precede the subject in Tzotzil?

(6.8) Does the object precede the subject in Tzotzil?

(6.9) Does the verb precede the object in Tzotzil?

(6.10) Using the rules you developed in (1-4) above, draw the trees for (4) and (5).