50 points total, the number of points for each part is indicated a number in brackets.

1. [8] Fill in the missing labels for the nodes in the tree below. Where a node is the maximal projection of a lexical item, indicate it with the standard “X-bar” notation (e.g., NP for the maximal projection of a noun, v’ for an intermediate projection of v). The sentence is *Cyrano secretly mailed bundles of paper to Roxane*. I have indicated the category feature of each lexical item. The arrow is for use in question 4.

2. [6] In the sentence for which the structure is given above:
   
a. Is mail bundles a constituent?  
   b. Is bundles of paper to Roxane a constituent?  
   c. Is secretly mail a constituent?  
   d. What is the specifier of V?  
      [Note: “specifier of V” means the same thing as “specifier of VP”]  
   e. What is the complement of v?  
   f. Are T and secretly sisters?

3. [2] Circle one: The verb shown in the structure above is  
   
   ditransitive / transitive / unergative / unaccusative
4. [2] Circle every node in the tree above c-commanded by the node designated by the arrow.

5. [3] Name the $\theta$-role that [to Roxane] has: Goal

6. Suppose we start building a structure for a sentence, and at a certain stage we wind up with a $vP$ as shown (abstractly) below.

```
  vP
   vP
    v' P NP5
       PP
      NP1
       v P
        vP
         V P NP2
             <V>
              NP3 PP
               NP4
```

a. [3] Name the $\theta$-role that the NP$_2$ will have. Theme

b. [2] If NP$_4$ were an anaphor, which NPs could serve as its antecedent? (That is: Which NPs could potentially bind NP$_4$?)

NP$_3$ and NP$_1$. (NP$_2$ contains NP$_4$, NP$_5$ doesn’t c-command NP$_4$)

c. [2] How many [uP] features were there, total, in these lexical items initially?

None (maybe a little bit of a trick question—the PPs are both adjuncts)

d. [3] Which of the following three sentences might plausibly include this kind of $vP$?

1. I rent movies about crime from Blockbuster.
2. I read books about cities with subways beneath them.
3. I drink tea in summer with delight.

The answer here hinges on where the PPs attach. In the tree, one PP modifies the Theme, the other NP modifies the whole $vP$. In #2 above, one PP modifies the object of a PP that modifies the Theme; in #3 above, both PPs modify the $vP$.

7. [2] Circle one: The verb shown in the structure above is
ditransitive / transitive / unergative / unaccusative
8. Binding Theory. The sentence below is “trying to mean” Mary claimed that she (Mary) nominated herself. Two questions, about the sentence below:

a. [1] Which NP ensures that the sentence satisfies Principle A?

Mary

This question was not a model of clarity. Principle A involves two things, the anaphor and the binder. The anaphor is relatively obvious (herself), the question was really: Which NP binds “herself”? To compensate for the level of confusion this question generated, it was only worth a single point.

b. [2] Which Principle makes the sentence ungrammatical on the intended interpretation?

Principle C

*Shei claimed that [Maryi nominated herselfi].

9. Suppose you had a sentence with the following abstract structure. I have provided two lexical items (the NP dinner and the verb burn). Fall 2009 note: In part (c), you need to change the verb form into whatever is appropriate—“burn” is provided here as the uninflected base form. Also, assume that T is a present tense (nonpast) T.

\[
\text{TP} \quad \text{T'} \\
\quad \text{NP} \quad \text{T} \\
\quad \text{dinner} \quad \text{Prog+T} \\
\quad \text{[N]} \quad \text{[…pres…]} \\
\quad \text{ProgP} \quad \text{vP} \\
\quad \text{<Prog>} \quad \text{v} \\
\quad \text{V+v} \quad \text{VP} \\
\quad \text{burn} \quad \text{<V>} \quad \text{<NP>}
\]

a. [2] Irrelevant for Fall 2009, asks about something we haven’t covered.

b. [2] Irrelevant for Fall 2009, asks about something we haven’t covered.

c. [3] Write the sentence that this would be the structure for.

Dinner is burning

d. [2] What was the motivation to Merge T and ProgP?

Hierarchy of Projections

e. [2] What was the motivation to Merge V and NP?

\text{V has a \{uN\} feature that must be checked}
10. [3] What makes the following sentence ungrammatical, in terms of the system developed in class? Fall 2009 note: We haven’t completely formalized the process that has gone wrong here, but we have talked about it sufficiently that you can probably identify the problem.

*Patricia did not be hiding her income.

Fall 2009 version of the answer: Prog did not move to T.

I got a variety of answers on this one, not many of which were the one I gave above. Often, people identified the fact that there was “unnecessary do-support” or discussed how grammatical sentences look without then going back to say what’s different between the sentence above and a grammatical sentence. Often, too, the grammatical sentences being compared with the sentence above were basically entirely different sentences (“Patricia will not be hiding her income” or “Patricia has not been hiding her income”). What this sentence should have been was: “Patricia was not hiding her income.”

The main thing to notice here is Prog. It’s to the right of negation. That’s where it belongs according to the Hierarchy of Projections, there’s nothing amiss here about the HoP. The thing is that it is an auxiliary, and in English, auxiliaries … have to move to T… And that’s what didn’t happen here. Prog (“be”) stayed where it was. As for do-support, it wasn’t really wrong either, given that the auxiliary didn’t move. The real crux of the problem is that the auxiliary didn’t move.