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 *Milo can decode messages from anyone*. 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:

For questions a–c, the constituency can be read off the tree (is there a single node that dominates all of the words specified and no others?), no need for constituency tests. The answer for e is not M. MP is the sister of the head (T).

a. Is *messages from anyone* a constituent?  
   Yes

b. Is *decode messages* a constituent?  
   No

c. Is *decode messages from anyone* a constituent?  
   Yes

d. What is the specifier of TP?  
   NP (*Milo*)

e. What is the complement of T?  
   MP

f. Does *decode* dominate *from anyone*?  
   No
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.

For #4, a number of people were circling “little v” as well—I took that into account, and assumed that you were not circling them as part of the answer to this question. Sorry for choosing “circling” as the means of designating the answer to #4. **Fall 2009 note:** That had to do with a suggestion I had made in class that “little v” be designated with a circle just generally, in order to make it more distinguishable from “big V” since I was finding it hard on the homework to see what people intended. You, Fall 2009 participant, should not have even been tempted to circle little v.

5. [2] Name the θ-role that [Milo] has:

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.

   ![Tree Diagram]

   a. [2] Name the θ-role that the NP② will have.

   b. [2] If NP② were an anaphor, which NPs could serve as an antecedent?
      (That is: Which NPs could potentially bind NP②?)
      \[ NP① \] (NP③, NP④ and NP⑤ don’t c-command NP②)

   c. [2] How many [uP] features were there, total, in these lexical items initially?
      \[ \text{One} \] \( (\text{on } V, \text{ selecting the Goal}) \)

   For #6(c–d) and #7, there is a certain interdependency, so if you said it was “transitive” in #7, then you would have been consistent to say there were “zero” [uP] features, and to have picked either sentence 1 or 3 in (d). One point was given for every matched pairing, so if you were consistent as outlined above, you’d get 3 points for consistency.
d. [3] Which of the following three sentences might plausibly include this kind of vP?

1. I paint portraits in vibrant watercolors on Tuesdays.
2. I give catnip to eager cats in Summer.
3. I buy coffee with extra sugar at noon.

In the sentences above, only one has a Goal. In the other cases, the PP either modifies the theme (in vibrant watercolors, with extra sugar) or the vP (on Tuesdays, at noon, in Summer).

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 convinced herself that John likes her (Mary). Two questions, about the sentence below:

a. [3] Why can’t Mary serve as the antecedent for herself?

Mary is not in the same clause/sentence as herself.

It was important to mention the fact that Mary is not in the same clause (binding domain) as herself. Also: It is wrong to think that Mary does not c-command herself. You can see that Mary c-commands herself by testing it for Principle C: *Bill convinced her that John likes Mary. This is bad because it violates Principle C, which in turn tells us that her here c-commands Mary.

b. [2] Which Principle of Binding Theory is not violated in this sentence?

Principle B

I had a couple of people who said “Principle 2”. That’s not the right terminology, though I graded these as if 1=A, 2=B, 3=C. “Principle B” is the right name for the second principle of Binding Theory.

*Shei convinced Maryi that John likes 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: You will need to change the verb form in part (c) to whatever is appropriate, “burn” here is intended to represent the basic uninflected form. Assume too that the T is a present tense (nonpast) T.

\[
\begin{array}{c}
\text{TP} \\
\text{NP} \\
\text{T} \\
\text{[N]} \\
\text{Perf+T} \\
\text{[...pres...]} \\
\text{PerfP} \\
\text{<Perf>} \\
\text{vP} \\
\text{<NP>} \\
\text{V+v} \\
\text{burn} \\
\text{<V>} \\
\text{VP} \\
\text{<NP>} \\
\text{dinner} \\
\text{[N]} \\
\end{array}
\]

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.

I have burned dinner. (or “I have burnt dinner” is ok too.)

d. [2] What was the motivation to Merge \( v' \) and NP?

\( v \) (or \( v' \)) has a \([uN]\) feature that must be checked

e. [2] What was the motivation to Merge Perf and \( vP \)?

Hierarchy of Projections

10. [3] What makes the following sentence ungrammatical, in terms of the system developed in class? (A grammatical sentence can be made using all the same lexical items—what is different about the sentence below? Why is it ungrammatical?)

*Patricia was not having eaten vegetables.

The Hierarchy of Projections was not obeyed: Perf should be above Prog.