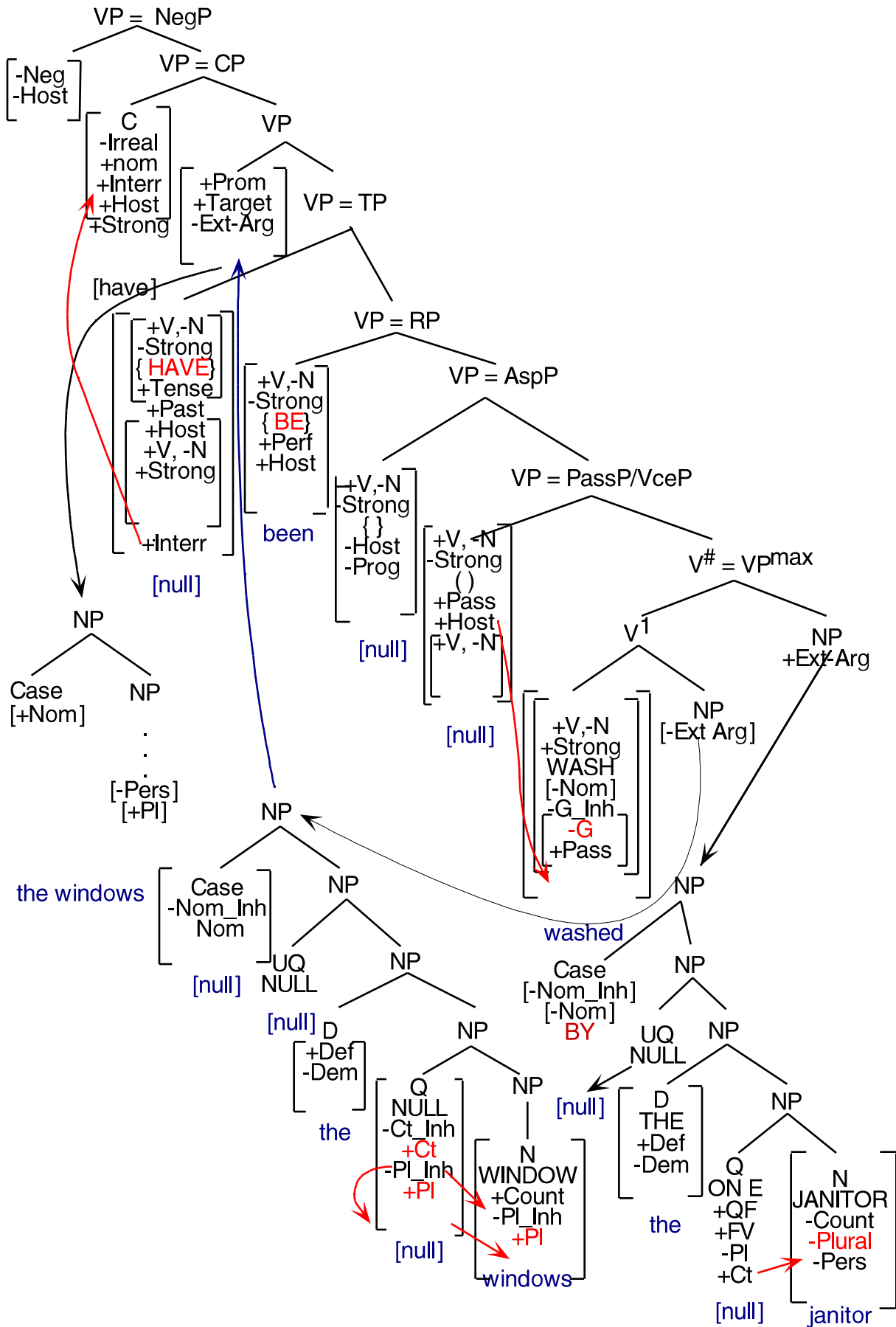# Final Exam

Linguistics 322

Spring 2003

Answer Sheet

I.   Determine the full D-structure (underlying structure) of the following sentence and complete a step-by-step derivation including complete NPs: [30]

(1)   Have the windows been washed by the janitor?

Final Exam

VP = NegP

$\begin{bmatrix} -Neg \\ -Host \end{bmatrix}$

VP = CP

$\begin{bmatrix} C \\ -Irreal \\ +nom \\ +Interr \\ +Host \\ +Strong \end{bmatrix}$

VP

$\begin{bmatrix} +Prom \\ +Target \\ -Ext\text{-}Arg \end{bmatrix}$

VP = TP

[have]

$\begin{bmatrix} +V,-N \\ -Strong \\ \{ HAVE \} \\ +Tense \\ +Past \\ +Host \\ +V, -N \\ +Strong \\ \\ +Interr \end{bmatrix}$

$\begin{bmatrix} +V,-N \\ -Strong \\ \{ BE \} \\ +Perf \\ +Host \end{bmatrix}$

VP = RP

VP = AspP

been

[null]

$\begin{bmatrix} +V,-N \\ -Strong \\ \{ \} \\ -Host \\ -Prog \end{bmatrix}$

VP = PassP/VceP

[null]

$\begin{bmatrix} +V, -N \\ -Strong \\ ( ) \\ +Pass \\ +Host \\ +V, -N \end{bmatrix}$

$V^{\#} = VP^{max}$

V^{1}

NP
+Ext-Arg

NP

Case
[+Nom]

NP

$\vdots$

[-Pers]
[+Pl]

[null]

NP
[-Ext Arg]

$\begin{bmatrix} +V,-N \\ +Strong \\ WASH \\ [-Nom] \\ -G\_Inh \\ -G \\ +Pass \end{bmatrix}$

NP

the windows

NP

$\begin{bmatrix} Case \\ -Nom\_Inh \\ Nom \end{bmatrix}$

NP

UQ
NULL

[null]

NP

Case
[-Nom_Inh]
[-Nom]
BY

NP

washed

[null]

D
[+Def]
[-Dem]

NP

UQ
NULL

NP

the

NP

[null]

D
THE
+Def
-Dem

NP

$\begin{bmatrix} Q \\ NULL \\ -Ct\_Inh \\ +Ct \\ -Pl\_Inh \\ +Pl \end{bmatrix}$

NP

N
WINDOW
+Count
-Pl_Inh
+Pl

the

$\begin{bmatrix} Q \\ ON E \\ +QF \\ +FV \\ -Pl \\ +Ct \end{bmatrix}$

$\begin{bmatrix} N \\ JANITOR \\ -Count \\ -Plural \\ -Pers \end{bmatrix}$

[null]

windows

[null]

janitor

II.   For example justify each step that you have completed; that is what principles are involved? [10]

Copy the internal argument to Prom

Ext. Arg: copy +Ct to N from A

Int Arg: copy +Ct from N to Q

By the alpha convention, replace black Pl with Plural to agree with +Ct.

Copy +PL to N from Q.

Adjoin +Pass to WASH, split to WASH + [+Pass]

Insert BE in [+Perf] since the only available host is taken.

Insert HAVE in [+Perf] since the only available host is taken.

Copy +Pl and -Pers from Prom-NP to +Tense

Copy + Interr to =Tense

Copy Head containing +Interr back to C.

Spell out.

III.   Name all the strategies available at this time. Take an example each out of your an-swer for and use it to illustrate the strategies that you have named. (10)

copy value of feature to valueless feature. In the external argument, "+" is copied from Pl to in Q to Pl in N under terms of government.

adjoin X, X a feature, head, or phrase to a host. Adjoin +Tense to host, the strong (main) verb. (sufficient to say adjoin a feature, since I never covered this in detail.)

Insert a dummy form. BE is inserted in [+Perf] since it governs +Passive.

IV.   Identify the theta roles for each argument in. [5].

the windows = theme; janitor = agent.

V.   No structures are necessary for (2). Just discuss the relationship between (2a) and (2b); include he logical (argument) structure in your explanation: [10]

(2)   a.   Two elephants sprayed water at the lions.

        b.   Did two elephants sprayed water at the lions?

The two sentences share the same argument structure of the verb *spray*: SPRAY <theme>, <goal>, <agent>; they also share the same operators except for the mood operator: one is [-Interr] and the is [+Interr].

VI.   Discuss why each of the following sentences are ungrammatical—i.e. what principles and parameters failed to be applied or were applied incorrectly: [10]

(3)   a.   *Was slain the intruder several little old lady.

        b.   *Millie not does sold the Lamborghini (a car).

The correct forms are *Several little old ladies slew the intruder*, and *Millie has sold the Lamborghini!*

(3a):

1.   The external object, which is targeted, should have been spelled out at the tail of the a-link (raised). Prom must target an NP. In this case the external argument must be raised to Prom. It is incorrect to not raised an NP to prom.

2.   The dummy verb *was* improperly inserted. [+Past] needs a verbal host, and there is no intervening governing blocking the adjunction of [+Past] to the main verb.

3.   The voice feature must be [-Pass], not [+Pass] to generate the intended sentence. Spelling [+Pass] out as "n" is OK here since it is appropriate; the error is selecting [+Pass].

4.   LADY should have been pluralized to *ladies* to agree with quantifier SEVERAL, The quantifier contains the feature [+Pl], which governs the valueless feature [Pl] in LADY. The principle barring features with no values was not correctly observed.

(3b):

5.   The dummy verb HAVE failed to be inserted. To correctly generate the target sentence, the feature [+Perf] must be selected; this did not happen.

6.   The dummy verb DO was improperly inserted. This is related to the above. If [+Perf] had been selected, then HAVE, not DO, must be selected since [+Past] governs [+Perf].

7.   the negative particle NOT was not adjoined to the right of the dummy verb. The splitting rule for [+Neg] when it is adjoined to T is to place it to the right of T, not the left.

VII.   What are the various kinds of links that we have discussed? [5]

        f-links, h-links, a-links.

VIII.   In which way do these links differ from the other? [5]

        f-links link two like features, h features link all the features linking heads, and a-links link all features linking maximal projections and the maximal projections must share a common referent.

IX.   List all the arguments that Prom may target. [5]

        the internal argument and the external argument.

X.   Define the following terms: [10]

        (4)   a.   Antecedent government

                      XP governs YP, if XP basic-governs YP, and XP is coindexed with
                      YP.

               b.   host

                      the form to which an adjunct is adjoined.

               c.   internal argument

                      the argument c-commanded (or governed) by its head.

               d.   link

                      If A governs B, and B is a head, a link holds between A and B.

               e.   Case Filter

                      *NP, if NP has a phonetic form and is not marked for Case.

FOR EXTRA CREDIT:

XI.   Compare the following three pairs of sentences:

        (5)   a.   John gave something to Mary.

               b.   What did John give to Mary?

        (6)   a.   Somebody gave some flowers to Mary.

               b.   Who gave some flowers to Mary?

        (7)   a.   John gave some flowers to somebody.

               b.   Who did John give some flowers to?

        You have all the necessary tools to discuss the following problem.

        Assume that all three pairs of sentences have similar L-structures. What operator
        would you propose that is common to the "b" sentences? How would this operator
        work? What property do the WH-words have in common that determine its position.
        You may describe how this operator works; tree structures are not necessary here.
        Hint: Assume that the operator takes NegP in its scope (it c-commands NegP).

There is a WH-operator that must target one of the arguments of the main verb, and the argument is outside the scope of NegP such that NegP occurs within the scope of the WH-operator. All the WH-operators occur outside of the main clause and target something inside of it.