

Linguistics 550 Midterm

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Please do this exam on a computer, as with the homeworks and midterm. Submit the answer via email in file whose name has the following form: First-name_Last-name_lx550_MIDTERM. The exam should be submitted by 11:59 PM on Friday, November 6. Please make sure to keep both an electronic copy and a hard copy of your answers in case the mailing goes astray or other disasters occur.

The exam has three questions. Please do all three of them. In answering the questions, you should use the systems of concepts developed in the course lectures and textbook as your starting point. Be sure to use tree diagrams where appropriate to represent sentence structure.

Because this is an exam, you should not discuss the questions or your answers with other students or with anyone else. You may use secondary literature, but the exam is designed to be answered without the need for this and it is not recommended. If you do use additional sources, you must cite them at appropriate points in the text of your answers and list them as references.

If you have questions as you are taking the exam, send them to me by email. I'll be happy to answer them, where appropriate and will forward the substance of my answers to the entire class.

1. Download the Trees grammar tool “midterm09.tgr” for this question and save it to your computer. There is a link to it on the course web page under the link to this file. The tool allows you to construct trees for sentences in two dialects of an artificial language, Delvish, with English words at the leaves but with non-English syntax. The grammars for the two dialects of Delvish are G1 and G2. The “Grammar Choice/Checking” menu allows you to chose one or the other grammar to construct your trees. It also contains a menu item that checks whether your derivations are complete and correct. Click on this menu item after you have constructed a tree to check it. Use the tool to answer the following questions.

For each of the following sentences of Delvish, say whether it is generable by G1, by G2 or by both grammars. Some of the sentences are structurally ambiguous

under G1 or G2 or both. Pick three sentences that are structurally ambiguous under a single grammar and give the tree diagrams for the different structures the grammar assigns to the sentence.

- (1) John laughed
- (2) that laughed John
- (3) that John may laugh
- (4) that may John laugh
- (5) Mary saw John
- (6) Mary may John see
- (7) may Mary see John
- (8) saw Mary John
- (9) Mary that John saw
- (10) may Mary arrive
- (11) that John Mary saw
- (12) arrived Mary
- (13) Mary arrived
- (14) that arrived Mary
- (15) that may Mary arrive

B. What grammatical principles among those discussed in the text and course lectures are responsible for the patterns of word order manifested by G1 and G2? What are the differences between the two grammars?

2. Consider the following examples:

- (1)
 - a. The mason constructed the tower
 - b. The tower was constructed (by the mason).
- (2)
 - a. the mason's construction of the tower
 - b. the tower's construction (by the mason)

The parallel between (1) and (2) has led to the proposal that the passive transformation applies within noun phrases as it does within sentences.

a. If we assume this to be true, what differences are there, if any, between the passive in noun phrases and the passive in sentences?

b. Now consider the following examples:

- (3) a. Mary is eager to help John.
b. Mary is likely to help John.
c. Mary desires to help John.
d. Mary appears to help John.
- (4) a. Mary's eagerness to help John
b. the likelihood of help for John
c. Mary's desire to help John
d. Mary's appearance
- (5) a. *Mary's likelihood to help John
b. *Mary's appearance to help John

What problem or problems do these examples raise for the idea that transformations apply inside noun phrases? How might they be addressed?

3. Chomsky's binding theory, as presented in the textbook, distinguishes between three types of noun phrase:

- A. anaphors (reflexives and reciprocals)
- B. pronouns
- C. R-expressions

The constraints on the appearance and coindexing possibilities of these items are given by Principles A, B and C of Chomsky's binding theory. There are two kinds of element whose distribution might be thought subject to the binding theory that we have not discussed: i) *pro*, the empty pronoun subject of tensed clauses in languages like Spanish or Korean and ii) PRO, the empty subject we postulate for infinitives in examples like:

- (1) Mary tried PRO to leave on time.
- (2) Mary persuaded John PRO to leave on time.
- (3) PRO to leave on time would be a good idea.

It seems clear that, at least to a first approximation, *pro* has the binding behavior of an overt pronoun. PRO is more interesting. What are its binding properties and how well does it fit into Chomsky's scheme?