

Bonus Homework

Your name: _____

Due Thursday, December 8th

Feel free to print this and write your answers directly on the assignment itself, or you can write the answers on a separate sheet of paper. Remember to write clearly!

Question 1: English sentences You've seen the following three types of questions in class, but here I'm giving them slightly different names:

- (1) Declarative sentences
 - a. Yoda is a muppet.
 - b. The Death Star has a weak spot.
 - c. They are in the trash compactor.
 - d. They will escape.
 - e. I think that Luke is Leia's brother.
- (2) Matrix polar questions
 - a. Is Yoda a muppet?
 - b. Does the Death Star have a weak spot?
 - c. Are they in the trash compactor?
 - d. Will they escape?
 - e. Do you think that Luke is Leia's brother?
- (3) Matrix wh-questions
 - a. Where is the rebel base?
 - b. Who is Obi-Wan Kenobi?
 - c. What was Han Solo frozen in?
 - d. How long has Luke been out on Hoth?
 - e. Who do you think is Leia's brother?

Now, here are two types of questions we haven't seen in class:

- (4) Embedded polar questions (in brackets)
 - a. I don't know [whether Yoda is a muppet].
 - b. They wondered [whether the Death Star has a weak spot].
 - c. He asked [whether they were in the trash compactor].
 - d. I can't say [whether they will escape] because spoilers.
 - e. I asked [whether you think that Luke is Leia's brother].
- (5) Embedded wh-questions (in brackets)
 - a. He asked [where the rebel base was].
 - b. She wondered [who Obi-Wan Kenobi was].
 - c. [What Han Solo was frozen in] is a mystery.
 - d. It is important to know [how long Luke has been out on Hoth].
 - e. I asked [who you think Leia's brother is].

Based on what we have covered in class, what is the structure of (4) embedded polar questions, and (5) embedded wh-questions? What movement operations are happening in each

type of embedded question? How can you tell? Are those movement operations the same or different from the movement that happens in matrix questions?

You can use the trees you draw below to illustrate your answer.

- (6) Draw a tree for each of these:
- a. Kylo Ren landed the shuttle.
 - b. Will Poe survive the crash?
 - c. What did Rey fly?
 - d. Rey wondered whether BB-8 had the files.
 - e. BB-8 asked what Rey saw.

Question 2: Arguing for movement

In class, and in your analysis in the previous section, we have assumed that sentences can undergo movement operations, such as T to V movement, T to C movement, and wh-movement. Let's now consider an alternative hypothesis to account for word order in questions, which appeals to a concept called subcategorization.

Subcategorization A word may require a certain syntactic category as its sister. We say that the word **subcategorizes** for this category.

For example, a verb can subcategorize for the syntactic category of its complement:

- (7) Verbs that subcategorize for NP complements:
- a. John drew a horse. (*a horse* is an NP)
 - b. *John drew that the house was on fire. (*that the house was on fire* is a CP)
 - c. Melody drank the water.
 - d. *Melody drank that the book was good.
- (8) Verbs that subcategorize for CP complements:
- a. Zeus thinks that the apple is gold.
 - b. *Zeus thinks the apple.
 - c. Juno supposes that the water is clear.
 - d. *Juno supposes the water.

Let's consider the following two hypotheses in our analysis of English embedded wh-questions.

Hypothesis 1 A wh-question contains a wh-word by definition. This wh-word appears in C and subcategorizes for a sentence. In an embedded context, nothing else needs to happen. (*Note: in matrix wh-questions, we'd also have to somehow get the contents of T up into C for this hypothesis to work. Don't worry about that in your discussion.*)

Hypothesis 2 A wh-question contains a wh-word by definition. The wh-word appears within a sentence and must move to the specifier of CP to make the question. In an embedded context, nothing else needs to happen.

Make an argument for Hypothesis 2 over Hypothesis 1. The following English data may be useful.

- (9) a. *The Sarlacc devoured.
b. The Sarlacc devoured Boba Fett.
c. I know [who the Sarlacc devoured].
- (10) a. *Devoured Boba Fett.
b. The Sarlacc devoured Boba Fett.
c. I know [what devoured Boba Fett].
- (11) a. *Luke warmed up in.
b. Luke warmed up in a tauntaun.
c. I know [what Luke warmed up in].
- (12) a. Jabba froze in carbonite.
(Means that Jabba became frozen in carbonite.
Cannot mean that Jabba froze someone else in carbonite.)
b. Jabba froze Han Solo in carbonite.
c. I know [who Jabba froze in carbonite].

Question 3: Optional word orders in Dholuo

The following are simplified data from Dholuo¹. Although not many examples are given, assume that other wh-questions in this language operate similarly.

NOTE: This is the first time you're seeing an actual complementizer (*ni*) occurring with a wh-word. Based on what you learned in class about the structure of matrix wh-questions, it will probably be straightforward for you to figure out what structural position *ni* occupies.

- (13) a. Pamba owacho ni Onyango ogweo **ng'a**?
P. said that O. kicked **who**
'Who did Pamba say that Onyango kicked?'
or 'Pamba said, "who did Onyango kick?"'
- b. *Pamba owacho ni Onyango **ng'ama** ogweo?
P. said that O. **who** kicked
- c. Pamba owacho ni **ng'ama** Onyango ogweo?
P. said that **who** O. kicked
'Who did Pamba say that Onyango kicked?'
or 'Pamba said, "who did Onyango kick?"'
- d. *Pamba owacho **ng'ama** ni Onyango ogweo?
P. said **who** that O. kicked
- e. *Pamba **ng'ama** owacho ni Onyango ogweo?
P. **who** said that O. kicked
- f. **ng'ama** Pamba owacho ni Onyango ogweo?
who Pamba said that Onyango kicked
'Who did Pamba say that Onyango kicked?'
cannot mean 'Pamba said, "who did Onyango kick?"' (Dholuo)
- (14) a. Onyango paro ni Ochieng' owacho ni Achieng' ohero **ng'a**?
Onyango thinks that Ochieng' said that Achieng' loves **who**
- b. Onyango paro ni Ochieng' owacho ni **ng'ama** Achieng' ohero?
Onyango thinks that Ochieng' said that **who** Achieng' loves
- c. Onyango paro ni **ng'ama** Ochieng' owacho ni Achieng' ohero?
Onyango thinks that **who** Ochieng' said that Achieng' loves
- d. **ng'ama** Onyango paro ni Ochieng' owacho ni Achieng' ohero?
who Onyango thinks that Ochieng' said that Achieng' loves
'Who does Onyango think Ochieng' said Achieng' loves?'
(a., b., and c. examples can also be interpreted as embedded wh-questions)
(Dholuo)

In a dialect of English spoken in West Ulster, **what all** can be used instead of **what** if the answer is expected to be plural. In this dialect, the **all** can appear in a number of interesting places. In the following data from West Ulster English, the parentheses indicate that the sentence is grammatical with or without *that*. Assume that all other word orders for these questions are ungrammatical².

¹Data are from *Optional Wh-Movement and Clefts*, Anisa Schardl, published in the Proceedings of the 31st West Coast Conference on Formal Linguistics, 2014.

²West Ulster English data are from *Quantifier float and wh-movement in an Irish English*, James McCloskey, published in *Linguistic Inquiry* volume 31, 2000

- (15) a. What **all** did he say (that) he wanted?
 b. What did he say (that) he wanted **all**?
 c. What did he say **all** (that) he wanted? (West Ulster)
- (16) a. What **all** do you think (that) he'll say (that) we should buy?
 b. What do you think **all** (that) he'll say (that) we should buy?
 c. What do you think (that) he'll say **all** (that) we should buy?
 d. What do you think (that) he'll say (that) we should buy **all**? (West Ulster)

Provide a description of the word order possibilities for wh-questions in Dholuo. How are the possibilities different from what is allowed in English? Suggest an explanation for how *all* came to be where it is in West Ulster English. Make sure to refer to specific structural positions and movement operations in your description.

Please draw trees of each sentence in (13), a-d. You can refer to these trees in your above answer.