

Assignment 4

1 Do Support

1a. Explain the following patterns of grammaticality.

- (1) a. i. Chunghye is talking to Makoto.
ii. Chunghye might be talking to Makoto.
iii. *Chunghye does be talking to Makoto.
iv. Chunghye is not talking to Makoto.
v. *Chunghye not is talking to Makoto.
vi. *Chunghye did not be talking to Makoto.
- b. i. Chunghye talked to Makoto.
ii. Chunghye might talk to Makoto.
iii. Chunghye does talk to Makoto.
iv. *Chunghye talked not to Makoto.
v. *Chunghye not talked to Makoto.
vi. Chunghye did not talk to Makoto.

Your explanation should illustrate the *last resort* nature of the phenomenon at hand, explain why (1b.iii) is only a putative counterexample to giving the above phenomenon a *last resort* characterization, and address why 'emphatic' *do*-support as in (1b.iii) is not an option with auxiliaries (see 1a.iii).

1b. Consider the following minimal pairs.

- (2) a. i. Charlene is not meeting with Minjoo.
ii. Charlene isn't meeting with Minjoo.
iii. Isn't Charlene meeting with Minjoo?
- b. i. Charlene has not met with Minjoo.
ii. Charlene hasn't met with Minjoo.
iii. Hasn't Charlene met with Minjoo?

A common analysis of these facts assumes that *have/be* are generated below NegP. They pick up the head *n't* on their way to T⁰ by passing through Neg⁰. The cases in (2a/b.iii) are taken to be generated by further movement into C⁰.

Provide an explanation for the ungrammaticality of (3).

- (3) a. *Is not Charlene meeting with Minjoo?

b. *Has not Charlene meet with Minjoo?

1c. Discuss the implications of the following facts for your analysis of the English auxiliary system, in particular where modals are generated and when/where auxiliary *do* enters into the derivations.

- (4) a. Modals:
- i. Angela shouldn't invite Tom.
 - ii. Shouldn't Angela invite Tom?
- b. *do*-support:
- i. Angela didn't invite Tom.
 - ii. Didn't Angela invite Tom?

The last section of Embick and Noyer (2001) might be relevant here.

1d. In addition to being triggered by a ΣP that intervenes between a finite T^0 and an associated VP, *do*-support also takes place if we try to elide or topicalize a tensed VP headed by a main verb. If the VP is not tensed, we do not get *do*-support.

- (5) a. VP-ellipsis:
- i. Bill [likes David]. Maria does, too.
 - ii. Bill should [like David]. Maria should, too.
- b. VP-topicalization:
- i. I was convinced that Bill [liked David], and [like David], he does.
 - ii. I am convinced that Bill will [like David], and [like David], he will.

Extend your proposal for *do*-support to handle the cases in (5).

1e. Based on the following parallel, one could think that (6a) involves *do*-support.

- (6) a. What Roumi and Dave did in the kitchen was soak their feet.
- b. I thought that Roumi and Dave soaked their feet in the kitchen and [soak their feet], they did in the kitchen.

But does (6a) really involve *do*-support? Give arguments to support your conclusion.

2 Modality, Negation, and Head Movement

Modals in English have unexpected interactions with negation.¹ Modals seem to be generated in T⁰ above sentential negation. If the semantic scope between modals and negation followed straightforwardly from their syntactic scope, we would expect that modals would always take semantic scope over negation in English. This is in fact not the case. The possibility modals *can/could* take scope below negation.

- (7) a. uncontracted negation:
John cannot/could not leave.²
b. contracted negation:
John can't/couldn't leave.
semantic scope: *not* > *can*

But the necessity modal *must* takes scope over negation.

- (8) a. uncontracted negation:
John must not leave.
b. contracted negation:
John mustn't leave.
semantic scope: *must* > *not*

2.1. Determine the scopal relations between negation and the following English modals: *may*, *might*, *should*, *need*.³

2.2. Pick a language and investigate the scopal relations between negation and modals in this language. Try to cover the modals mentioned above but keep in mind that your language might not have all of these modals.

2.3. It is worth contrasting the class of modal verbs in English with expressions that are semantically modal but have the syntax of main verbs/auxiliaries.

- (9) *have to*
a. John has to leave.
b. John does not have to leave.
c. John doesn't have to leave.
d. Does John have to leave?
e. Does John not have to leave?
f. Doesn't John have to leave?

¹In the following examples, we will set aside the constituent negation reading which is always available. As expected constituent negation takes scope below the modal. You can force the constituent negation reading by inserting an *always* between the modal and the negation: *He can always not come*.

²My intuition is that *John can not leave* favors a constituent negation reading where the negation takes scope below *can*. Perhaps the orthographic convention *cannot* just indicates normal intonation and sentential negation and because of its existence *can not* is limited to a constituent negation reading. Since there is no such convention with other modals, the *must/should/could not* orthography does not favor a constituent negation reading.

³We are interested here in the *need* that takes bare VP complements: *He needn't leave*. The *need* that takes *to*-infinitives does not have the syntax of a modal and is therefore not of interest here.

- g. To have to leave now is annoying.
- h. To not have to leave now is a relief.

With *have to*, the semantic scopal relations between negation and *have to* perfectly match the surface syntactic c-command relations between negation and *have to*. Next consider dialects of English where the *have* in *have to* patterns with auxiliary *have*.

- (10) a. John hasn't to leave.
 b. (John has not to leave.)
 c. Has John to leave?
 d. Hasn't John to leave?
 e. (Has John not to leave?)⁴

It is reported that (10a) has the same meaning as (9c). The same is reported for (10d) and (9f). In particular, despite the surface position, the negation takes scope over the modal.

Also consider the following cases and the corresponding cases for the modals *may*, *might*, *should*, *need*.

- (11) a. Negation in C⁰:
 i. Couldn't John leave?
 ii. Can't John leave?
 iii. Mustn't John leave?
 b. Negation in NegP:
 i. Can John not leave?
 ii. Could John not leave?
 iii. Must John not leave?

What can we conclude from the above facts about the effect of head movement on interpretation and the locality of scopal interactions between modality and negation? What kind of effect, if any, does the movement of the modal from T-to-C have on interpretation? What is the effect of the placement of negation (on the modal in C⁰ in contracted form vs. in NegP in the uncontracted form) in such inversion constructions on interpretation?

2.4. As things stand, it is entirely mysterious why some modals can take scope under negation. Provide a hypothesis under which such interactions are possible. Your analysis of the facts in problem (1c) might provide you with a handle on this puzzle.

References

- Embick, D., and R. Noyer (2001) "Movement Operations after Syntax," *Linguistic Inquiry* 32:4, 555–598.

⁴I am not sure about the status of the parenthesised examples.