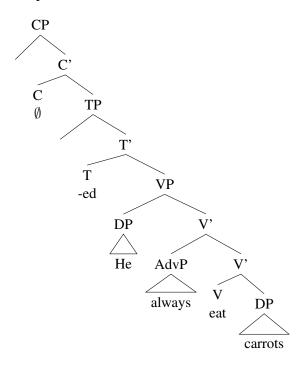
# Homework 8

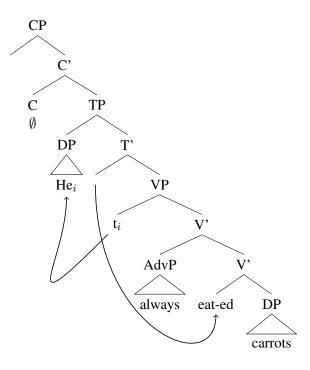
# Mark Simmons

# April 17, 2020

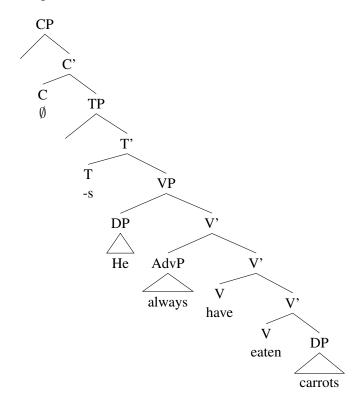
#### 1. Technical

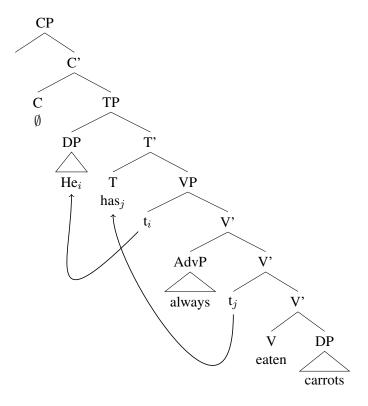
### (a) Deep Structure



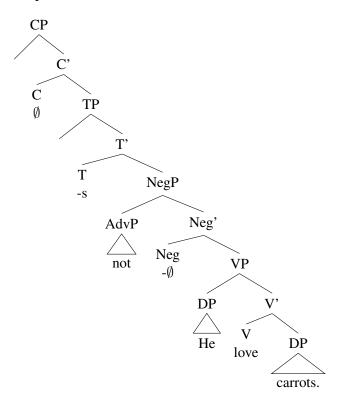


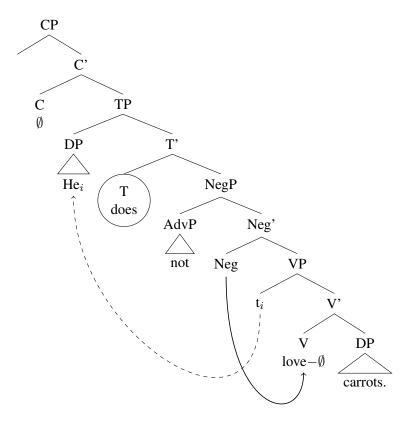
### (b) Deep Structure



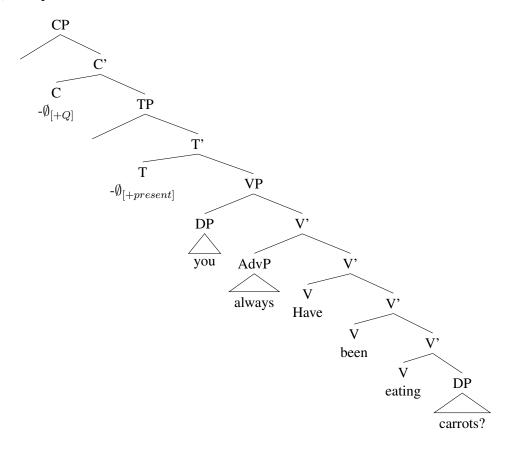


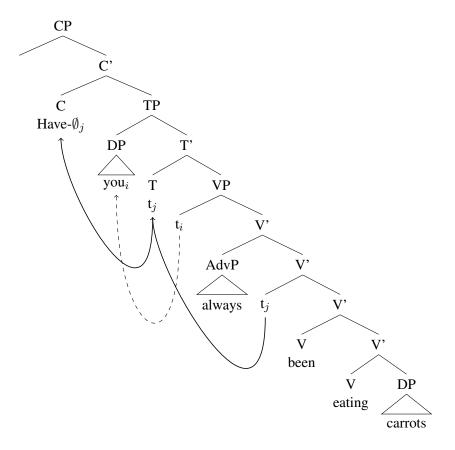
# (c) Deep Structure



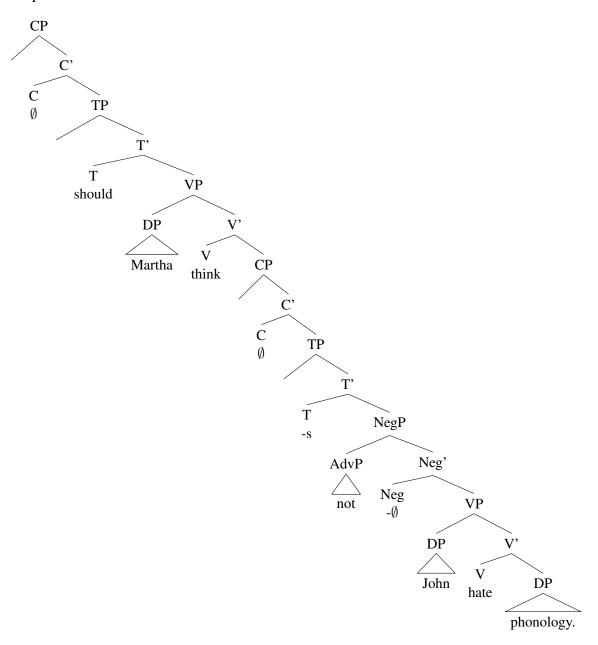


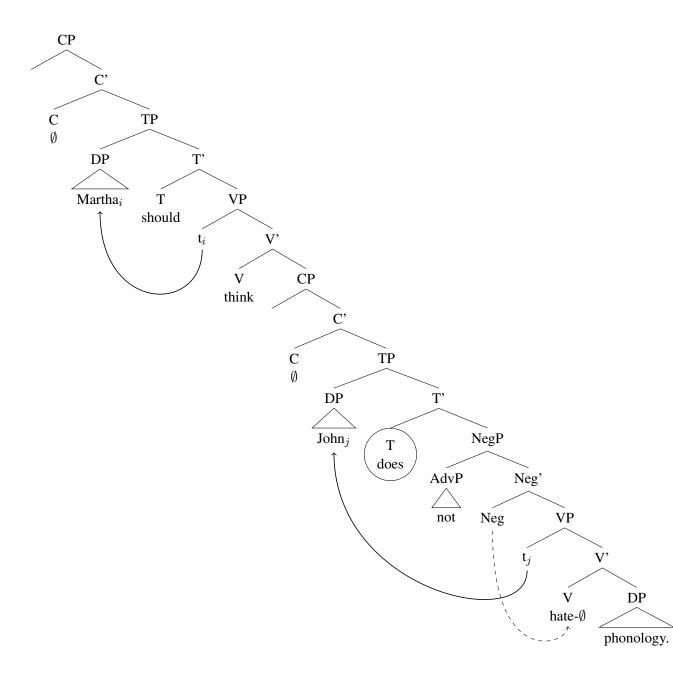
# (d) Deep Structure



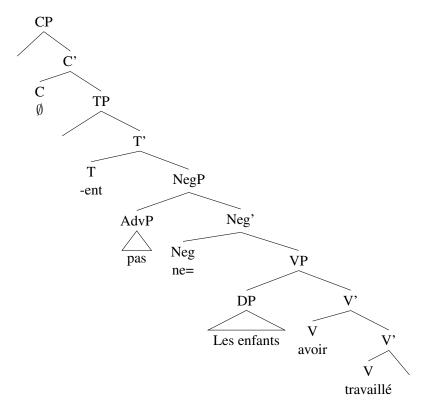


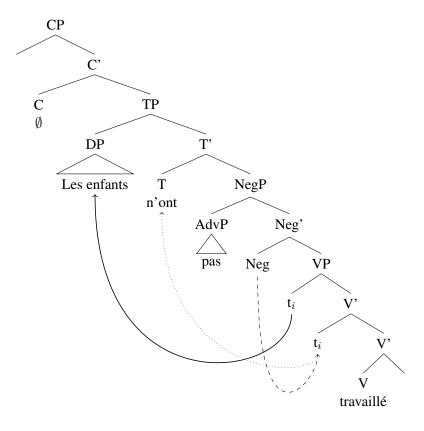
# (e) Deep Structure



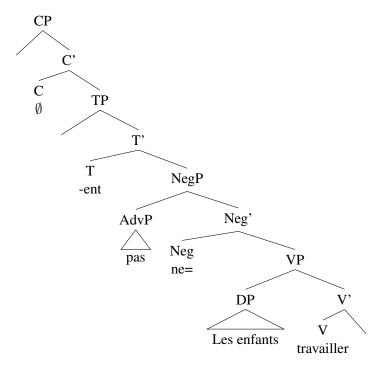


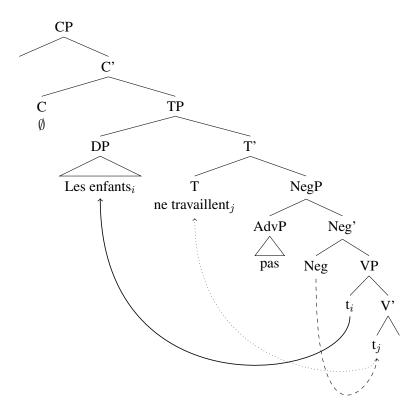
# (f) Deep Structure





# (g) Deep Structure





#### 2. Short Answer

- (a) **German:** In the presence of auxiliaries, e.g. *sollen* and *sein*, verbs appear at the end of the clause (v. 2b,d), whereas the auxiliary appears closer to the beginning of the clause. In (2a,c) no auxiliary is present and the verb (*sprechen* and *sitzt* respectively) appears near the beginning of the clause. Furthermore, the negative particle intervenes between the verb *sitzt* and the verb complement *auf disem Tish* in (2c), suggesting that the verb has moved from outside the VP. Thus, German appears to have V → T movement.
- (b) **Indonesian:** (3a,b) show that the modal auxiliary *boleh* precedes the verb *masuk* in a declarative clause, and appears clause-initially in an interrogative clause. In (3d), the verb *membeli* fronts in an interrogative clause, suggesting that V can move to T (which then moves to C), thus Indonesian appears to have  $V \to T$  movement.
- (c) **Haitian:** The past auxiliary te occurs before the adverb deja. The verb pase occurs after the adverb deja and before the object rad yo whether te is present or not in the sentence. Interjecting the adverb between the verb and the object results in an ungrammatical sentence, as shown in (4c,d). Thus, V does not appear to move to T, suggesting that Haitian Creole features  $T \rightarrow V$  lowering.

**Bonus:** If we assume that *pa* behaves similar to *not* in English and *pas* in French, then we would expect it to follow T and precede V. *renmen* is of category V, and (5a)

shows that NEG precedes it. Furthermore, (5b) shows that *renmen* does not raise to T, since placing NEG after it results in an ungrammatical sentence.

#### 3. Argumentation

German exhibits V2 word order, a phenomenon where the topic phrase of a CP occurs as the first element, followed by the finite verb.

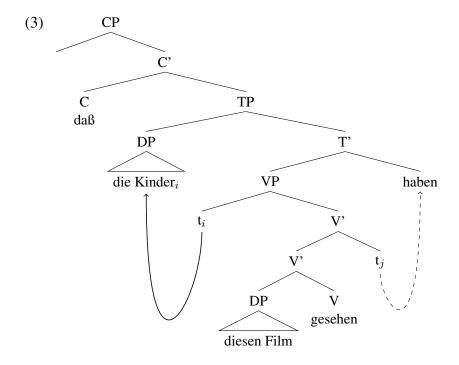
- (1) a. Die Kinder *haben* diesen Film gesehen.
  - 'The children have seen this film.'
  - b. Diesen Film *haben* die Kinder gesehen.
    - 'The children have seen this film.'

In complement clauses introduced by  $da\beta$ , however, the finite verb does not appear following the topic phrase, but rather at the very end of the sentence.

- (2) a. Er sagt [ daß die Kinder diesen Film gesehen haben ].
  - 'He said that the children have seen this film.'
  - b. \*Er sagt [ daß die Kinder haben diesen Film gesehen ].

In X-Bar theory, phrase heads that "jump around" between various places in a sentence can be explained by rules of movement that operate on output from the deep structure (DS) of a sentence, being reflected in the surface structure (SS). In French, for example, V arguments move to T position when T is occupied by a stranded affix. In this paper. I will argue that V2 word order as observed in German is best explained as a movement process that occurs because of a stranted affix in C position that causes the topic DP as well as the T to front.

If we assume that subject moves from specifier to VP to specifier to TP, and that V raises to T when T is occupied by a stranded affix, we can generate a tree for the inner clause of (2a) without any further movement rules.



However, we cannot generate the outer clause with these same rules. As observed above, our model currently predicts that all V and T arguments occur after the complement of VP, which would generate the ungrammatical sentence \*Er [  $da\beta$  die Kinder haben diesen Film gesehen ] sagt. We need another rule to explain why T precedes the complement of VP rather than following it.

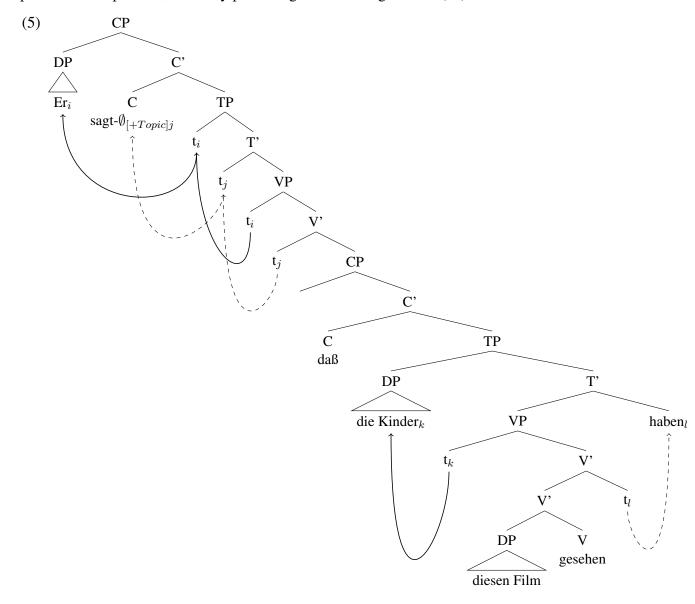
As noted above, T is only attested to occur clause-finally when  $da\beta$  is in C position. The same sentence as (2a) without an overt C introducing the embedded clause features T in clause-initial position.

(4) %Er sagt [ die Kinder haben diesen Film gesehen ]. 'He said that the children have seen this film.'

Here, we see T occuring immediately before the complement of *gesehen* (i.e. the DP *diesen Film*), same as in (1a). It would appear T has fronted, but it is not clear to what position. Since it is interposed between the subject DP *die Kinder* and the V *gesehen*, it is possible that it is moved to the specifier position of VP, which is between the same two arguments in (3). However, it is important to note that specifier-VP in (3) is not empty, rather it is occupied by a trace from the subject. Furthermore, it is worth noting that T is only attested in initial position when C seems to be empty. I thus propose that T raises to the C position when C is not occupied by an overt lexeme. This is because in the absence of an overt lexeme like  $da\beta$ , C is occupied by a null affix. T then raises to satisfy the Stranded Affix Filter.

This leaves the question of why T is preceded by the subject DP. In (3), nothing precedes C  $da\beta$  except for an empty specifier position. Thus, if we only proposed that T raises to C,

we would expect T to appear at the beginning of the sentence, with nothing preceding it. This can be resolved by applying a second movement rule, which moves the subject DP to specifier of CP position, correctly predicting the following tree for (2a):



We can explain why the subject DP raises if we posit that it bears an uninterpetable feature [+TopicU]. This then requires the DP to migrate to specifier of CP position in order to check this feature. However, the fronted DP is not always the subject of the sentence, as demonstrated below.

(6) Diesen Film *haben* die Kinder gesehen. 'The children have seen this film.'

And this is why I propose the topic feature. In (1a) and (2a), the topic of the sentence is the subject DP, but initially (2a) it is the object. Thus in (2a) the object DP migrates to specifier of CP position, leaving the subject as the specifier of TP, which follows the verb in C position, generating the correct surface structure for the sentence. Note that, since [+Topic] is a pragmatic rather than morphological feature, my theory permits that phrase types other than DP can be fronted in the same manner, but no such example is attested in the data concerned.

Thus, we can explain the V2 tendency in German by positing a phonologically null affix that occupies C position whenever no lexical C appears present. This affix causes the T to raise to C position in order to satisfy the Stranded Affix Filter, and then requires the topic phrase to front in order for its [+TopicU] feature to be checked.