PART A: vP SHELLS

Question 1

In our Jan. 17 class we saw evidence for analyzing ditransitive structures in terms of vP shells: one shell headed by a (functional) light *v* and the other shell headed by a (lexical) content V. Can we extend this analysis to nominalizations of ditransitive structures like (1)? In other words, could we model structures like (1) using an nP shell structure? Discuss what such an extension would look like and provide a tree for (1a).

Tip: Your answer should address the position of the possessive marker **'s**. Do we need a DP layer to account for this or would a *nP* shell structure suffice on its own?

(1) a. Hassan's gift of a book to Franny

　　　b. Hassan's donation of socks to the shelter

5 pts for this question.

General notes:
- The reasoning is the same for both sentences
- You needed to give a structure for (a) and address it

Can we extend this analysis to nominalizations of ditransitive structures like (1)?

Yes because these nominals and their components are parallel to verbal counterparts:
　　　Hassan gave a book to Franny
　　　Hassan donated socks to the shelter.

If you answered 'no' you could still get partial points if you gave good arguments and explained your reasoning clearly.

Discuss what such an extension would look like

Detail of parallels:
- N [gift/donation] can be identified with the head of the lower part of the shell structure

- notice that (as with verbal counterparts) **three arguments are introduced within the extended projection:**
  - **complement of N** is PP [to Franny/to the shelter]
  - **specifier of N is PP** [of a book/of socks].
  - **specifier of little n is** External argument NP [Hassan]

- big N has to move to little n or word order is wrong

Fleshing out:

- you were asked to address possessive *'s*. many will try to put this in *n* but we need *n* to be available for big N. A DP must be assumed, with -s in D.

Bonus:

- Excellent if you noticed that licensing possessor in higher D is parallel to how the EA gets licensed in vP (it needs higher TP for case).
- Excellent if you can connect the position of the possessor to the predicate-internal subject hypothesis (PISH).

provide a tree for (1a)

<mark>Completion only</mark>. Goal of the tree was mainly to get you to be concrete about the structure you were assuming and to make it easier to follow your discussion.
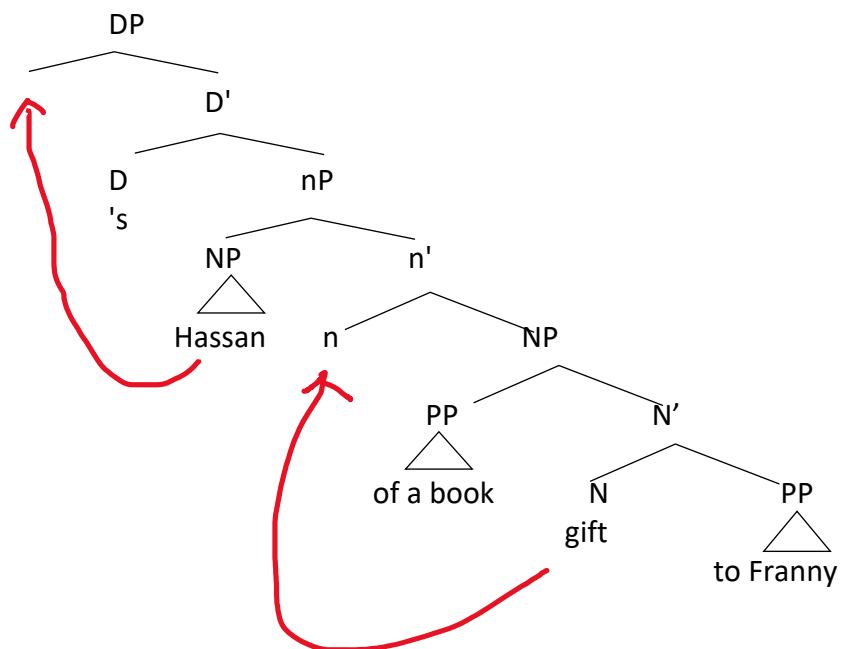
Summary of components:

- **noting the parallel between examples in (1) and their verbal counterparts**
- **discussing the parallel in detail**
- **addressing the locus of possession**
- **tree**

Question 2

Keeping in mind vP shell structure, think about the fact that (1a) -- with light verb *put* -- can be paraphrased as (1b), but not as (1c). Try to use vP shell structure to explain this. Illustrate your answer with trees as needed.

(1)   a. Hassan put the boxes on the shelves.

b. Hassan shelved the boxes.

c. Hassan boxed the shelves.

Completion only.

For this question the starting point is the observation that (1a) and (1b) have equivalent meanings: "put the boxes on the shelves" is equivalent to "shelve the boxes" in terms of the thematic roles required in the situation being expressed:

- an agent (*Hassan*)
- a theme (*the boxes*)
- a goal (*the shelves*)

Can the shared thematic roles be tied to a shared vP shell structure?
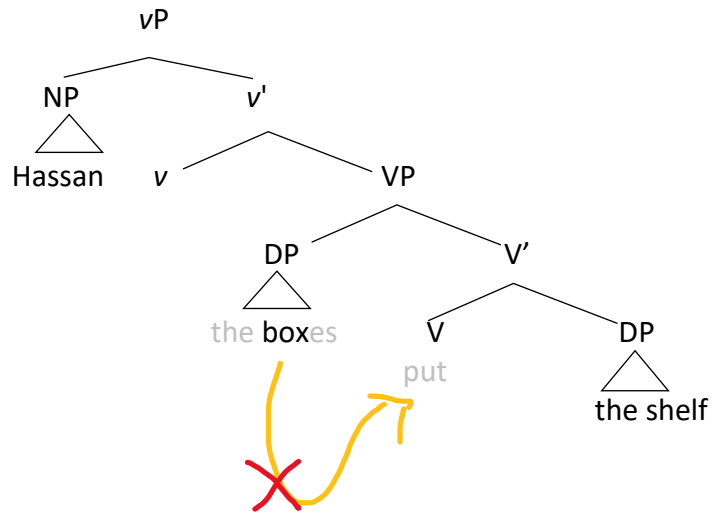
(i)
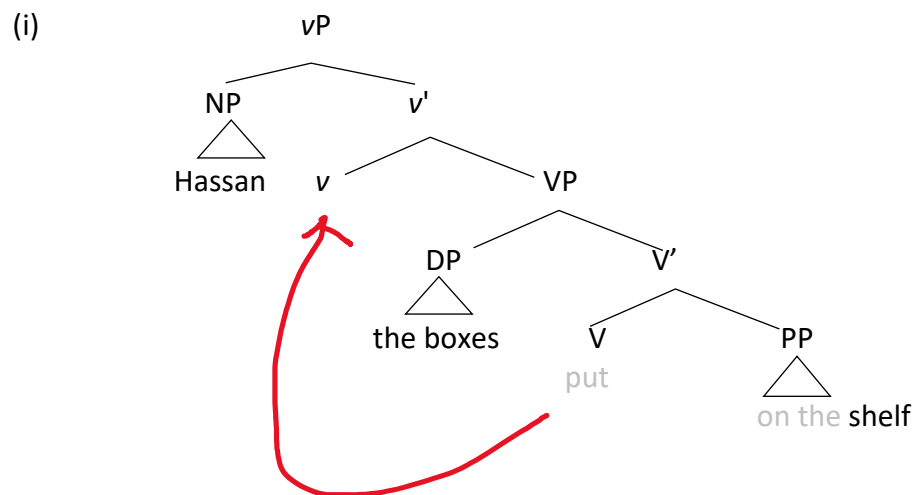
(ii)
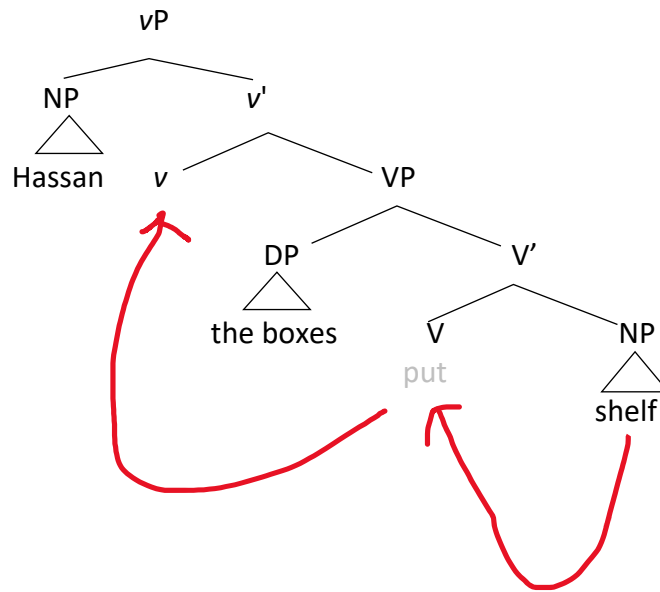
Tree (ii) connects with your Harley 2011 reading, in particular the discussion of Hale & Keyser in section 19.2.1 which talks about incorporation of a bare noun complement into a verb head. (This is often referred to as **coflation**)
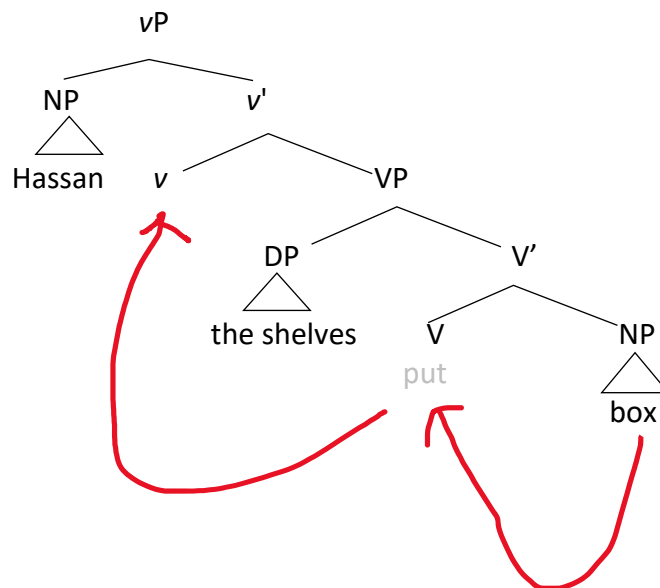
The fact that (1c) is not a possible paraphrase for (1a) suggests that incorporation from the specifier of V is not possible (see tree (iii) below).

Indeed, the only possible interpretation for (1c) is one where the verb *box* coflates the goal thematic role and *shelves* is understood as the theme, as in tree (iv) below.

(iii)

vP
- NP
  - Hassan
- v'
  - v
  - VP
    - DP
      - the boxes
    - V'
      - V
        - put
      - DP
        - the shelf

(iv)

vP
- NP
  - Hassan
- v'
  - v
  - VP
    - DP
      - the shelves
    - V'
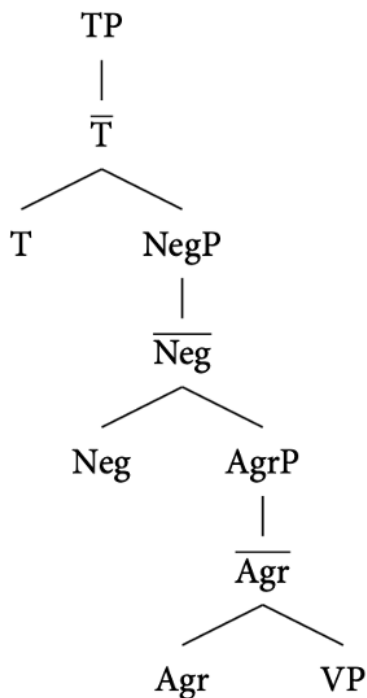   - V
        - put
      - NP
        - box

Summary of components:
- **attempt to explain (b) having same meaning as (a)**
- **attempt to explain (c) not having same meaning as (a)**
- **use of vP shell structure in explanations**
- **illustrating answer with trees**

PART B POLLOCK

For the questions below, you will apply Pollock's idea that there are two projections in the inflectional domain as in (1). Note that X̄ is the same as X'. You can use either in your own trees.

```
        TP
        |
        T̄
       / \
      T   NegP
          |
          Neg
         / \
       Neg  AgrP
            |
            Agr
           / \
         Agr  VP
```

Pollock proposed that functional heads can be morphologically **strong** or **weak.** This difference can be tied to verb movement in the following way:

strong: main verbs and auxiliaries can move to strong positions

weak: auxiliaries can move to weak positions

With this background in mind, answer the following questions.

Here are three important tips:

A. Don't use outside data/knowledge about Danish for any part of this homework, it might get you into trouble!

B. Assume the Head Movement Constraint holds for all your answers.

C. Assume vP shell structure and treat auxiliary verbs as additional light *v* layers

Question 3

Based on what you have seen for English and French (week 3 lecture), propose a Pollockian analysis of Danish root clauses based on **just the following three examples**. Briefly explain your analysis and upload a tree for (2a).
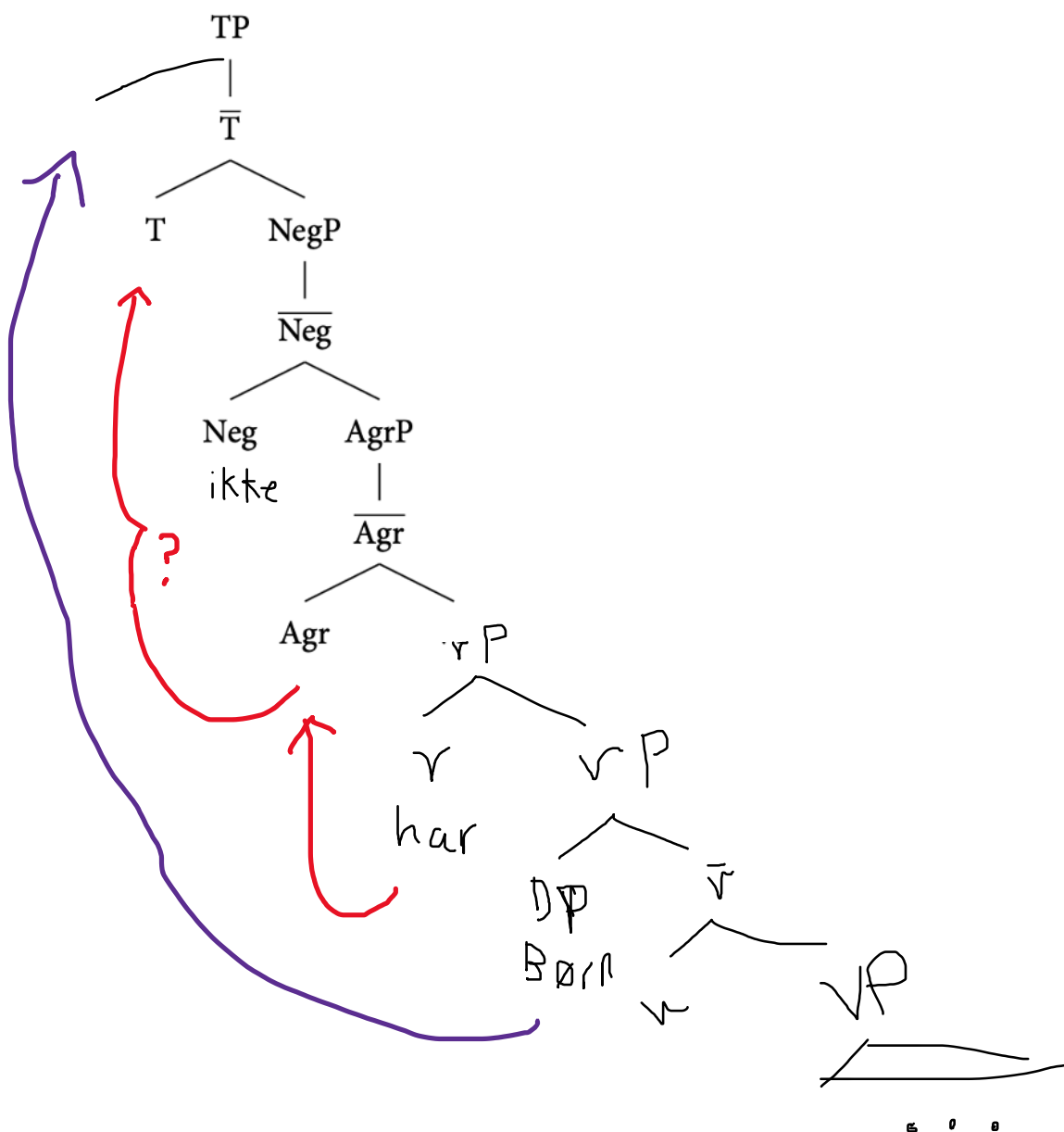
Danish (root clauses)

(1) Affirmative

Børnen har set denne film
kids-the have seen this film
'The kids have seen this film.'

(2) Negative

a. Børnen har ikke set denne film.
kids-the have not seen this film
'The kids haven't seen this movie.'

b. * Børnen ikke har set denne film
kids-the not have seen this film
'The kids haven't seen this movie.'

- discussion:
  - we see aux *har* precedes NEG
  - in Pollockian terms:
    - *har* must have moved as high as T.
    - Given the **HMC**, *har* must have also passed through Agr.
    - Given word order, Subject must raise to Spec,TP
  - Since what moves is an auxiliary, we can't determine if T and Agr are strong or weak, we would need to see data with main verbs for that
- bonus:
  - There is an issue with the HMC. Why is movement across Neg^0 Ok?
- tree:
  - essentially for completion, except that for full points you should have used pollockian functional structure and vP shell

TP
 T̄
  T   NegP
        Neḡ
      Neg   AgrP
      ikke   Agr̄
            Agr   vP
            v   vP
            har   DP   v̄
                  Børn v   VP

Summary of components:
- **observation of position of *har***
- **situating *har* in clause structure using Pollockian functional structure**
- **note problem for HMC**
- **tree for (2a)**

Question 4

Now consider the following Danish data, which shows a verb second (V2) pattern such that any XP can precede the finite verb in a root clause (but only one XP can do so). When the preceding XP is not the subject, the subject immediately follows the finite verb. Answer the following:

A. Does this data undermine your answer to the previous question?

B. Modify your previous analysis to incorporate (3), extending the Pollockian strong/weak distinction as needed to any head that can host the finite verb. Provide a brief explanation of your new analysis and upload a tree for (3b). In your explanation, make sure to indicate how your new analysis can still account for the facts from the previous question.

Hint: it will help to review the German verb placement pattern we discussed in class Jan. 24.

(3) Danish V2 order

a.   Børnen har set   denne film
     kids-the have seen this   film
     'The kids have seen this film.'

b.   Denne film bar   børnen set.
     this   film have kids-the seen
     'The kids have seen this film.'

c. * Denne film børnen har   set.
     this   film kids-the have seen
     'The kids have seen this film.'

Does this data undermine your answer to the previous question

No, but we have to add another piece (CP layer) to capture the new pattern.

Modify your previous analysis to incorporate (3):
- brief explanation
- this data requires positing an additional verb-movement step to C
- since what moves is an Aux we cannot determine if C is strong or weak
- the word order further requires XP-movement to spec,CP.
- Subject must be in Spec,AgrP (when it is not in spec,CP)

new tree
- completion only but must show pollockian structure

CP
C̄
C
TP
T̄
T
NegP
Neḡ
Neg
ikke
AgrP
Agr̄
Agr
rP
r
har
vP
DP
Børn
v̄
v
VP
set [denne film]

?
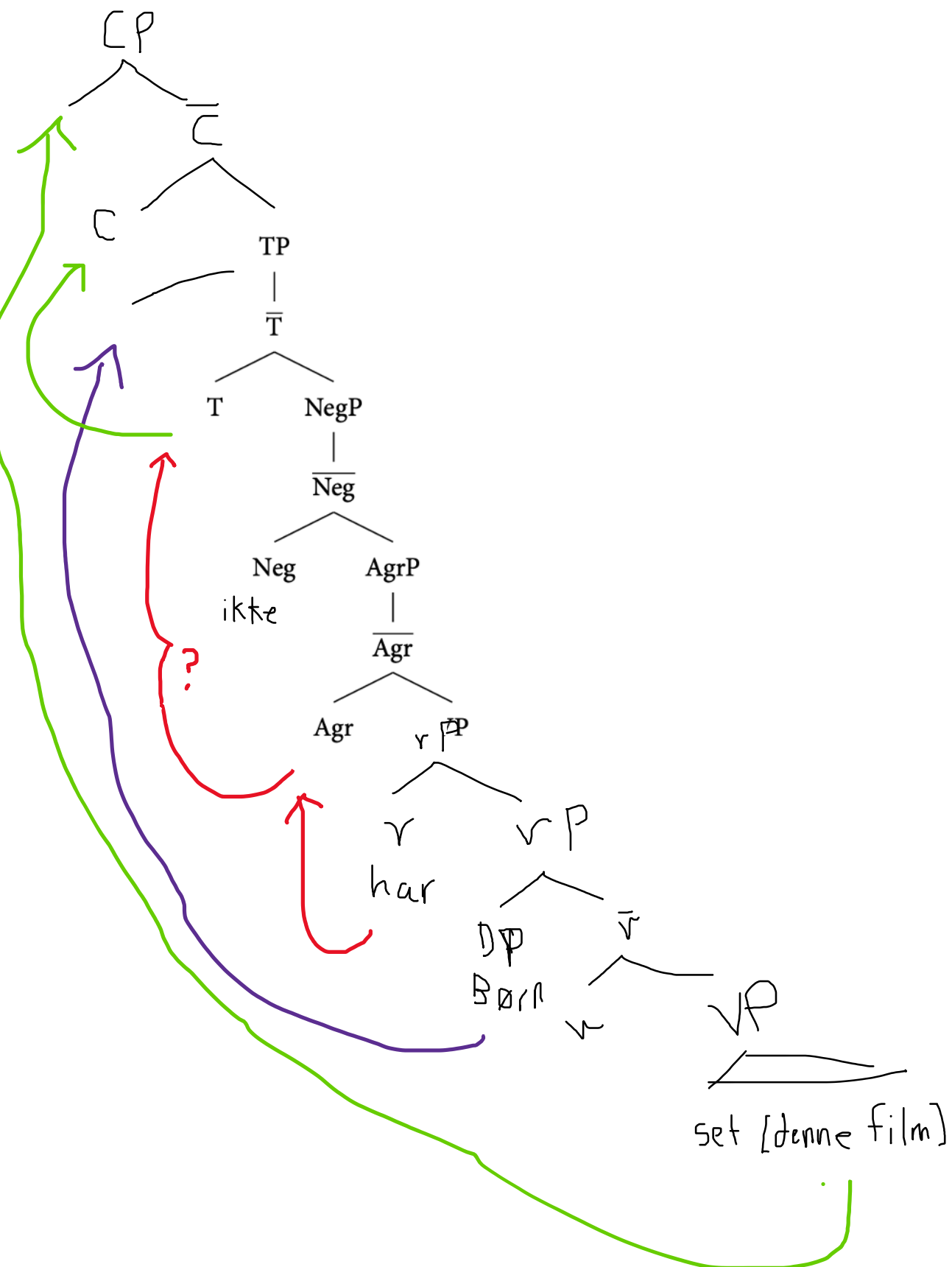
Question 5

Now compare Danish root and embedded clauses. Explain how they differ and propose a Pollockian analysis for embedded clauses. Give a tree for (4c).

(4) Root vs. Embedded

a. Børnen har ikke set denne film.
    kids-the have not seen this film
    'The kids haven't seen this movie.'

b. * Børnen ikke har set denne film
    kids-the not have seen this film
    'The kids haven't seen this movie.'

c. Jeg ved at børnen ikke har set denne film
    I know that kids-the not have seen this film
    'I know the kids haven't seen this movie.'

d. * Jeg ved at børnen har ikke set denne film
    I know that kids-the have not seen this film
    'I know the kids haven't seen this movie.'

discussion of how embedded clause differs from root clause
- *har* must follow NEG in the embedded clause
- therefore *har* is not raising as high as TP
- we can't tell if *har* stays in situ or moves just to Agr
- to determine whether it was in Agr we would need to see adverb position

tree for (4c)
- completion only; must show pollockian structure is the only condition

TP

T̄

T   NegP

Neg

Neg   AgrP
ikke
Agr

Agr   rP

r   vP
har
DP   v̄
Børn
v   VP

set [denne film]
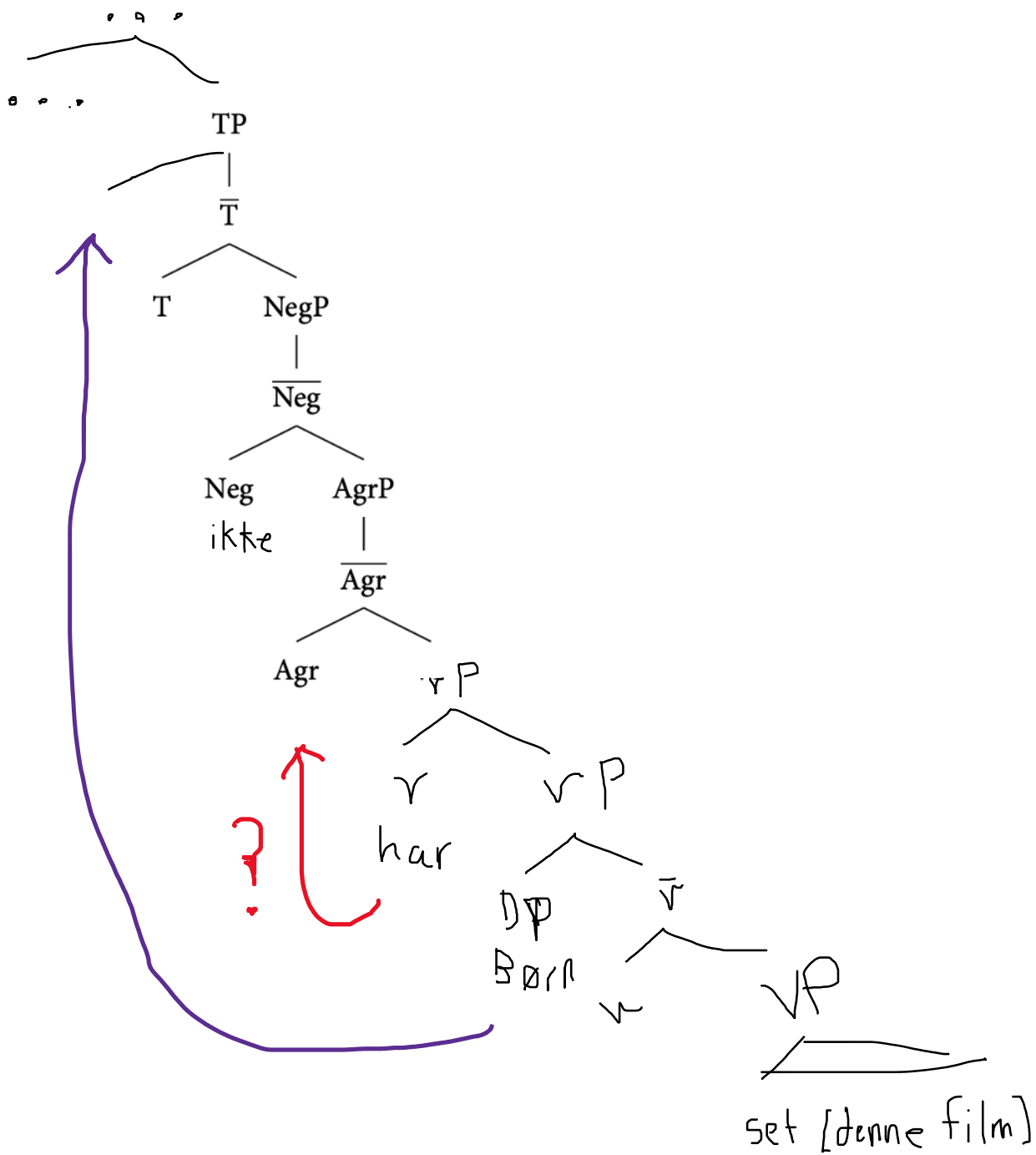
Question 6

Based on your answer to the previous question,the data in (5) should be problematic. Explain the problem in detail and then suggest a solution that conforms to our assumptions as much as possible. Provide a tree illustrating how your solution works for (5).

If you do not think (5) is a problem for your previous answer, explain why in detail and provide a tree (or trees) supporting your answer.

Note that Danish differs from what we saw for German on Jan. 24. In German, embedded V2 is only possible in the absence of an overt complementizer, whereas in Danish this is fine. Don't worry about this difference (one might argue that Danish has an added C layer that accommodates this pattern).

(5) V2 pattern in Danish embedded clauses

Vi ved   at   denne bog   har Bo ikke læst.
we know that this   book has Bo not read
'We know that Bo hasn't read this book.

discussion of problem
- (5) shows V2 in embedded clause, which means *har* moves as high as C
- but we just saw in (4) that *har* only moves (at the very highest) to Agr, not T, which...
- means we have a problem for the Head Movement Constraint....
- because *har* must skip T en route to C it would seem

proposed solution completion points only;
- one possibility: there is actually no TP layer in embedded clauses in Danish.
  - this would mean (setting aside the Neg problem) that CP is the next projetion up from AgrP
  - but then we have a problem with subject position
- other possibilities? Maybe something blocks Aux from surfacing in T^0 but it is ok to move through. But then we need a story explaining why blocking would happen.

tree completion

...

... CP

NP C'
this book

C NegP
has

Neg AgrP
not

Agr'

Agr vP

v *v'*

DP *v'*

*v* VP
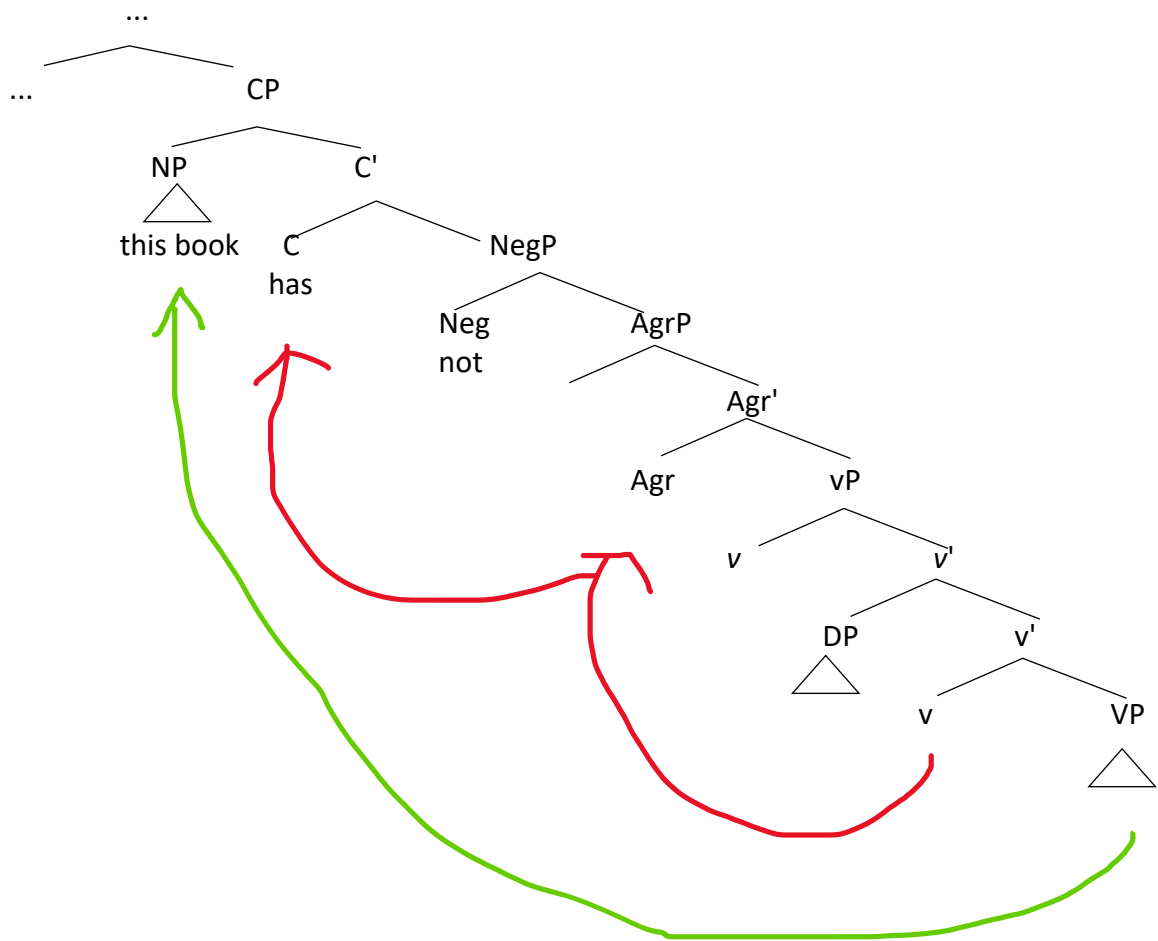
Apppendix: The problem of Neg and the HMC

The Head Movement Constraint prohibits head movement across an intervening head.

(2)   a. Franny hopes [to not have been misunderstood].
         b. Franny hopes [not to have been misunderstood].
         c. *Franny hopes [have not to been misunderstood].

We should not expect the Head Movement Constraint to allow movement of Agr^0 to T^0 past Neg^0. How is it that head-movement across Neg doesn't seem to be a problem?

Pollock had a solution for this: Neg forms like *not* and *pas* are in the Specifier of NegP. The head Neg^0 a is a **clitic** position.
- In French it is *ne* that heads NegP.
- In English, this head is silent.
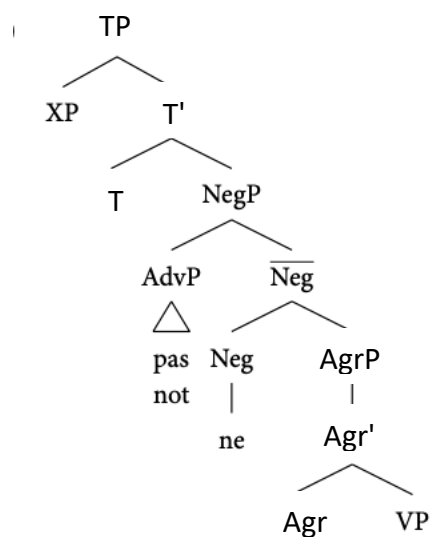
Clitics are prosodically weak pronouns. In Romance languages they surface adjacent to verbs (and are prosodically dependent on them).

On the clitic view of Neg^0, when Agr^0 moves to T^0, clitic Neg^0 doesn't count as an intervener.

Agr^0 can move through Neg^0 and adjoin with the clitic on its way to T^0.

But it must also be the case that Neg^0 can move to the left of its specifier and adjoin to T^0 even when there is no verb movement. We see this in French infinitival clauses when no verb movement to T^0 occurs.

(1) French infinitival clauses

   a.   ne *pas* **être** heureux est une condition pour écrire   des romans
        ne not be   happy   is a   condition for   writing novels
        'To not be happy is a condition for writing novels.'

   b.   N'**être** *pas* heureux est une condition pour écrire   des romans.
        ne'be   not happy   is a   condition for   writing novels
        'To not be happy is a condition for writing novels.'

Clitic movement, then, instantiates another type of movement: **cliticization**. Cliticization doesn't have the same properties that Head Movement has — it isn't subject to the Head Movement Constraint. For instance, Object clitics, satisfy the Theta Criterion and Projection Principle by way of occupying a position that is sister to the verb they are arguments of, but surface in Agr^0 position