

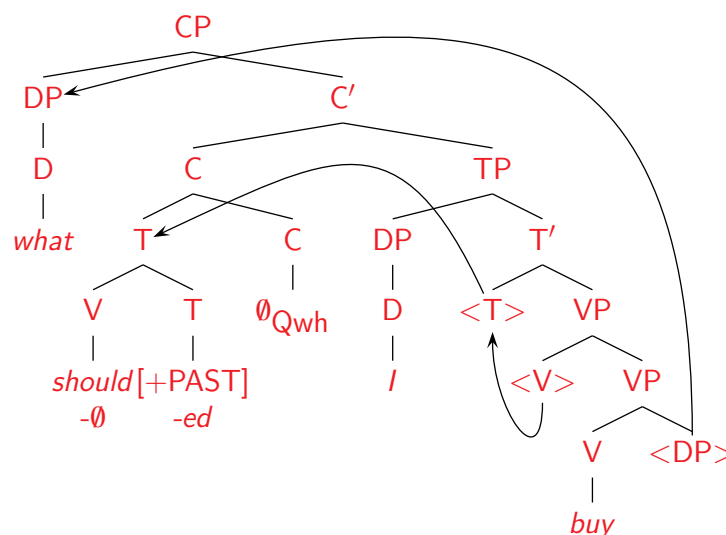
# 1 Wh-questions

To begin, we'll just draw some relatively straightforward *wh*-questions.

**Your task:** Draw trees for each of the following sentences:

- (1) What should I buy?
- (2) How should I buy cheese?
- (3) When will the party begin?
- (4) Who has brought cheese?
- (5) What did Pat say that Chris brought?

**When drawing these trees,** draw the S-structure structure (after all of the movement). Draw arrows that end in the position a moving element wound up, and start in the position where the moving element began. When a DP moves, for example, draw it in its final location, and in places it was before winding up there, use the <DP> convention (that is, put angled brackets around the node it was originally at). When a head moves (like V to T or T to C), it should form a complex head (e.g., a T with a V adjoined to it).



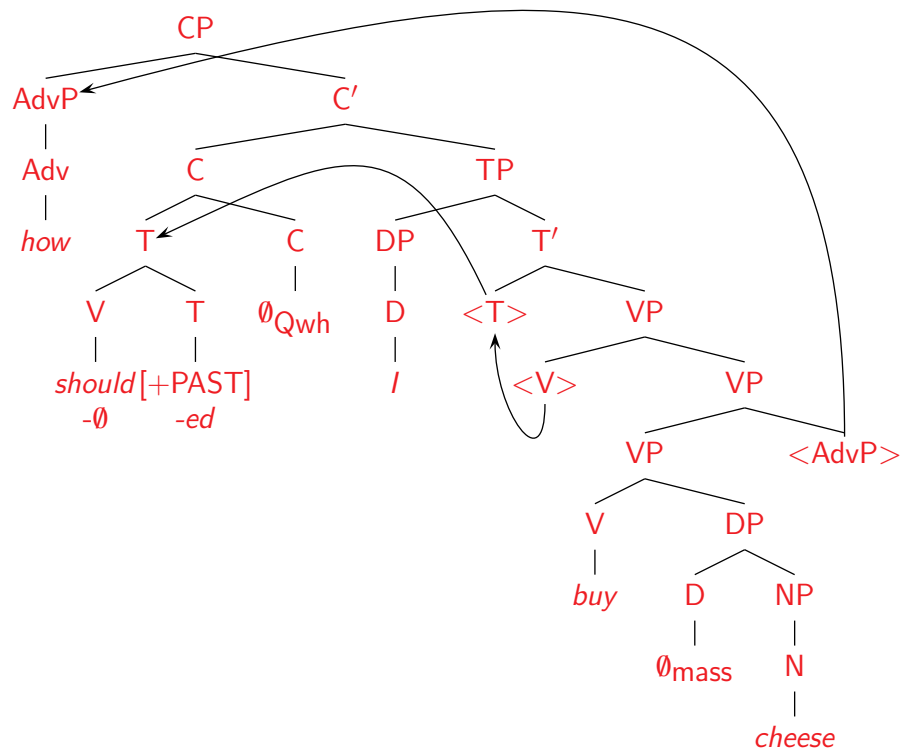
What should I buy?

*What* is the object of *buy*, moves to the specifier of the CP headed by  $\emptyset_{Qwh}$ . *Should* is the highest auxiliary (and is in a past tense form, so T is [+PAST]). *Should* moves to

adjoin to T, then T moves to adjoin to C. The abstract suffix contributed by T (-ed) is indicated under T, but is pronounced on *should* (leading to the pronunciation as *should* rather than as *shall*). The -∅ suffix under *should* is intended to indicate that the suffix *should* contributes is silent—the pronounced form of the verb originally below *should* is the bare form (*buy*).

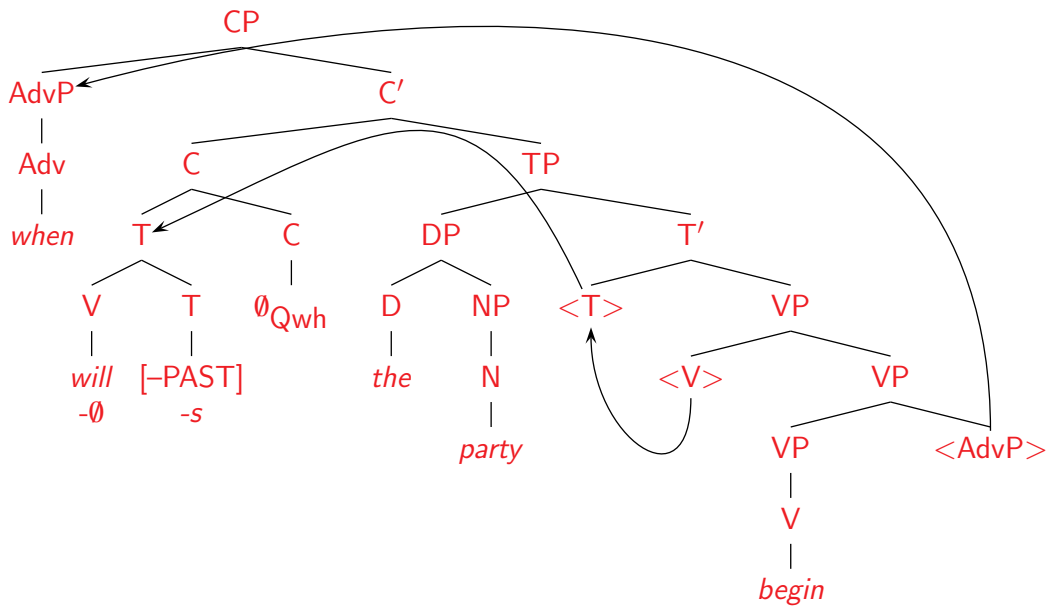
At a very technical level, we need to assume that the pronunciation of each verb is determined by the suffix contributed by the head above it at D-structure, *prior* to any movement—except for the suffix contributed by T, which gets applied *after* the movement, at S-structure.

The consequence of this technicality doesn't arise very often, but it is necessary to assume that the suffix supplied by T is different because moving T away (e.g., in auxiliary-less yes-no questions) will lead to the need to insert *do* (driven by the fact that the suffix on T can't attach to a verb anymore since it is too far away), while moving V away (e.g., moving perfective *have* away to T) doesn't prevent the suffix it contributes from marking the verb below.



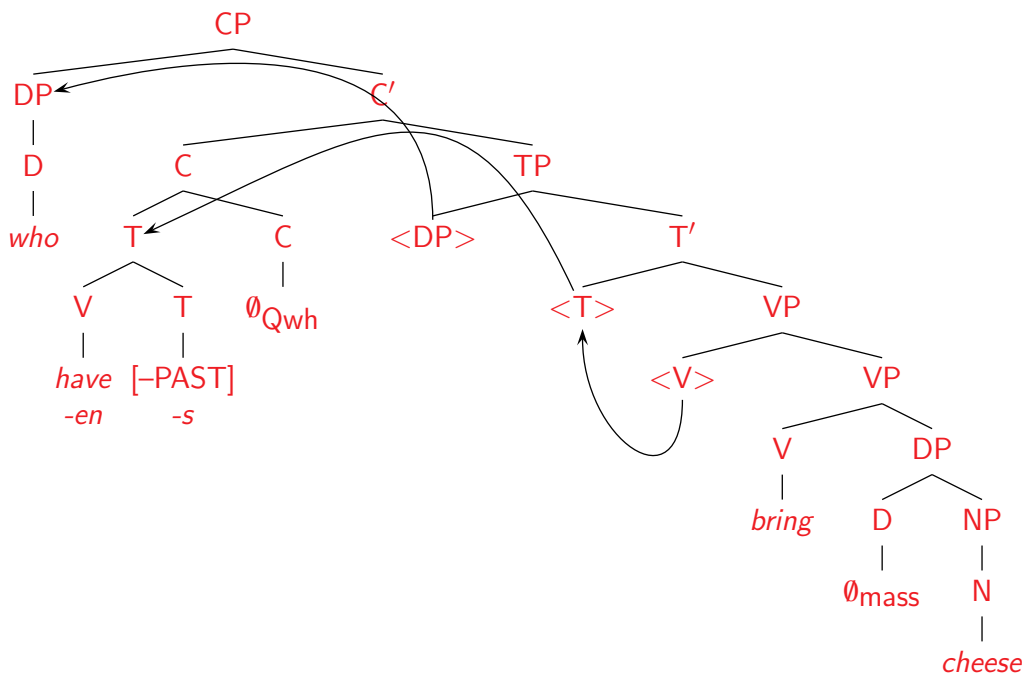
How should I buy cheese?

*How* is an AdvP (an adjunct, adjoined to VP) initially, and moves from there to the specifier of CP.



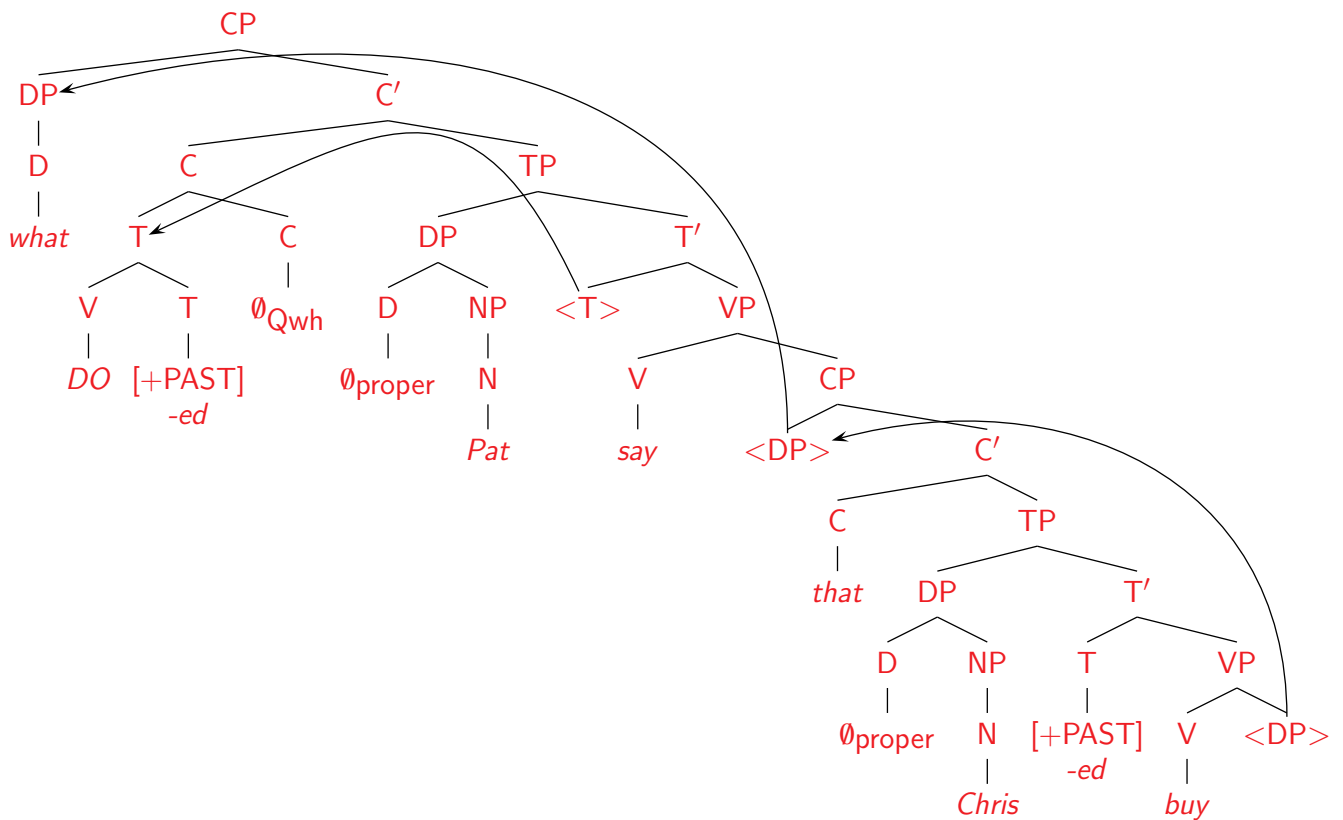
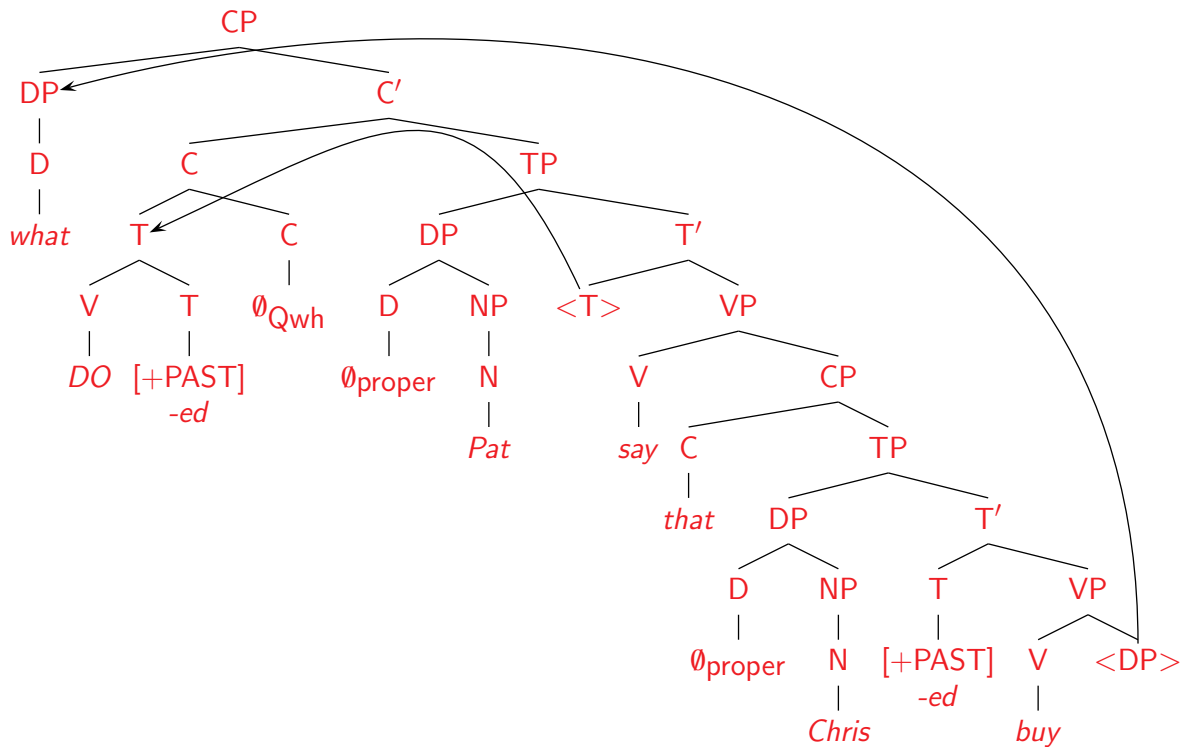
When will the party begin?

*When* is also an adjunct, like *how*. Attached similarly, adjoined to the VP first, then moved to the specifier of CP. *Will* is the highest auxiliary this time, so T is [-PAST].



Who has brought cheese?

The *-en* suffix contributed by *have* marks *bring* (as *brought*) and then *have* moves to T because it is the highest auxiliary. T marks *have* (as *has*).



What did Pat say that Chris brought?

I give two trees here because actually the lower one is probably more right for reasons that we only kind of started to explore. Maybe we can talk about it further. Ideally, you will have provided the second tree.

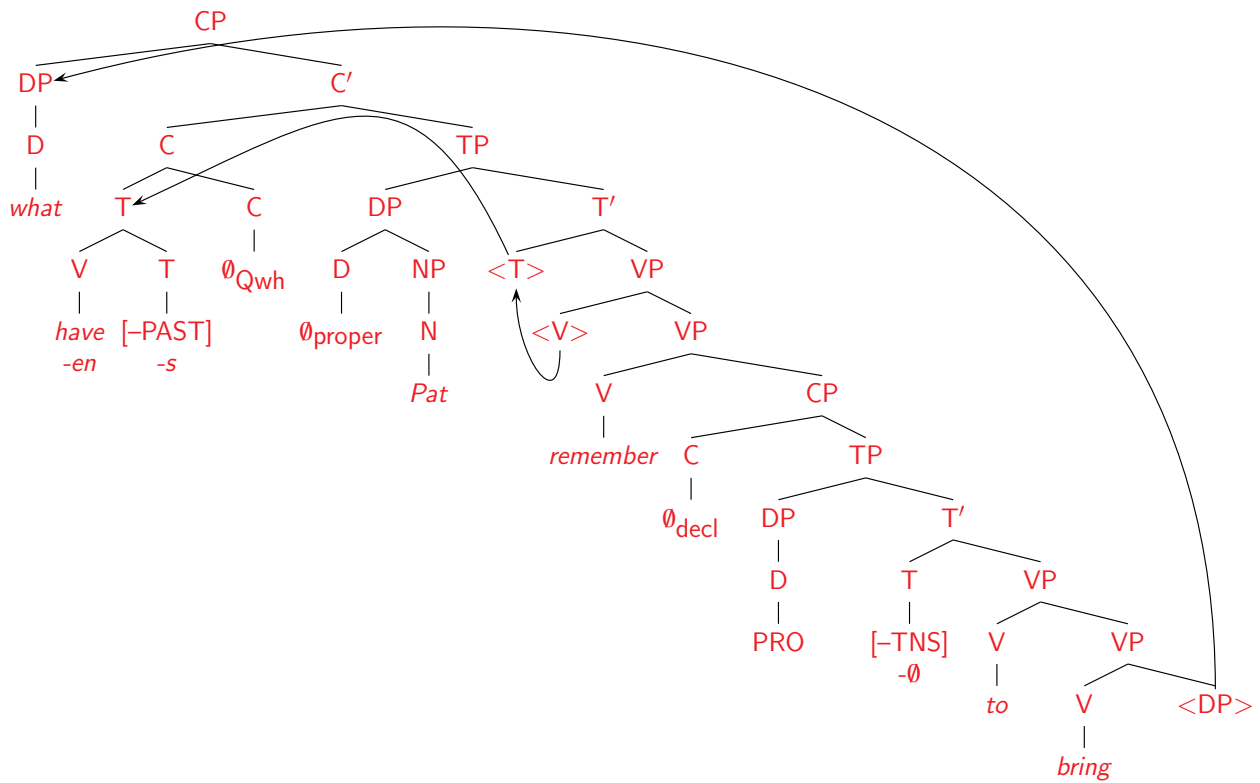
## 2 More trees

Ok, more trees. Same rules as before. These are just more involved and also might contain more things. Embedded clauses, auxiliaries, adverbs/adjectives, possessors, PRO. Very exciting.

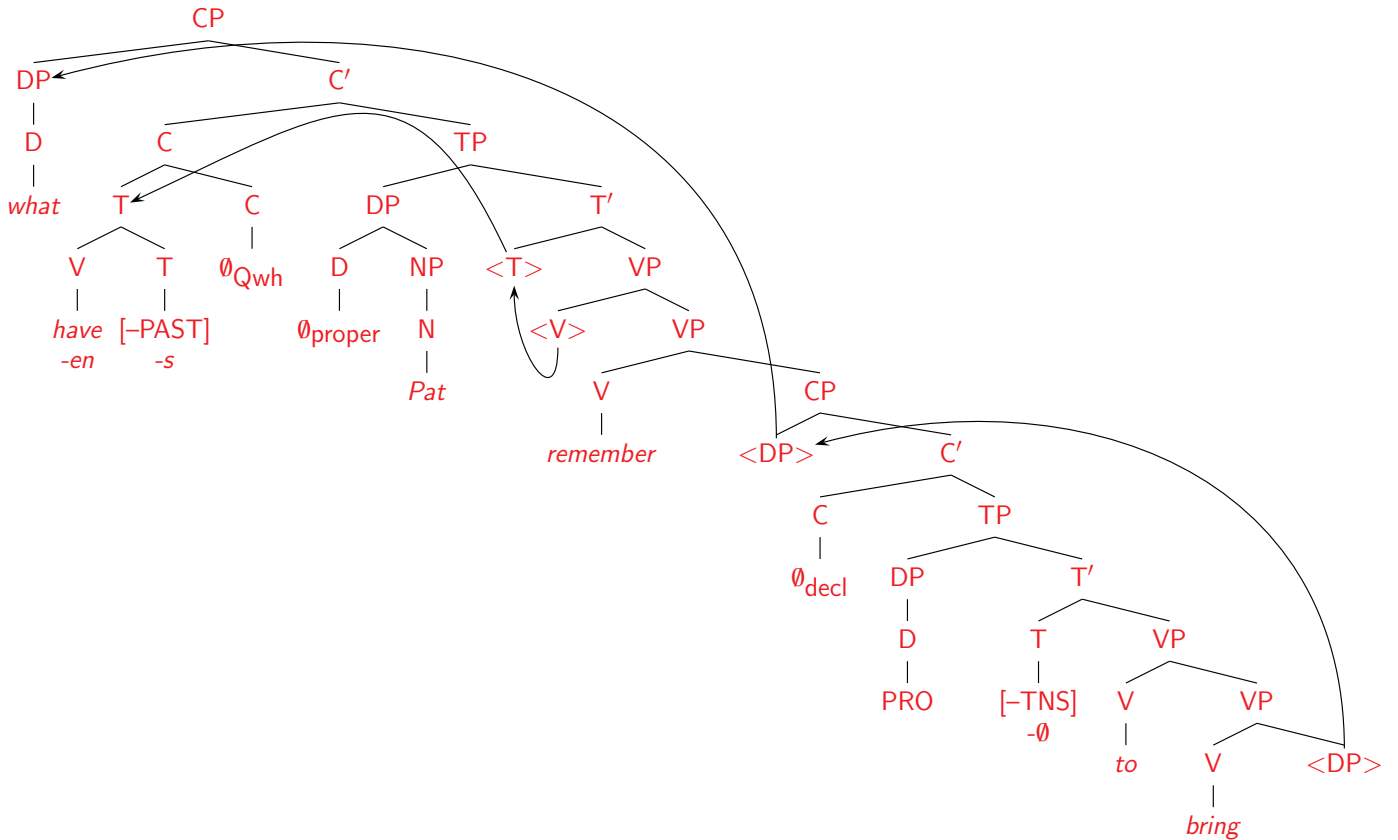
**Your task:** Draw trees for each of the following sentences:

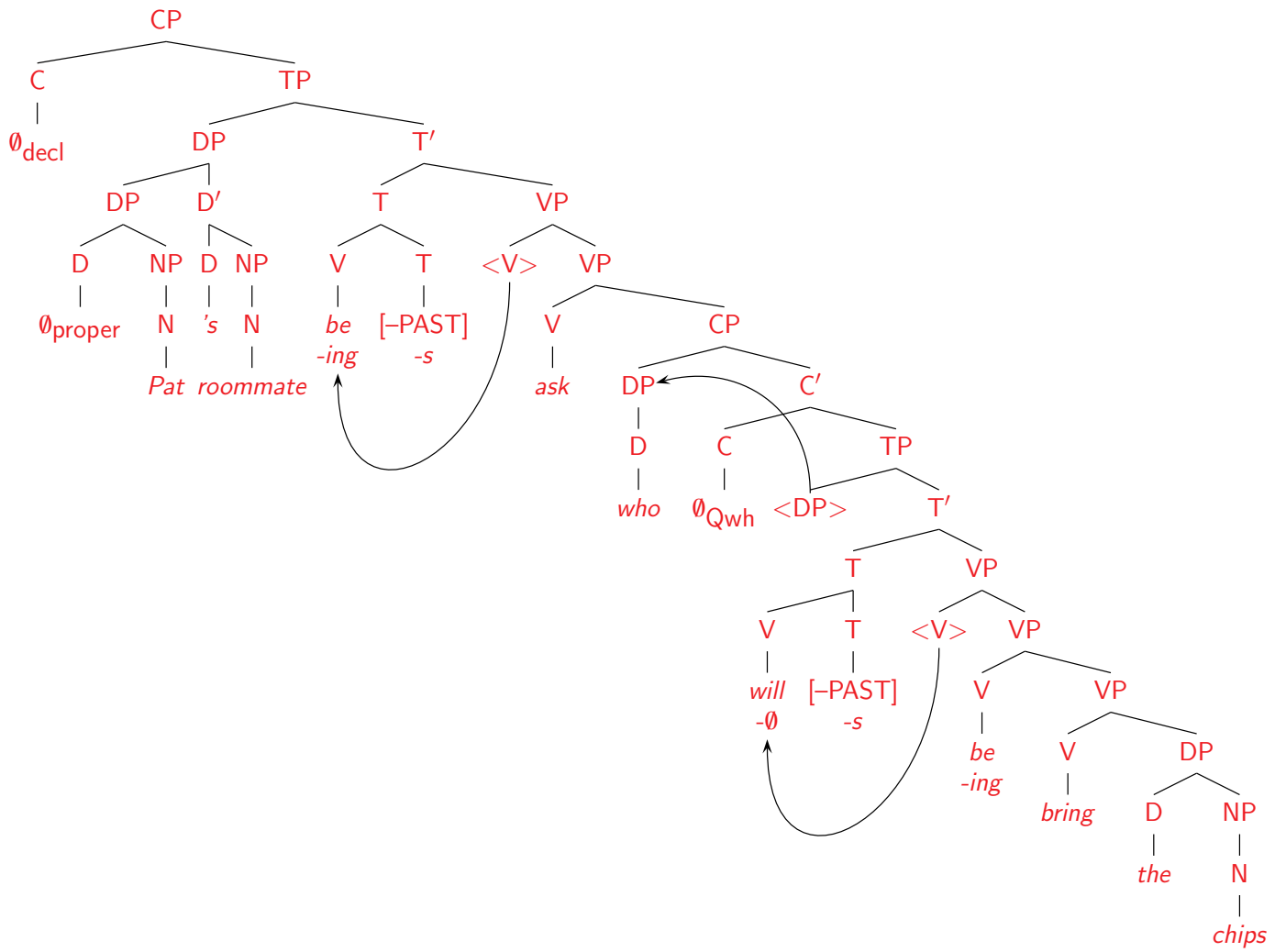
- (6) Has Pat remembered to bring the fruit salad?
- (7) What has Pat remembered to bring?
- (8) Pat's roommate is asking who will be bringing the chips.
- (9) What did Chris promise to bring?
- (10) How will you pay for the envelopes?
- (11) How will you word the invitations?
- (12) Who did Chris want to persuade to come?





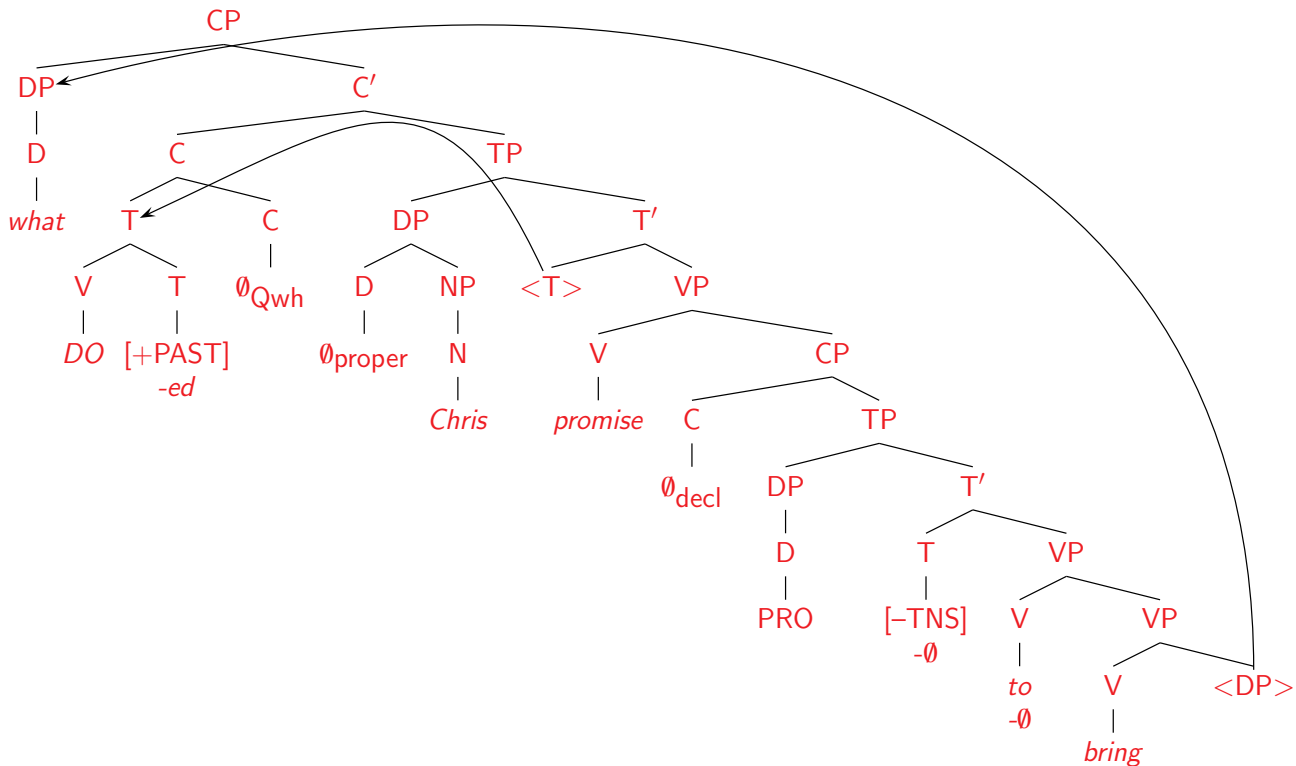
What has Pat remembered to bring?



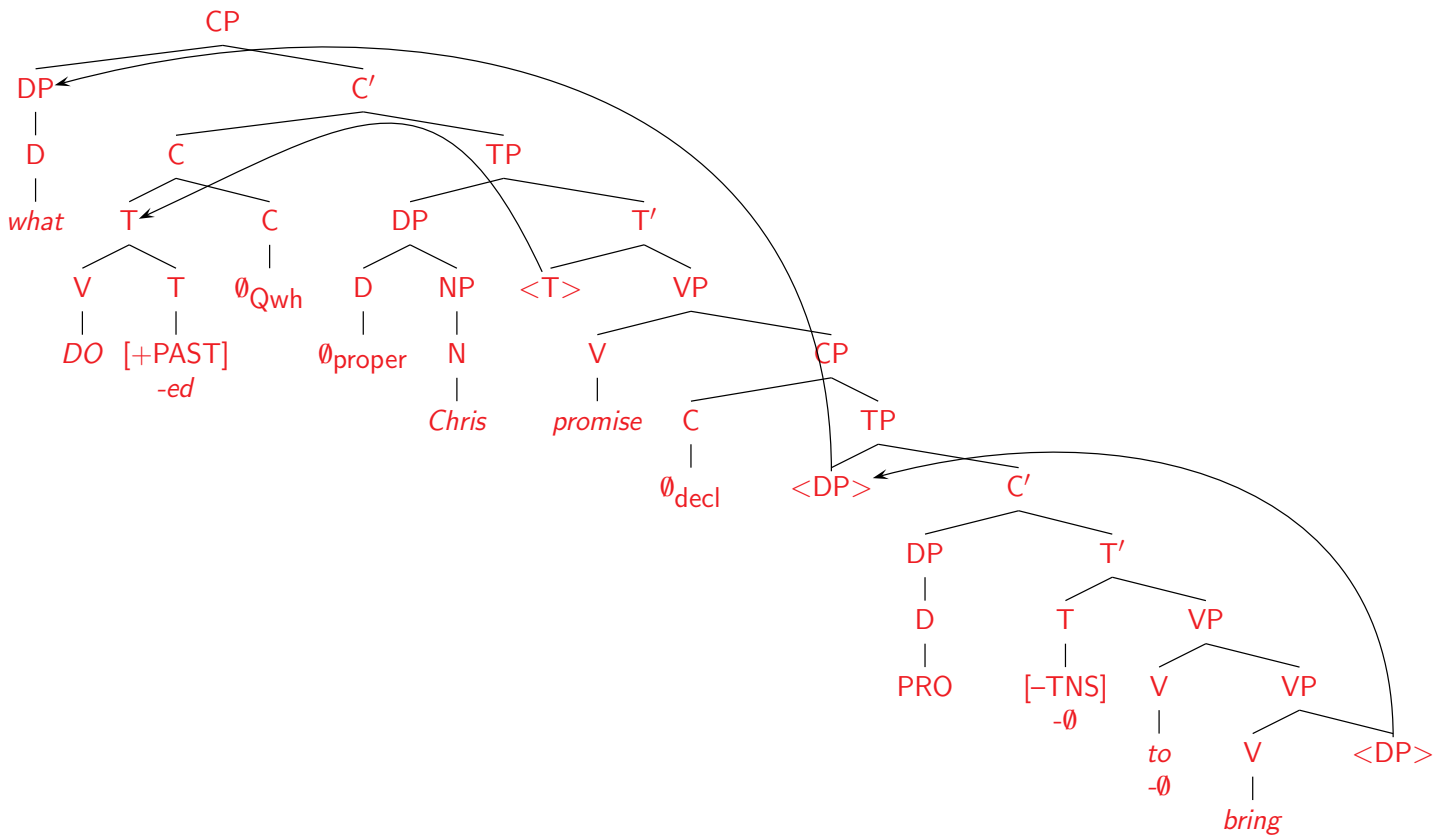


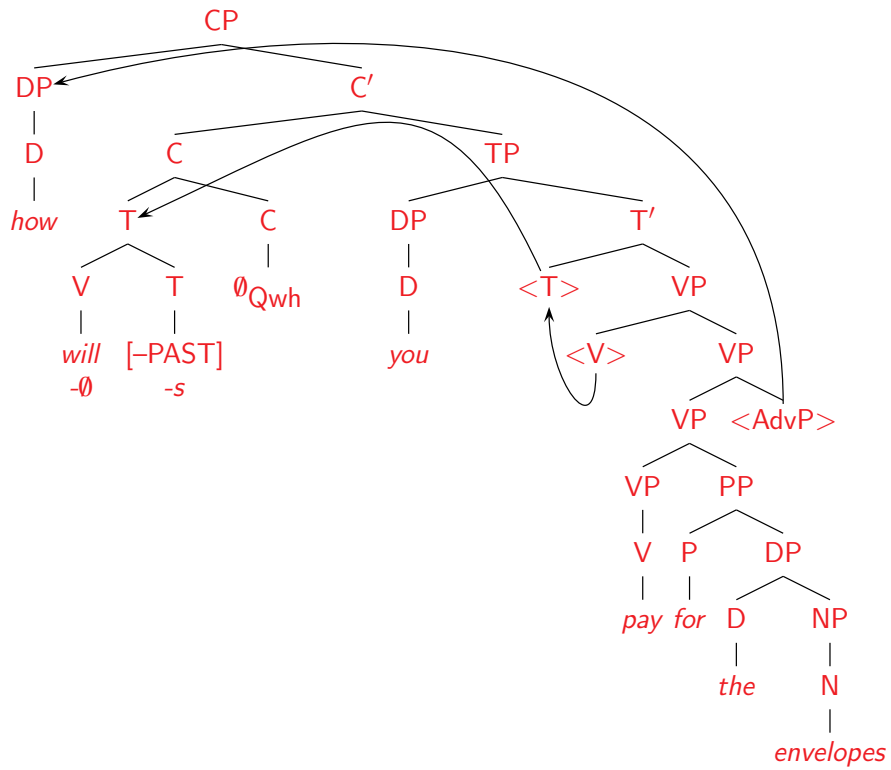
Pat's roommate is asking who will be bringing the chips.



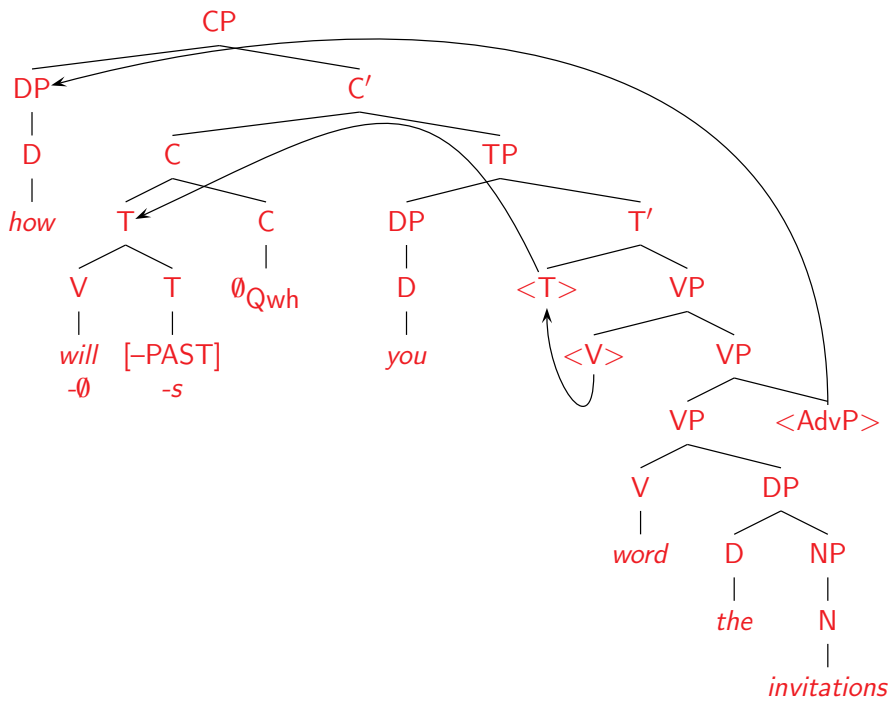


What did Chris promise to bring?



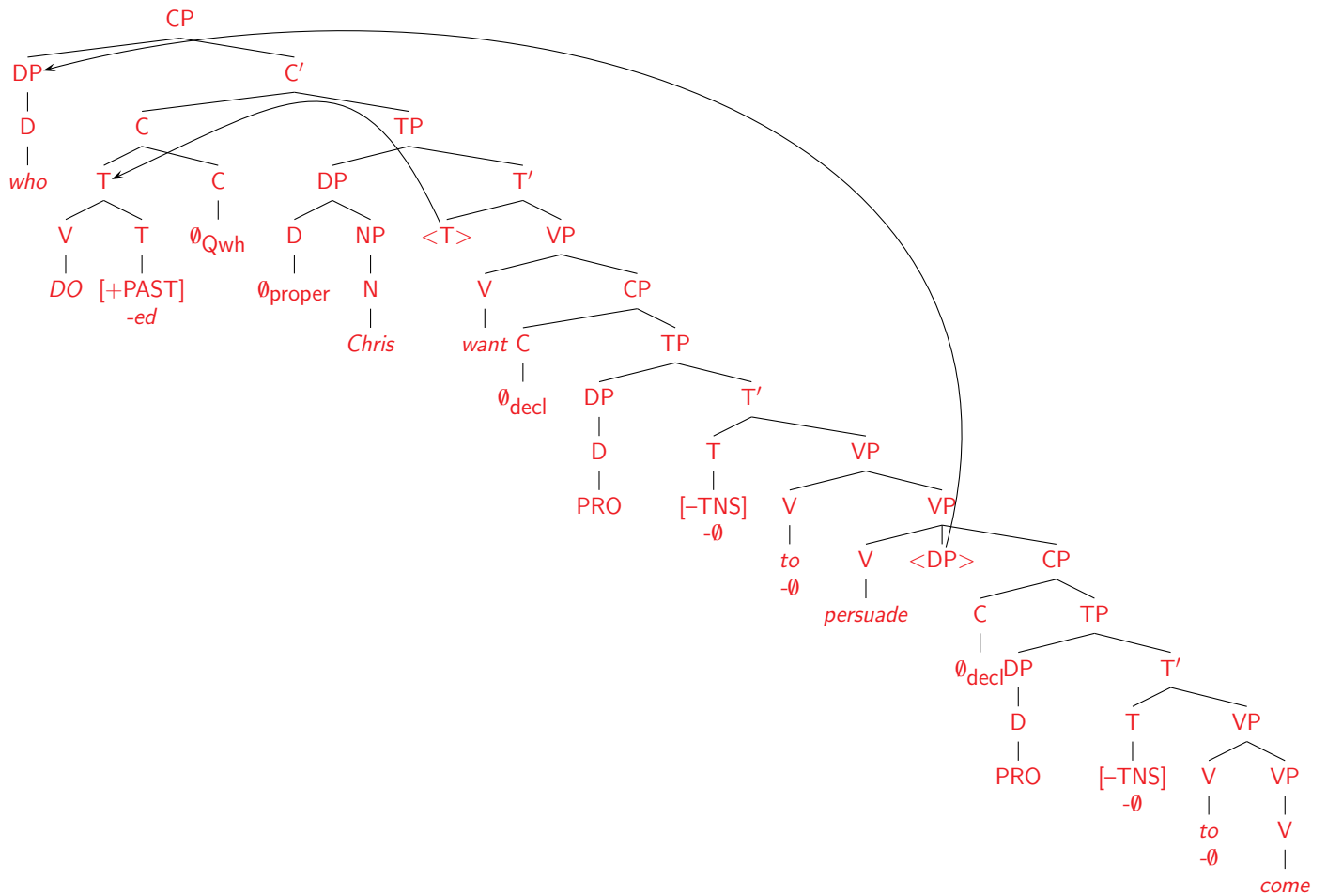


How will you pay for the envelopes?



How will you word the invitations?

Note here that *the invitations* is a complement not an adjunct.



Who did Chris want to persuade to come?

The structure of ditransitives (like *persuade*) is one of the last places that we have ternary branching structures. Not counting the subject/agent (persuader), *persuade* has two arguments (persuadee and the proposition the persuader is pushing), and so they must both be complements of *persuade*, necessitating a ternary structure. The only other place you'd see a ternary structure in principle anymore would be in a conjunction like *Pat and Chris*.

