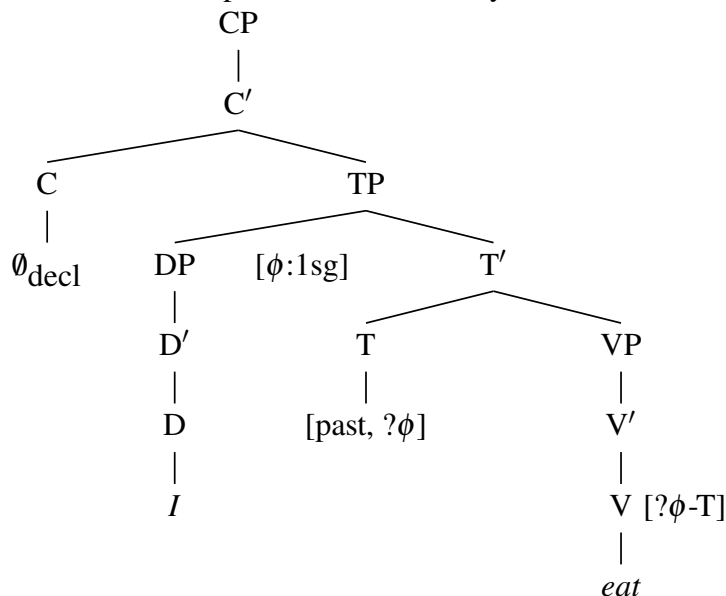


November 28ish, 2022

1 Inflection

This is kind of a deeper dive into our story about auxiliaries. First, recall how we got the sentence *I ate*.



The subject has $[\phi:1\text{sg}]$ features, which are shared by local agreement with T, filling in the $[\phi]$ feature to make it $[\text{past}, \phi:1\text{sg}]$. The $[\phi-T]$ feature of *eat* percolates to VP, and local agreement between T and VP passes the $[\text{past}1\text{sg}]$ feature over to fill in $[\phi-T]$, yielding $[\text{past}, \phi:1\text{sg}]$ on VP, thus on V. The way you pronounce the past, 1sg version of *eat* is *ate*.

The rationale here is that in order to pronounce the (abstract stem) *eat*, we need to know both the tense information from T and the person/number information from the subject. Except there are a couple of other ways you can pronounce *eat*.

nonpast, 3sg	<i>eats</i>
past	<i>ate</i>
(otherwise)	<i>eat</i>

- (1) He eats.
- (2) He ate.
- (3) We eat.
- (4) He is eating.
- (5) He has eaten.
- (6) He had been eating.
- (7) He should eat.
- (8) He should be eating.
- (9) He should have been eating.
- (10) Lunch was eaten.

So we need to know person/number and T information in some cases, but not all of those. In some cases what we need to know is what verbal element preceded it.

after T (nonpast, 3sg)	<i>eats</i>
after T (past)	<i>ate</i>
after progressive <i>be</i>	<i>eating</i>
after other auxiliary	<i>eaten</i>
(otherwise)	<i>eat</i>

As for those auxiliaries (*have* and *be*) that can precede it, they seem to be acting like regular verbs too.

- (11) I am eating.
- (12) They are eating.
- (13) He is eating.
- (14) I was eating.
- (15) They were eating.
- (16) They have been eating.
- (17) I have been eating.
- (18) He has been eating.
- (19) I had been eating.
- (20) They might have been eating.

after T (nonpast, 3sg)	<i>is</i>	
after T (nonpast, 1sg)	<i>am</i>	
after T (nonpast, pl)	<i>are</i>	
after T (past, sg, –addressee)	<i>was</i>	after T (nonpast, 3sg) <i>has</i>
after T (past)	<i>were</i>	after T (past) <i>had</i>
after progressive <i>be</i>	<i>being</i>	(otherwise) <i>have</i>
after auxiliary	<i>been</i>	
(otherwise)	<i>be</i>	

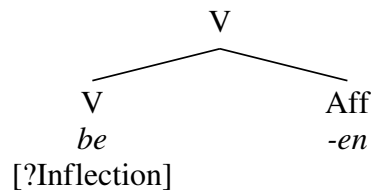
So we generalize. It's not that a verb needs to know [ϕ -T] specifically. It needs to know **something that determines its ending**. If T is the thing that precedes the verb, then it'll be the [ϕ -T] features, but if an auxiliary is the thing that precedes the verb, it'll be the identity of the auxiliary that determines it. So, instead, we'll say:

- (21) V << [ϕ Inflection]

And we have a list of things that will **satisfy** an [ϕ Inflection] feature. [T- ϕ] features can do that, but so can a [AUX, PASS] feature, an [AUX, PROG] feature, an [AUX, PERF] feature, and (potentially) an [AUX, MODAL] feature.

We'll imagine as actually putting the verb in the tree in two parts. There's a **root** and an **affix**. We will assume that they're actually morphologically marked as such. That is, the affix has a "leading hyphen" (that indicates it is a suffix, it attaches to something on the right), and the root has a "trailing hyphen" (that indicates that it needs a suffix). More or less.

So, though we'll write something like "be+EN" that is a V that is made of two parts, which we might—under a microscope—actually see as this:



So, if we say that any verb has an [?Inflection] feature (needs an ending), and the features above can provide that ending, we can get the features to spread around and predict what we see. (We do need to assume that a verb can't set its own ending.)

(22) be+ING, V, [AUX, PROG], [+ _ VP]

(23) have+EN, V, [AUX, PERF], [+ _ VP]

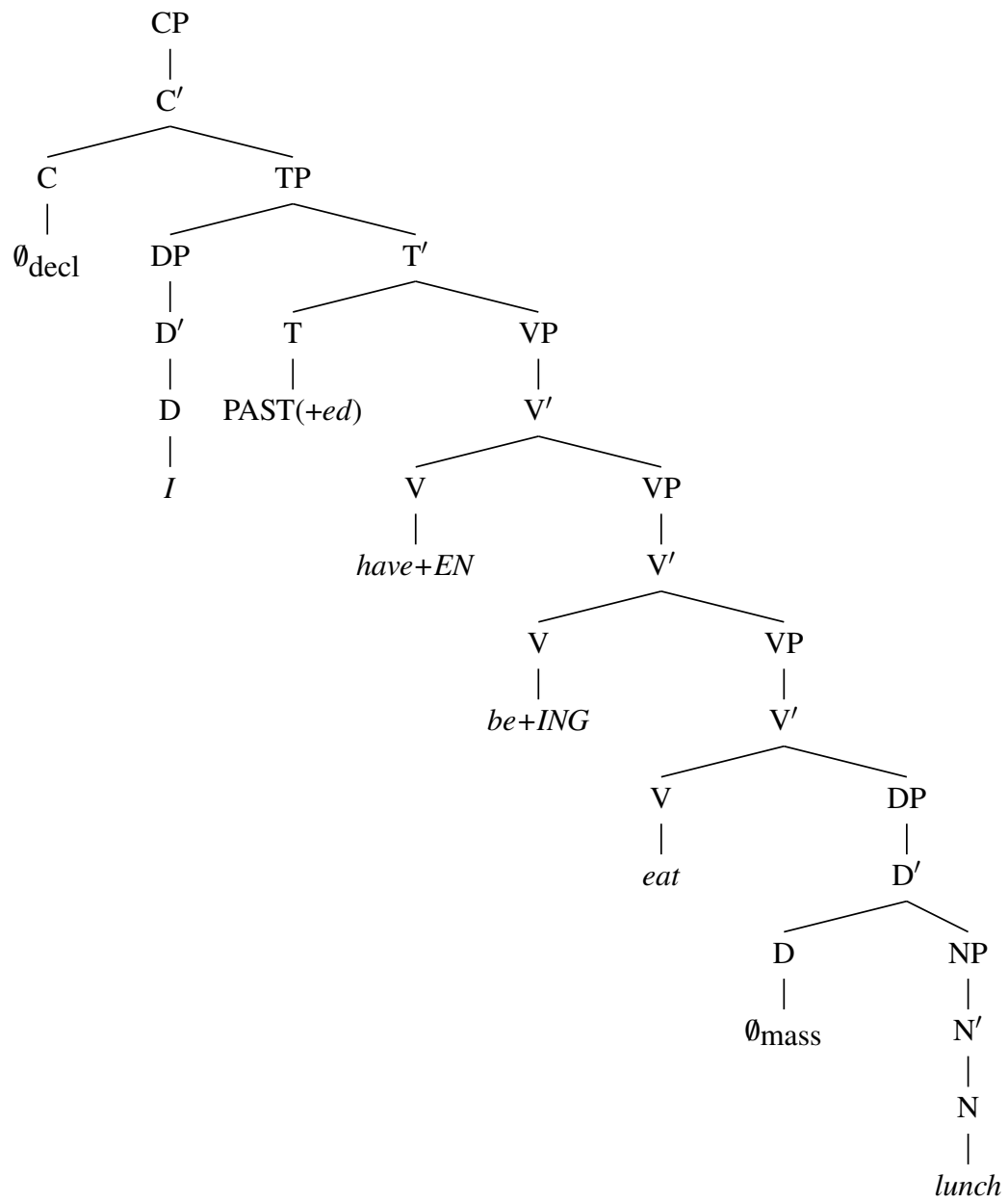
(24) be+EN, V, [AUX, PASS], [+ _ VP]

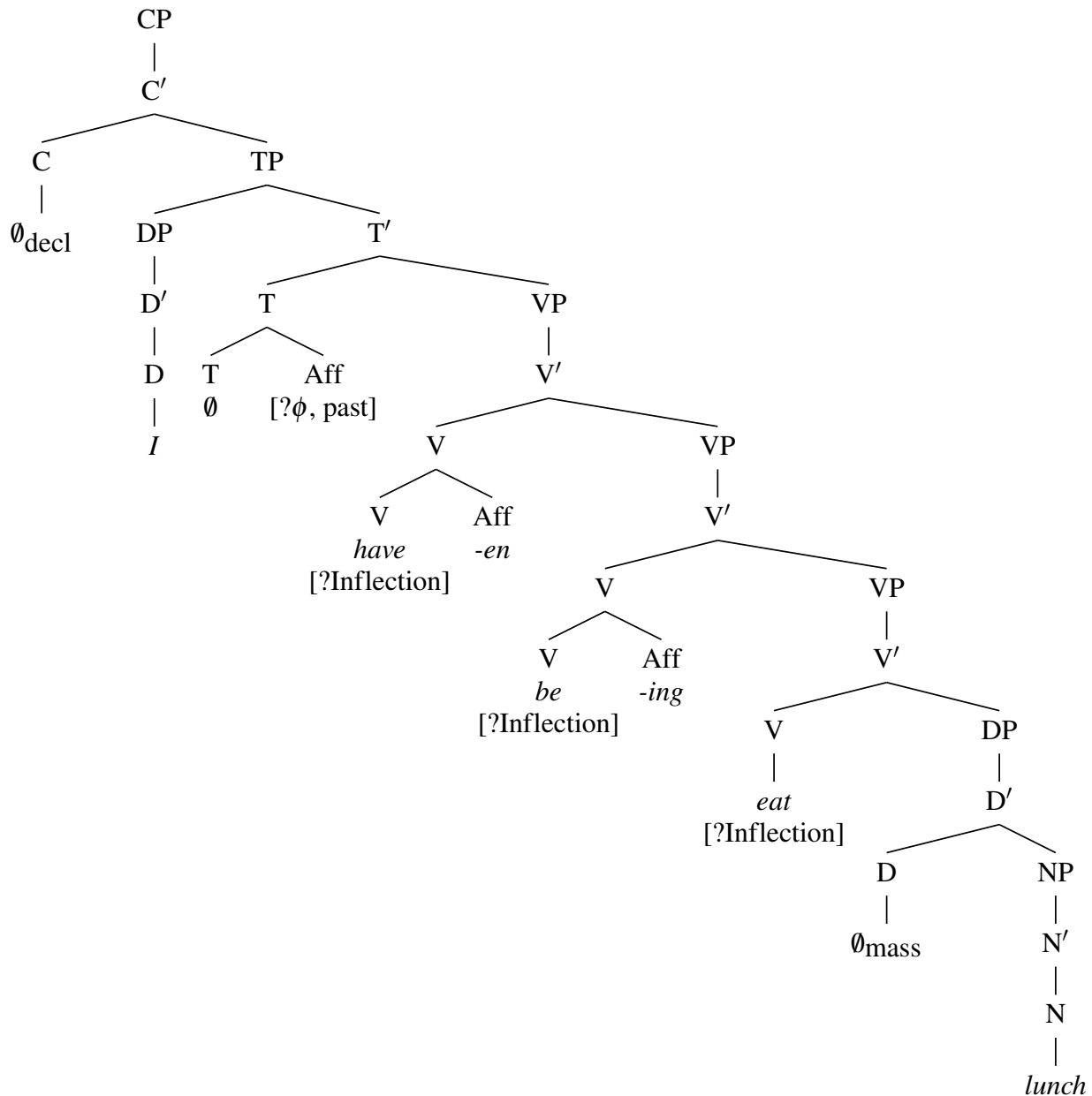
(25) might+Ø, V, [AUX, MODAL], [+ _ VP]

← Maybe. Until now, this has been “T”

(26) I PAST have+EN be+ING eat lunch

(27) I had been eating lunch





This isn't *quite* enough though. We do need to say that in order to know how to pronounce the verb, it needs to look up the tree a little bit to get the information about its ending. But more than that, we also need to say that the things that have endings **need** to provide them to something.

That is *have+EN* really comes in with an “EN” suffix that **needs** to be realized.

Same with the “ING” suffix on *be+ING*, same with the “T-φ” suffix on T.

We'll leave this stated somewhat informally, but that is the understanding. This is what will allow us to understand *do*-support. One possible way to think about it is that things with a suffix have a [$?V$] feature that has no default, it **must** be identified with a verb ([$?Inflection$] does seem to have a default).