

CAS LX 522 Syntax I

Case, agreement, and the passive
(chapter 6 continues)

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Subject-verb agreement

Recall that in English, the ϕ -features of the subject have an effect on the morphology of the verb:

- 1) Fans were rioting on Comm Ave.
 - 2) A fan was rioting on Comm Ave.
- While we're here, we might as well account for this too. It is also an agreement relation, between the subject and, eventually, the verb (or auxiliary, if there is one).

Subject-verb agreement

What we're after is this:
The subject (the thing that's getting nominative case) should share/check ϕ -features with the thing that gets inflection from tense.

The ϕ -features are on the DP that checks nominative case with T.

The relevant inflection is valued by T.

Maybe it's "passed" from the DP to T, then from T to the *uInfl*: below.

- 1) Fans were rioting on Comm Ave.
- 2) A fan was rioting on Comm Ave.
- 3) Fans riot on Comm Ave.
- 4) A fan riots on Comm Ave.

Subject-verb agreement

So. The verb gets its tense inflection specified by T when, e.g., the [*tense:pres*] feature of T values the [*uInfl*:] feature of *v*.

Since the subject already agrees with T (the [*nom*] feature of T checks the [*case*] feature of the subject), we'll incorporate subject agreement into this process.

Notice that we still want this agreement to be mediated by T (sometimes it values, e.g., Perf):

- 1) They have been reading novels.
- 2) She has been reading novels.

Subject-verb agreement

Suppose then that T has a [*u ϕ* :] feature as well.

The subject has (interpretable) ϕ -features that value the [*u ϕ* :] feature of T.

- They were rioting on Comm Ave.

T [*T*, *uD**, *u ϕ* :, *nom*] [*ucase:nom*]

they [*D*, ϕ :*pl*, *case*] [*ucase:*]

So, once T is in the structure, c-commanding *they* in *SpecvP*, we get:

T [*T*, *uD**, *u ϕ* :*pl*, *nom*] [*ucase:nom*]

they [*D*, ϕ :*pl*, *nom*] [*ucase:nom*]

Subject-verb agreement

Finally, we suppose that the (checked) [*u ϕ* :*pl*] feature of T, also values a [*uInfl*:] feature on a lower *v* (or Perf, or Prog).

- The rules of pronunciation will tell us that a *v* with the verb *riot* adjoined to it sounds like:
 - "riots" if *v* has the feature [*uInfl*:*pres,sg*]
 - "riot" if *v* has the feature [*uInfl*:*pres,pl*]

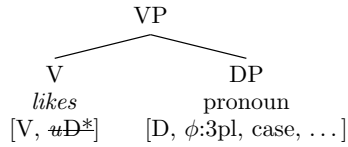
Notice that T values a [*uInfl*:] feature all at once, with any relevant feature(s) it has (so, tense and ϕ -features both).

She likes them

So, let's walk through it.

We start by merging *like* and the 3pl pronoun.

I've been kind of inconsistent about including the category feature in the feature list. I intend *not* to include it, because it is redundant with the node label. Later trees omit it, and that's my preference.



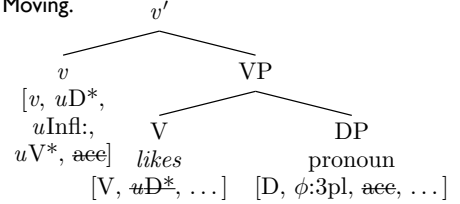
She likes them

v [v , uD^* , $uInfl$;, uV^* , acc]

We Merge v with VP (HoP).

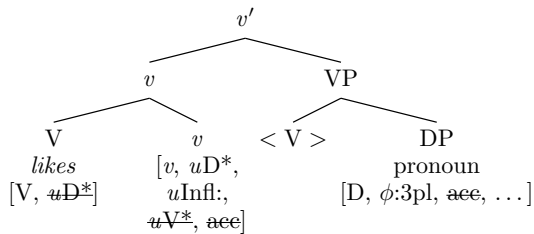
The [acc] on v matches, values, and checks the [$case$] on the pronoun, checking itself as well.

- Agree is lazy, we can do this without any further Merging or Moving.



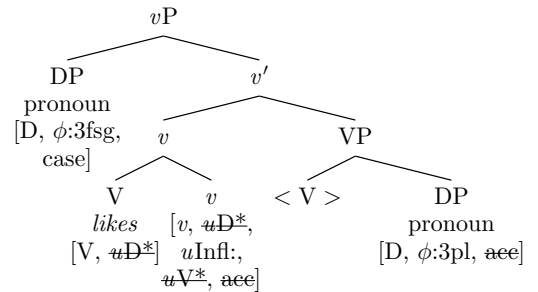
She likes them

The V moves up to adjoin to v to check the [uV^*] feature of v .



She likes them

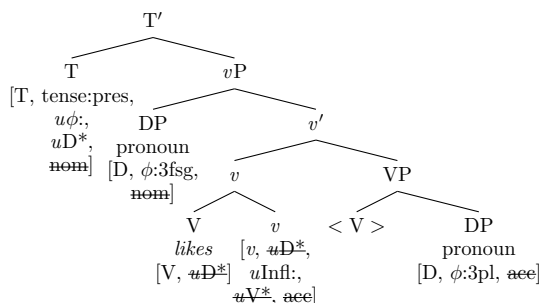
The 3sg feminine pronoun is Merged to check the [uD^*] feature of v .



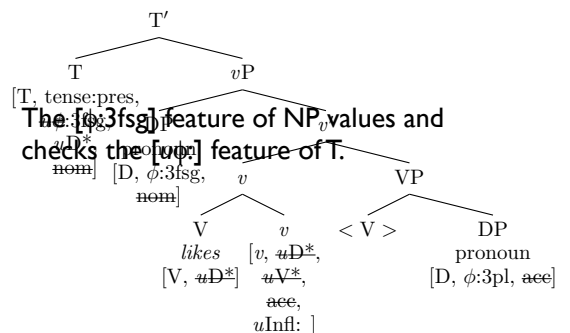
She likes them

The T is Merged with vP (HoP).

The [nom] feature of T matches, values, and checks the [$case$] feature of the pronoun, checking itself in the process.



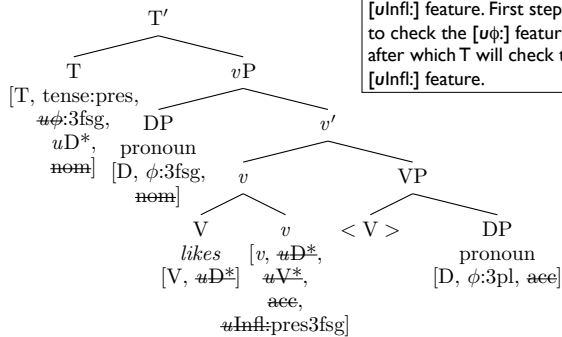
She likes them



She likes them

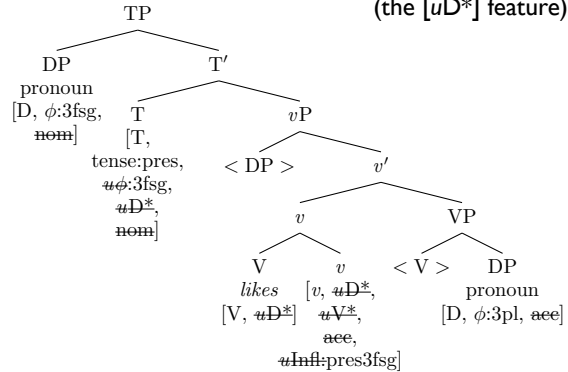
The [$\mu\phi$:3fsg] and [tense:pres] features of T value and check the [μ Infl:] feature of v.

From now on: (Finite) T can only value a lower [μ Infl:] feature once T itself has a value for [ϕ]. Both [tense] and [ϕ] value the lower [μ Infl:] feature. First step is always to check the [$\mu\phi$:] feature on T, after which T will check the lower [μ Infl:] feature.



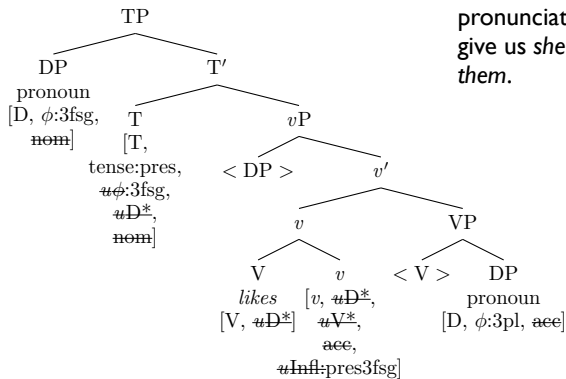
She likes them

Finally, the DP is moved up and Merged with T' in order to check the EPP feature (the [μ D*] feature) of T.



She likes them

All uninterpretable features are checked, the pronunciation rules give us *she likes them*.



Passives

The passive construction is one where:

The original subject disappears (or becomes a *by*-phrase)

The original object becomes the subject.

The verb appears as *be*+passive participle.

- The passive participle in English sounds just like the perfective participle.

- Pat took pretzels. **active**
- Pretzels were taken (by Pat). **passive**

Passives

- Pat stole books.
- Books were stolen (by Pat).

In both cases, *books* is getting the Theme/Patient θ -role. By UTAH, it must be originally Merged as DP daughter of VP, in both the active and the passive.

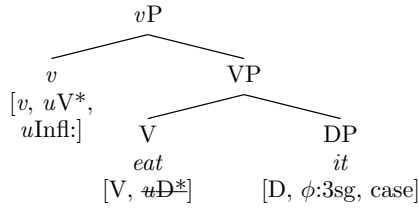
- In fact, the passive is a lot like the unaccusative. An “underlying object” becomes the subject.

Passives

- All we need is the passive auxiliary Pass.
- *be* [Pass, μ Infl:] selects a $v_{\text{unaccusative}}$.
- By selecting for $v_{\text{unaccusative}}$, the passive auxiliary “removes” an Agent.
- Not allowed for intransitives, an open mystery.
- *It was danced (by Pat)
- The passive auxiliary works like other auxiliaries: Pass can value a lower [μ Infl:] feature, if Pass' own [μ Infl:] feature is valued by a [tense] feature, it is strong.
- Lunch was not eaten.
- **Pass is the last auxiliary in the HoP:**
- Lunch may not have been being eaten.
- T > (Neg) > (M) > (Perf) > (Prog) > (Pass) > v > V

It was eaten

For *It was eaten*, we Merge *eat* and *it* to build the VP, then Merge an unaccusative *v*...

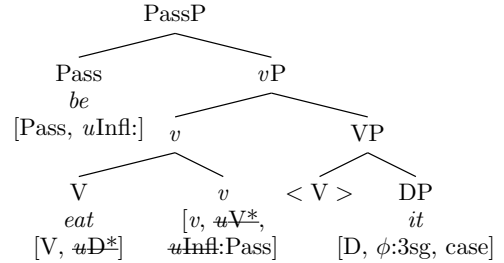


It was eaten

The V moves up to adjoin to *v* to check the [*uV**] feature of *v*.

The Pass auxiliary is Merged (HoP).

[Pass] matches, values, checks [*uInfl:*] on *v*.



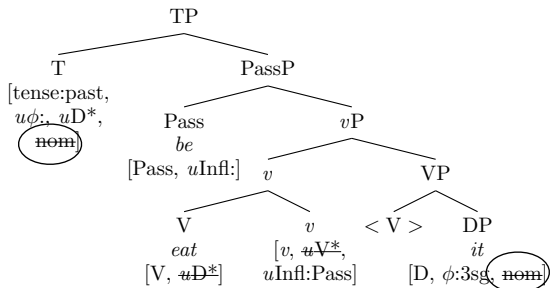
It was eaten

T is Merged (HoP).

[nom] on T matches, values, checks [case] on *it*.

[phi:3sg] on *it* matches, values, checks [*uphi:*] on T.

[past] on T matches, values [*uInfl:*] on Pass.



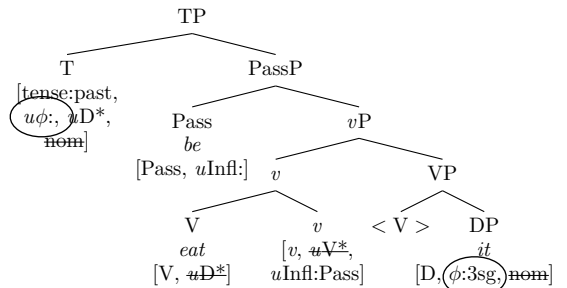
It was eaten

T is Merged (HoP).

[nom] on T matches, values, checks [case] on *it*.

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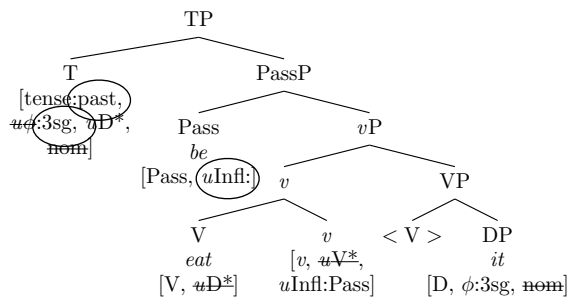
It was eaten

T is Merged (HoP).

[nom] on T matches, values, checks [case] on *it*.

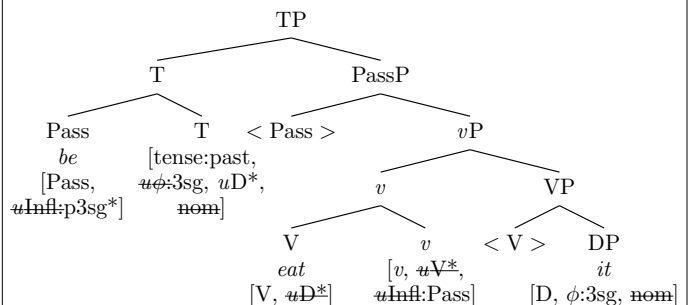
[phi:3sg] on *it* matches, values, checks [*uphi:*] on T.

[past] on T matches, values [*uInfl:*] on Pass.



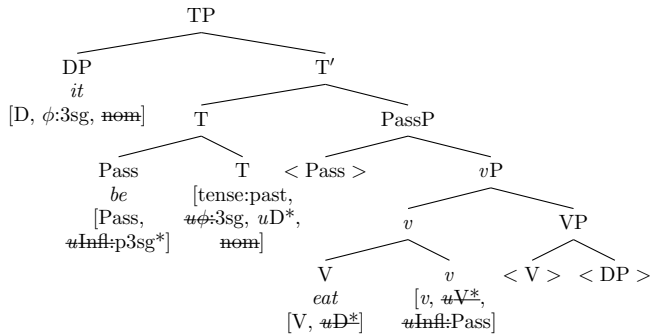
It was eaten

Pass moves to T (checks [*uInfl:past**] on Pass).



It was eaten

It moves to SpecTP (checks [uD^*] on T).



Ditransitive passives

Consider again *Pat gave Chris books*.

- Chris was given books.
- *Books were given Chris.

Pat gave books to Chris.

- Books were given to Chris.
- *Chris was given books to.

Where does the by-phrase attach?

Adverb tests can give us a hint...

The sandwich was eaten by Pat today at noon
 The sandwich was eaten by Pat at noon today
 The sandwich was eaten today _ by Pat _ at noon
 The sandwich was eaten at noon _ by Pat _ today

The dishes were washed by Pat _ poorly _ yesterday
 The dishes were washed poorly by Pat yesterday
 The sandwich was eaten by Pat _ sloppily _ at noon
 The sandwich was eaten sloppily by Pat at noon

- Conclusion?

Adverbs

Before today, we'd mostly drawn adjuncts as adjoined to vP . This explains why *sloppily* can be either to the left or to the right of vP :

- 1) Pat sloppily ate lunch.
- 2) Pat ate lunch sloppily.
- 3) Pat has sloppily eaten lunch.
- 4) Pat has eaten lunch sloppily.

Sloppily also seems to be able to adjoin to $PerfP$ or $ProgP$, at least marginally.

- 5) ?Pat might sloppily have eaten lunch.
- 6) ?Pat should sloppily be eating lunch.

But it can't be between a subject and T:

- 7) *Pat sloppily might eat lunch.

Manner vs. propositional adverbs

sloppily, slowly, quickly—all describe the *manner* in which an action takes place. These are **manner adverbs**. They adjoin to vP .

There are other kinds of adverbs as well, however. One such kind are propositional adverbs: *perhaps, fortunately, interestingly*. These express a kind of attitude on the part of the speaker toward the content of the sentence.

Propositional & temporal adverbs

- **Propositional adverbs** seem to adjoin to TP.

- 1) Fortunately, Pat ate lunch.
- 2) Pat ate lunch, fortunately.
- 3) ?Pat fortunately ate lunch.
- 4) ?Pat might have fortunately eaten lunch.

- **Temporal adverbs** also seem to adjoin high.

- 5) Today Pat ate lunch.
- 6) Pat ate lunch today.
- 7) *Pat today ate lunch.

Adverb positions

Generally speaking, where an adverb attaches depends on its meaning.

vP for manner adverbs, TP for temporal adverbs, ...

Notice that we predict this now:

- 1) Yesterday [Pat completely [finished lunch]].
- 2) Yesterday [Pat [finished lunch] completely].
- 3) Pat [[finished lunch] completely] yesterday.
- 4) Pat [completely [finished lunch]] yesterday.
- 5) *Pat [[finished lunch] yesterday completely].

Later, perhaps, we'll consider additional complexity in adverb placement.

Where does the by-phrase attach?

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 The sandwich was eaten by Pat _ sloppily _ at noon
 The sandwich was eaten sloppily by Pat at noon

- Conclusion?

Possessors

Consider the genitive (possessive) 's in English:

- 1) John's hat
- 2) The student's sandwich
- 3) The man from Australia's book
- 4) The man on the hill by the tree's binoculars

The possessor can be a full DP (inside another DP).

The 's attaches to the whole possessor *phrase*—it's the man's book and binoculars, not Australia's or the tree's, after all.

This is not a noun suffix. It seems more like a *little word* that signals possession, standing between the possessor and the possessee. (it's a *clitic*).

Possessors

It seems to be impossible to have both a 's and a determiner.

- *The building's the roof
- The roof of the building
- *The hurricane's the eye

Determiners like *the* and the possession marker 's seem to be in complementary distribution—if one appears, the other cannot.

- Compare:

1) The big fluffy pink rabbit	3) *The my rabbit
2) *The that rabbit	4) *Every my rabbit

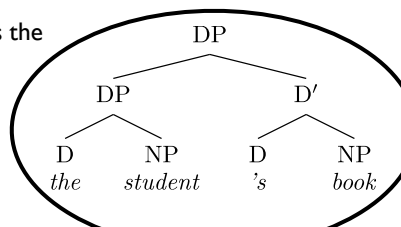
Possessors?

This suggests a structure like this for possession phrases:

The possessor DP is in the specifier of DP. And of course, this can be as complex a DP as we like, e.g., *the very hungry student of linguistics by the tree with the purple flowers over there... 's book*

- The possessed NP is the complement of D.

Not actually this, wait for the next slide



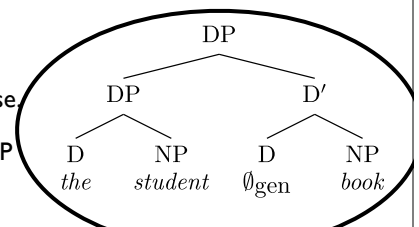
Possessors and the null D

But what then to do about DPs like *his book?* Or *their book?*

Here the possessor DP is the genitive case pronoun, and there's no 's.

- 1) *Their's book
- 2) *Them's book
- 3) *They's book

Accordingly, we will instead suppose that there is a **null D**, \emptyset_{gen} , that checks genitive case. The genitive case form of a non-pronominal DP is audible in English, as DP's.



The king's every whim

- 1) A whim
- 2) The king's whim
- 3) The king's every whim

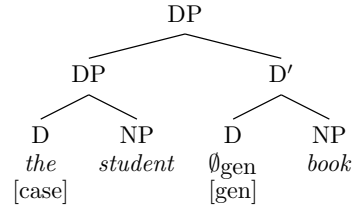
To the extent that every is a D, this indicates two things:

The king is to the left of the D; really, the specifier of DP is the only place it could be.

The genitive case 's isn't *always* incompatible with an overt D (hence, better to think of 's not as a D but rather as a case marker on the possessor DP). We take this (marked) use of every to be an exceptional overt determiner that can still check [gen].

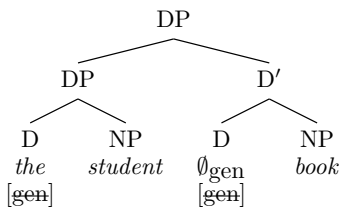
Checking genitive case

The checking of genitive case in the DP works exactly like the checking on nominative case in the TP does.



Checking genitive case

The checking of genitive case in the DP works exactly like the checking on nominative case in the TP does.



I don't mean to preclude the possibility that the possessor actually moves from somewhere into SpecDP—we'll explore that next week, but that need not happen for this to work.

A couple of null Ds

So we have at this point a couple of different null determiners. They are as different as *the* is from *a* or from *that*, they just happen to be pronounced the same way (like this: " ").

One is \emptyset_{gen} , which has a [gen] feature and in whose specifier we find possessors.

Another is \emptyset_{indef} , which is a nonsingular indefinite article, in whose complement we find plurals and mass nouns.

$[\emptyset_{indef} \text{ Milk}]$ spilled. $[\emptyset_{indef} \text{ People}]$ cried.

Mass vs. count: Some nouns indicate countable things (*chairs*) others indicate stuff (*milk*). Singular/plural distinctions don't apply with mass nouns.

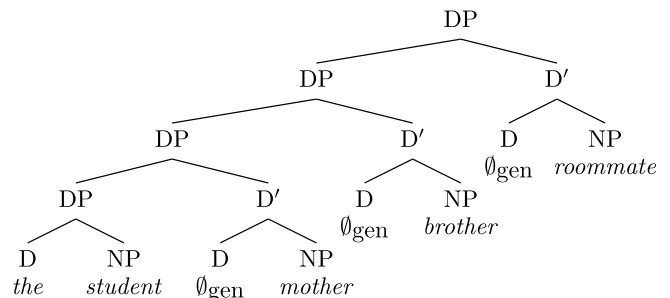
Recursion

Another noteworthy aspect of the possessor phrase is its *recursive* property.

The possessor is a DP in the specifier of DP. That means that the DP possessor could have a possessor too...

- 1) *The student's father's book*
- 2) *The student's mother's brother's roommate*

Recursion



Proper names

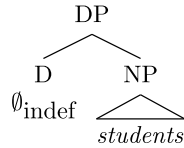
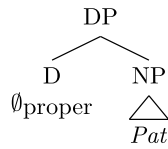
As for proper names like *Pat*, we will assume that they have a structure something like *students*.

- 1) The *Pat* we respect came to the party.
- 2) O *Giorgos ephuge* the *George* left 'George left.'

$\emptyset_{\text{proper}}$ (names are not indefinite; this is probably mostly the same as *the*, but silent).

Implementation:

$\emptyset_{\text{proper}}$ has a [*u*proper] feature, *Pat* has a [proper] feature.



Number agreement on D

What is wrong with $*[\text{DP } A \text{ students}]$ and $*[\text{DP } student]$? It's a lack of agreement in number. It's like $*\text{Students eats lunch}$.

We can encode this in the same way: The indefinite determiner has a [*u* ϕ :] feature, and the N has ϕ -features as always (including a num feature).

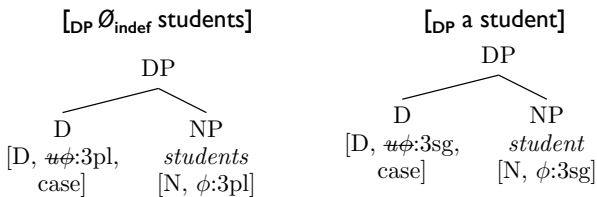
The [*u* ϕ :] feature is valued and checked by the ϕ -features of the N.

Number agreement

This means *a* and \emptyset_{indef} are in fact pronunciations of the same D (Like *me* and *I* are).

A(*n*) is the pronunciation when it has a [*u* ϕ :sg] feature

\emptyset is the pronunciation otherwise



The case of prepositional objects

Consider the case of the object of a preposition:

- Computers break near me.

Now that we've incorporated case into our system, we're stuck with it. Noun phrases come with case. *Computers* has case (nominative) and *me* has case (accusative).

The question is: How is the case of *me* checked?

Computers break near me

Computers break is unaccusative; there's no agent, and *computers* is the Theme/Patient, it is the affected object.

Thus, we have in our numeration:

break [V, *uD**]

unaccusative [v, *uInfl*., *uV**]

computers [N, ϕ :3pl, case]

\emptyset_{indef} [D, *u* ϕ : , case]

T [T, *u* ϕ ., pres, nom, *uD**]

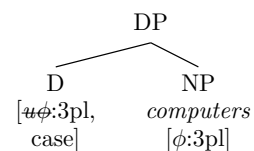
break is unaccusative,
no [acc].

As well as *near* and *me*, which we'll get to in a moment.

Computers break

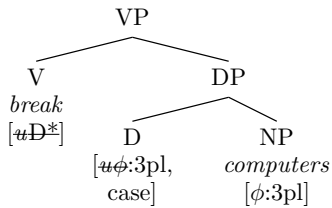
First, let's just do *computers break*.

We start by putting together *computers*.



Computers break

Then, merging *break* and *computers*.

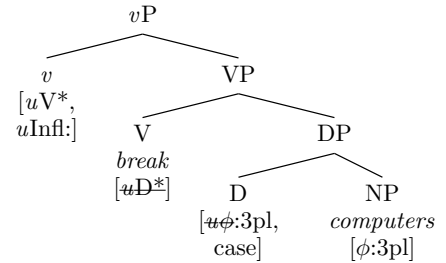


Computers break

v [uV^* , $uInfl:$]

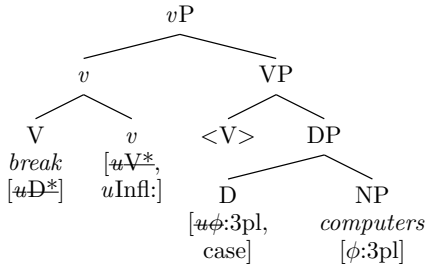
break is unaccusative,
no [acc].

We Merge v with VP (HoP).



Computers break

The V moves up to adjoin to v to check the [uV^*] feature of v .

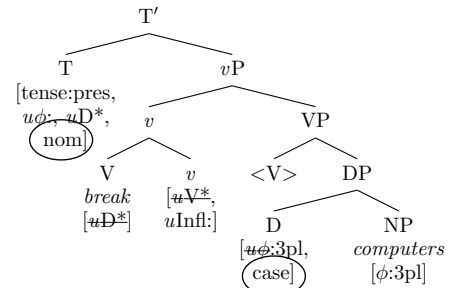


Computers break

The T is Merged with vP (HoP).

T has the features: [T, pres, $uφ:$, uD^* , nom].

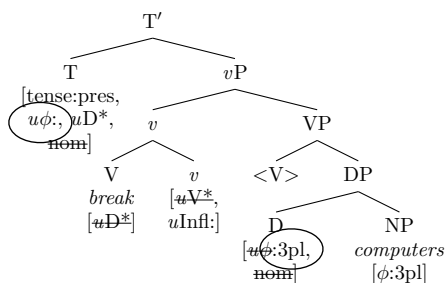
The [nom] feature of T can now match the [case] feature of *computers*.



Computers break

The [nom] feature of T matches, values, and checks the [case] feature of *computers*, checking itself in the process.

The [$uφ:$] feature of T can also match the [$φ:3pl$] feature of *computers*.

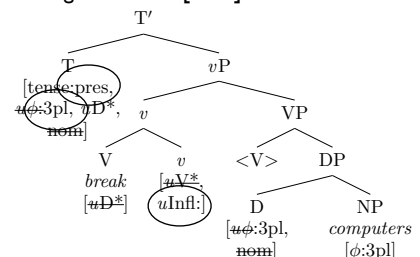


Computers break

The [$φ:3pl$] feature of *computers* matches, values, and checks the [$uφ:$] feature of T.

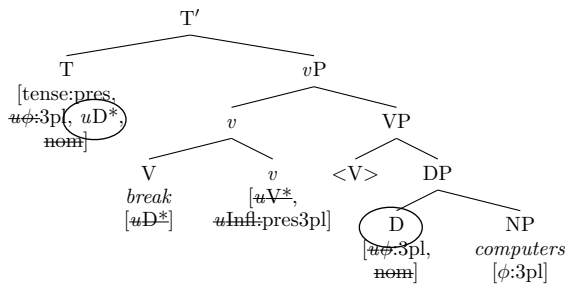
The [tense:pres] feature of T matches the [$uInfl:$] feature of v , which will be valued by both the tense and $φ$ -features of T.

- It's [tense:pres] that matches the [$uInfl:$] feature, but the $φ$ -features "come along" when the [$uInfl:$] feature is valued.



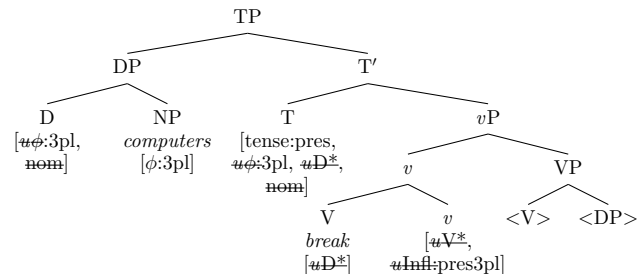
Computers break

The [uD^*] feature of T matches the [D] feature of *computers*. This is not sufficient to check the [uD^*] feature because they are not local, so *computers* is moved up to SpecTP.



Computers break

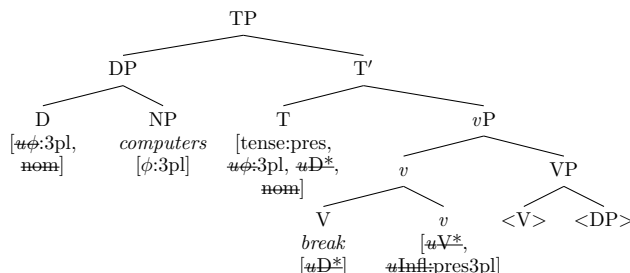
Once the [D] feature of *computers* is a sister to the T' that has the [uD^*] feature (the feature projects from T to T'—it's the same feature), the [uD^*] feature is checked.



Computers break near me

Now, let's consider *Computers break near me*.

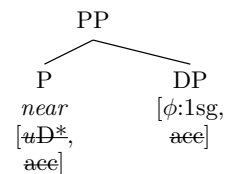
Me is clearly accusative. There's nothing here that can value a case feature as accusative. That's why I chose *break*. All we're adding to this is *me* (which has accusative case) and the P *near*.



Computers break near me

Conclusion: It must be *near* that is responsible for the accusative case on *me*.

Merge *near* and *me* (1sg pronoun). The [D] feature of *me* checks the [uD^*] feature of *near*. The [acc] feature of *near* values and checks the [case] feature of *me* (checking itself in the process).

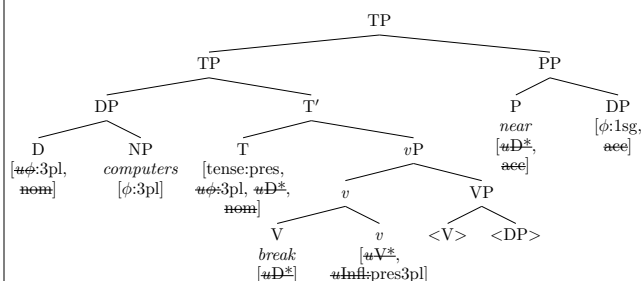


Near me computers break

The last step: Adjoin the PP to the TP.

To the TP? *Near me* can appear on either side of TP, not vP.

Computers near me break



P checks accusative

So, *in general*: A preposition P...

- Has a [P] category feature
- Has a [uD^*] feature, motivating a Merge with its object.
- Has an [acc] feature, valuing and checking the [case] feature of its object.

T has [T], [uD^*] (EPP), [$uφ$], [nom]

v has [v], [uInfl], [uV^*], and, if v assigns a θ -role, it has [uD^*] and [acc].

Double-object constructions

We've by now covered the sentence

1) Pat gave books to Chris.

Pat, books, and *Chris* are all noun phrases, they all need case.

Pat gets (nom) case from T.

books gets (acc) case from v.

Chris gets (acc) case from P (*to*).

What about *Pat gave Chris books*?

The “have” kind of “give” must have an [acc] feature.

Japanese Numeral Quantifiers

- Gakusei ga hon o 4-satu katta
students nom book acc 4-cl bought
'The students bought four books.'
- ?*Gakusei ga hon o 4-nin katta
students nom book acc 4-cl bought
- Gakusei ga 4-nin hon o katta
students nom 4-cl book acc bought
'Four students bought books.'
- Gakusei ga kyoo 3-nin kita
students nom today 3-cl came
'Three students came today.'
- Hon o Taroo ga 2-satu katta
books acc T nom 2-cl bought
'Books, Taroo bought two.'
- Yuube, kuruma ga doroboo ni 2-dai nusum-are-ta
last night cars nom thief by 2-cl steal-pass-past
'Last night, two cars were stolen by a thief.' (Miyagawa 1989)

Italian ne-cliticization

Maria ha visto Gianni. Maria lo ha visto.

M has seen G. M him has seen.

Gianni trascorrerà tre settimane a Milano.

G spend.fut3sg 3 weeks in M

Gianni ne trascorrerà tre (*ne) a Milano.

G of-them spend.fut3sg 3 in M.

Alcuni {persone/*ne} trascorreranno tre settimane a Milano
some people/of-them spend.fut3pl 3 weeks in M.

Telefoneranno tre persone domani

*Ne telefoneranno tre domani

Ne arriveranno tre domani

Ne furono arrestati molti.