March 1, 2024

1 Subject agreement in the age of DP

1.1 Getting agreement and tense to the verb

(1) a. They see us.
b. You see us.
c. It sees us.
d. They saw us.
e. You saw us.
f. It saw us.

(2) *see*, V, [+ _ DP]

(3) a. [–speaker, –addressee, +sg, –pl, –past] → *sees* 3sg present
b. [+past] → *saw* past
c. [ ] → *see* otherwise

(4) V << [?T-ϕ] V always has [?T-ϕ] (needs tense features and *phi*-features)

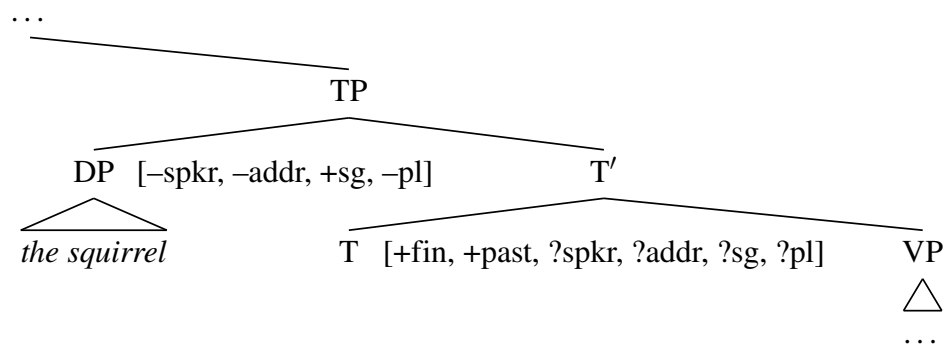
(5) a. ∅, T, [+finite, +past] past tense
b. ∅, T, [+finite, –past] present tense
c. ∅, T, [–finite] infinitive

(6) T << [?ϕ] T always has [?ϕ]

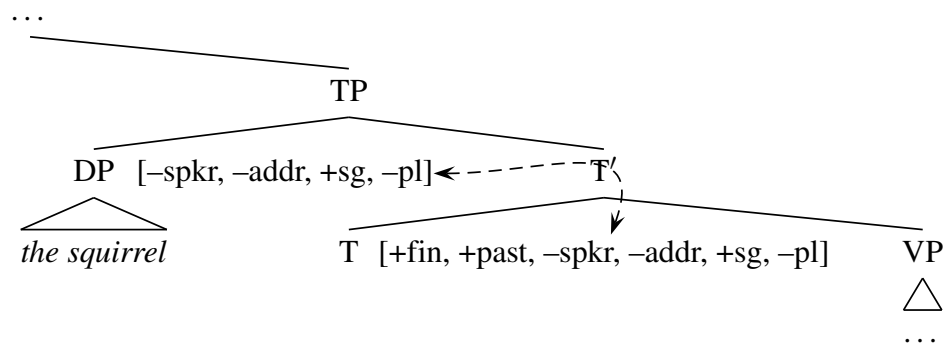
Spec-Head Agreement: Features can be shared between the specifier of a phrase and its head.

[+speaker, –addressee]	1st person
[–speaker, +addressee]	2nd person
[–speaker, –addressee]	3rd person
[+speaker, +addressee]	2nd person inclusive?
[+sg, –pl]	singular
[–sg, +pl]	plural
[–sg, –pl]	mass

So we start off with something like this:



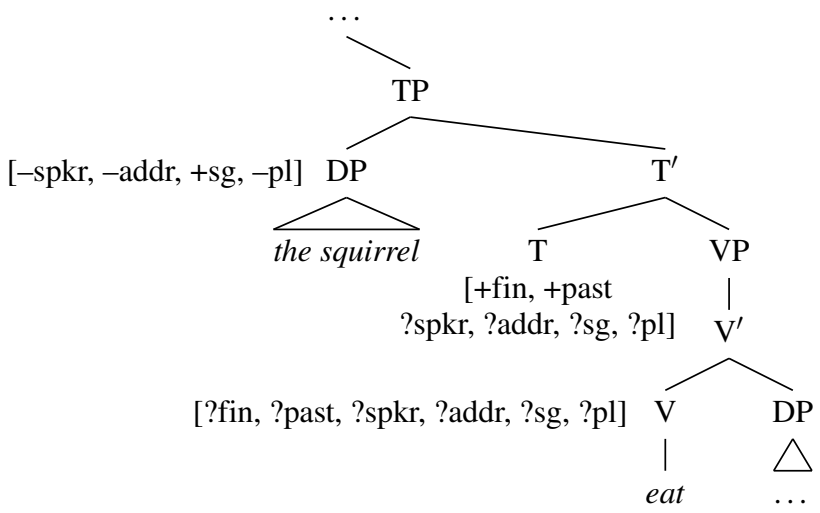
And after Spec-head agreement, wind up with this:



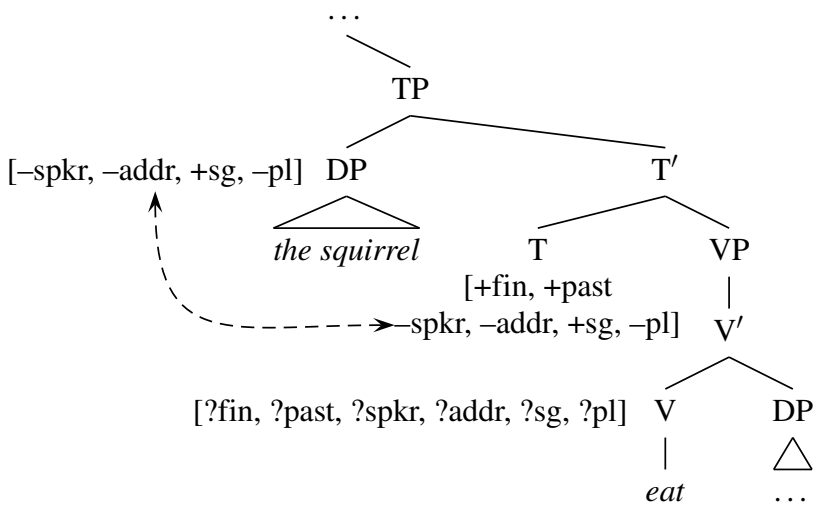
VP inflection: T passes (certain) features to a sister VP.

Feature percolation: (Certain) features are shared between a phrase and its head.

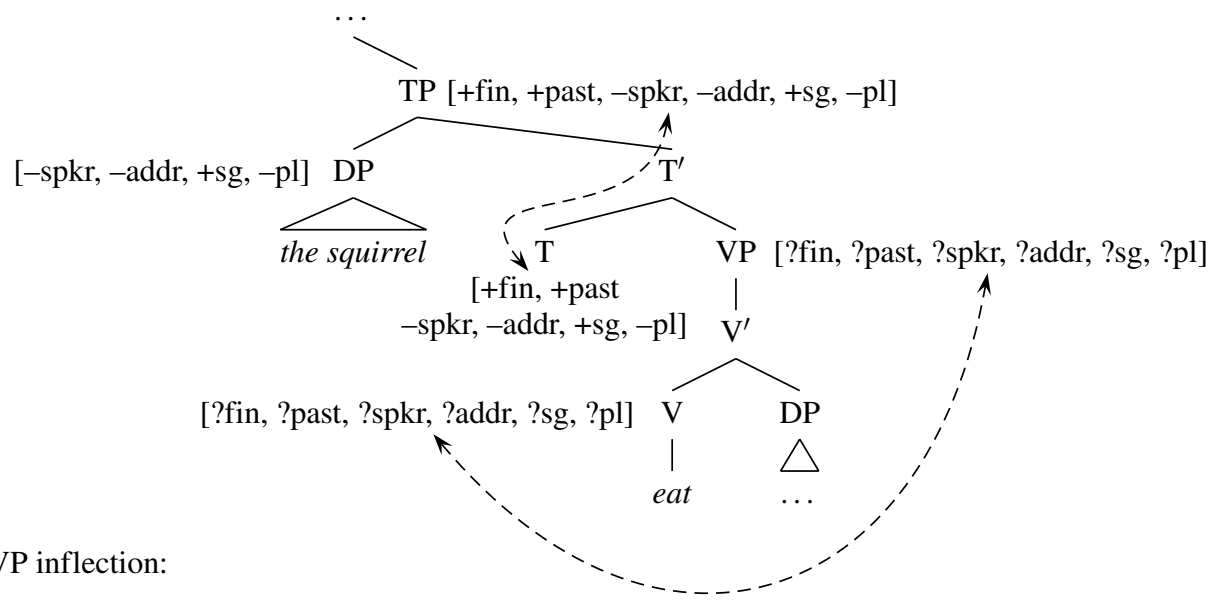
So continuing on in the squirrel tree, we would start off with:



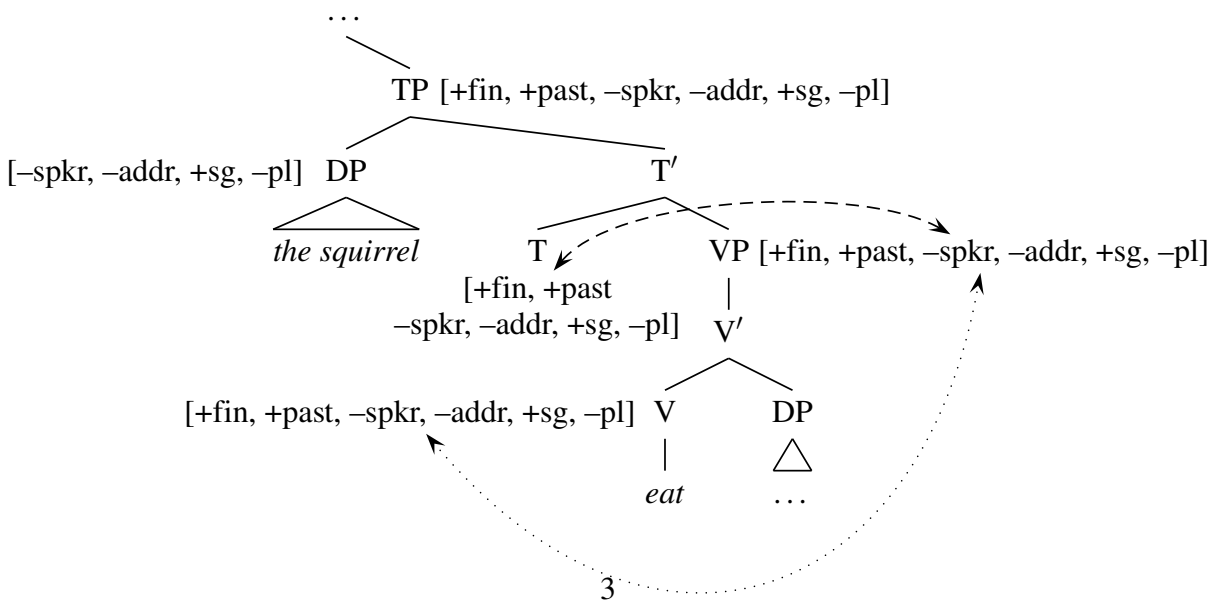
Spec-head agreement:



Percolation:



VP inflection:



[+speaker, –addressee, –sg, +pl]	[+1pl]
[+speaker, –addressee, +sg, –pl]	[+1sg]
[–speaker, +addressee, –sg, +pl]	[+2pl]
[–speaker, +addressee, +sg, –pl]	[+2sg]
[–speaker, –addressee, –sg, +pl]	[+3pl]
[–speaker, –addressee, +sg, –pl]	[+3sg]
[–speaker, –addressee, –sg, –pl]	[+3mass]
[+finite, –past, –speaker, –addressee, +sg, –pl]	[+pres3sg]
[+finite, +past, –speaker, –addressee, +sg, –pl]	[+past3sg]
etc.	

1.2 Getting ϕ-features to DP

(7) *squirrel*, N

(8) a. [–pl,] → *squirrel* singular/mass

b. [ ] → *squirrels* otherwise

(9) N << [?sg, ?pl] N always has [?sg, ?pl] (needs a number specification)

Then we have determiners like these:

(10) a. the, D, [+3sg] singular definite determiner

b. the, D, [+3pl] plural definite determiner

c. this, D, [+3sg] singular proximal determiner

d. these, D, [+3pl] plural proximal determiner

e. that, D, [+3sg] singular distal determiner

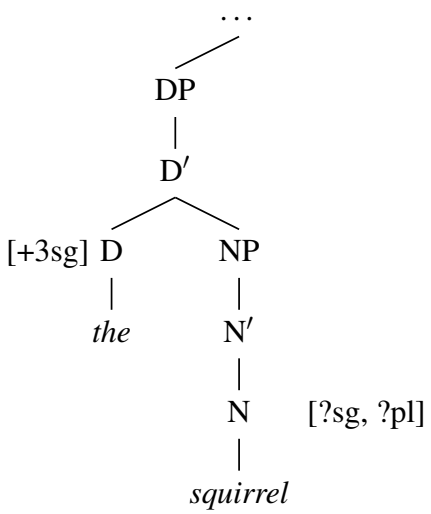
f. those, D, [+3pl] plural distal determiner

g. a, D, [+3sg] singular indefinite determiner

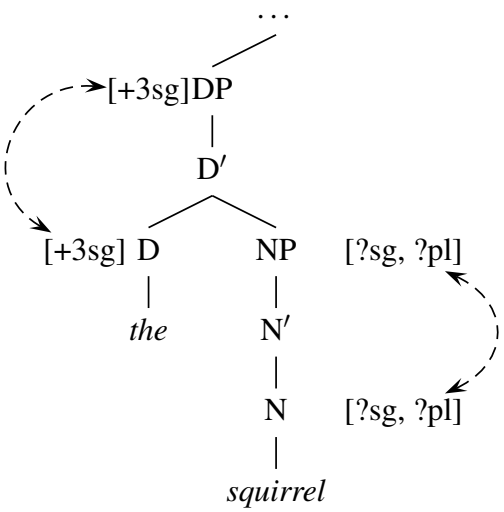
h. ∅, D, [+3pl] plural indefinite determiner

NP inflection: D passes (certain) features to a sister NP.

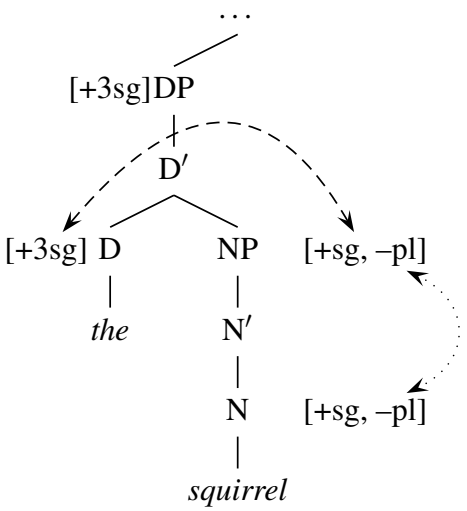
Given that, we get [+3sg] *the squirrel* like this:



Feature percolation:



NP inflection:

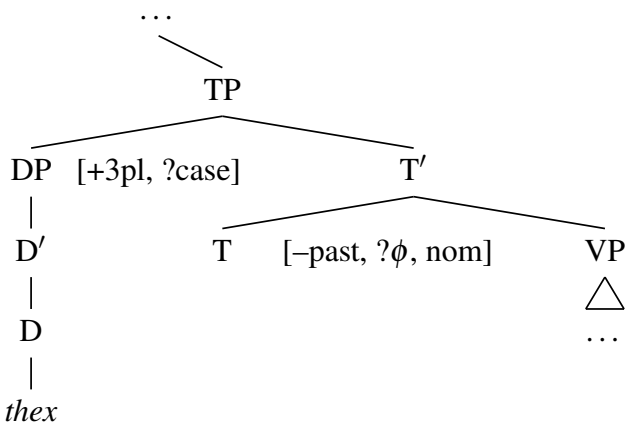


1.3 Pronouns and case

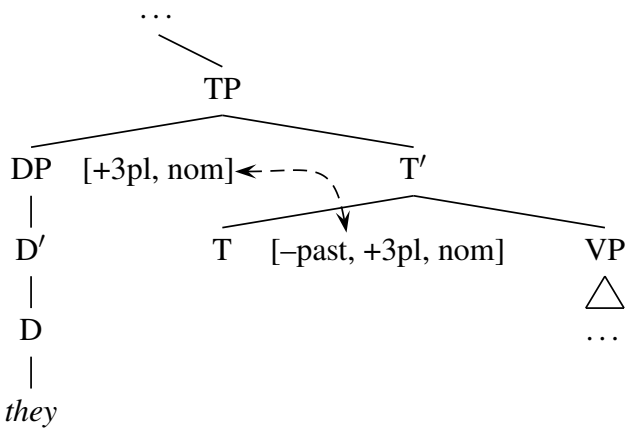
(11) D << [?case] — D always has [?case] (needs a case feature)

(12) T [+fin] << [nom] — Finite T always has a [nom] feature

We start with this:



And then spec-head agreement yields:



(13) P [+_ DP (...)] << [acc] A P with an object always has an [acc] feature

(14) V [+_ DP (...)] << [acc] A V with an object always has an [acc] feature

V-DP inflection: V passes (certain) features to a sister DP.

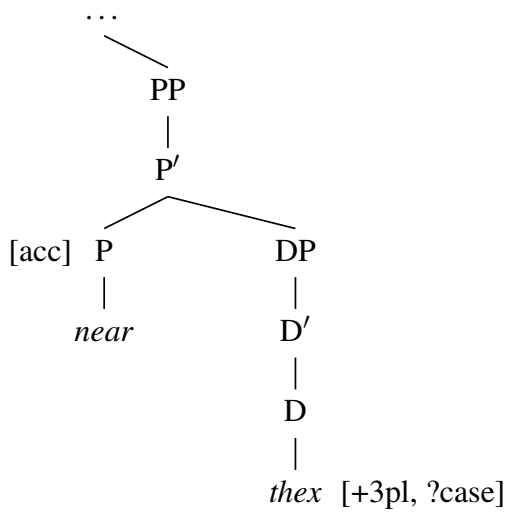
P-DP inflection: P passes (certain) features to a sister DP.

At this point, we seem to have collected too many of these "head passes (certain) features to its complement" rules.

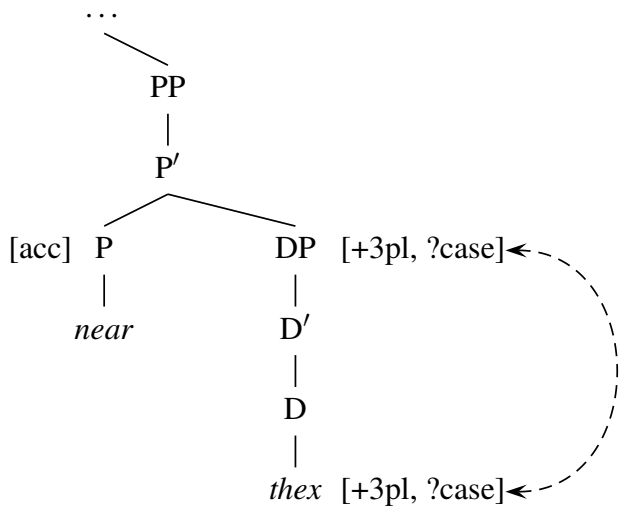
Local agreement: An unvalued feature can get a value from another if it is close.

Close: The specifier and complement are close to the head.

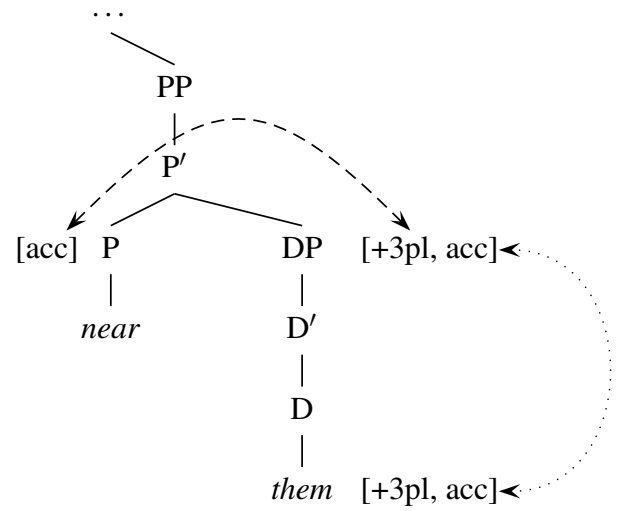
Now, let's look at accusative case in the PP.



Percolation:



Local agreement:



1.4 Summary

In summary, we have the following redundancy rules:

(15)	V << [?T-ϕ]	V always has [?T-ϕ] (needs tense features and *phi*-features)
(16)	N << [?sg]	N always has [?sg] (needs a number feature)
(17)	D << [?case]	D always has [?case] (needs a case feature)
(18)	T [+fin] << [nom]	Finite T always has a [nom] feature
(19)	P [+_ DP (...)] << [acc]	A P with an object always has an [acc] feature
(20)	V [+_ DP (...)] << [acc]	A V with an object always has an [acc] feature

And the following rules guiding features around the structure:

(21) **Feature percolation**: (Certain) features are shared between a phrase and its head.

(22) **Local agreement**: An unvalued feature can get a value from another if it is close.

(23) **Close**: The specifier and complement are close to the head.