## CAS LX 522 Syntax I

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

## [ucase:nom]

Nominative subjects generally appear in the specifier of a finite T .

- Finite T is pretty much any kind of T except the infinitive.

We can treat case like we treated tense inflection:

- Suppose T also has a [ucase:nom] feature.
- Suppose nominative NPs have a [ucase:] feature.
- Suppose the [ucase:nom] on T can value [ucase:] on the NP, checking both.
- So T needs a nom NP, and a nom NP needs T.


## Pronouns

Nominative case is associated with finite T.
She will charm snakes.
I want her to charm snakes.
I expect her to charm snakes

- Non-finite T is not associated with nominative case. It's not actually associated with accusative case either, but we'll come back to that later.

Because NPs have an unvalued [ucase:] feature, we can suppose that pronouns always enter the numeration the same way, and are valued based on where they are Merged.
pronoun [N, ucase:, ...]

## Case

Recall that pronouns in English show distinctions in case:

- Subject pronouns are in nominative case
- Object pronouns are in accusative case
- How can we ensure the correlation?

I saw her.
She saw me.
They saw him.

## [ucase:acc]

Subjects check nominative case with T. Objects have accusative case, which we can treat in the same kind of way.

Suppose $v$ has [ucase:acc].
Suppose accusative NPs have [ucase]

- Suppose the [ucase:acc] on $v$ can value the [ucase:] feature on the NP, checking both.

Nominative case is a relation between (finite) T and an NP, accusative case is a relation between $v$ and an NP.

## Subject-verb agreement

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

Fans were rioting on Comm Ave.
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

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

Since the subject already agrees with T (the [nom] feature of Thecks the [case] [ucase: feature of the subject), we'll incorporate [ucase: subject agreement into this process.
Notice that we still want this agreement to be mediated by T (sometimes it values, e.g., Perf):
They have been reading novels.
She has been reading novels.

## Subject-verb agreement

Finally, we suppose that the (checked) [ $\mu \phi: \mathrm{pl}]$ feature of T, also values a [ulnfl:] 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:

[^0]Notice that $T$ values a [ulnfl:] feature all at once, with any relevant feature(s) it has (so, tense and $\phi$-features both).

## Subject-verb agreement

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

The $\phi$-features are on the NP that checks nominative case with T .
The relevant inflection is valued by T .
Maybe it's "passed" from the NP to T, then from T to the ulnfl: below.
Fans were rioting on Comm Ave.
A fan was rioting on Comm Ave.
Fans riot on Comm Ave.
A fan riots on Comm Ave.

## Subject-verb agreement

Suppose then that T has a [u $\phi$ :] feature as well.
The subject has (interpretable) $\phi$-features that value the [u申:] feature of T .


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


## She likes them

So, let's walk through it.
We start by merging like and the 3pl pronoun.


## She likes them

$v\left[v, u N^{*}, u \operatorname{lnfl}, u \mathrm{~V}^{*}, \mathrm{acc}\right]$
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 $\left[u \mathrm{~V}^{*}\right]$ feature of $v$ ．

The 3sg feminine pronoun is Merged to check the ［ $u \mathrm{~N}^{*}$ ］feature of v ．


## She likes them

The［ $\phi: 3 \mathrm{fsg}$ ］feature of NP values and checks the ［u申：］feature of T．


## She likes them

The V moves up to adjoin to $v$ to check the $\left[u \mathrm{~V}^{*}\right]$ feature of $v$ ．


## She likes them

The $T$ is Merged with $\vee P(H o P)$ ．
The［nom］feature of T matches，values，and checks the ［case］feature of the pronoun，checking itself in the process．


## She likes them

The［ $\mu 申: 3 \mathrm{fsg}$ ］and［tense：pres］ features of $T$ value and check the［ulnfl：］feature of $v$ ．

［ T ，tense：pres， ＊：3fsg，

$u \mathrm{~N}^{*}$ ，pronoun
mem［ $\mathrm{N}, \phi: 3 \mathrm{fsg}$ ，
n日m］


## She likes them

Finally, the NP is moved up and Merged with $\mathrm{T}^{\prime}$ in order to check the EPP feature (the $\left[u N^{*}\right]$ feature) of T .

## 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

First, let's just do computers break.
We start by merging break and computers.



## 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:

$$
\text { break }\left[\mathrm{V}, u \mathrm{~N}^{*}\right]
$$

$V_{\text {unaccusative }}\left[v, u l n f l:, u \mathrm{~V}^{*}\right]$
computers [ $\mathrm{N}, \phi: 3 \mathrm{pl}$, case]
T [T, $u \phi:$, pres, nom, $\left.u N^{*}\right]$
As well as near and me, which we'll get to in a moment.

## Computers break

$v\left[v, u l n f l:, u \mathrm{~V}^{*}\right]$
We Merge $v$ with VP (HoP).


## Computers break

The V moves up to adjoin to $v$ to check the $\left[u \mathrm{~V}^{*}\right]$ feature of $v$.


## Computers break

The [nom] feature of T matches, values, and checks the [case] feature of computers, checking itself in the process.
The [up:] feature of T can also match the [ $\phi: 3 \mathrm{Pl}]$ feature of computers.


## Computers break

The [ $u \mathrm{~N}^{*}$ ] feature of T matches the [ N ] feature of computers. This is not sufficient to check the [uN*] feature because they are not local, so computers is moved up to SpecTP.


## Computers break

The T is Merged with vP (HoP).
T has the features: [T, pres, $u \phi:, u \mathrm{~N}^{*}$, nom].
The [nom] feature of T can now match the [case] feature of computers.


## Computers break

The $[\phi: 3 \mathrm{pl}]$ feature of computers matches, values, and checks the [ $u \phi$ :] feature of T.

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

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



## Computers break

Once the [ N ] feature of computers is a sister to the $\mathrm{T}^{\prime}$ that has the [ $u \mathrm{~N}^{*}$ ] feature (the feature projects from T to $\mathrm{T}^{\prime}$ - it 's the same feature), the $\left[u N^{*}\right]$ 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

Merge near and me (Isg pronoun). The [N] feature of me checks the [uN*] feature of near. The [acc] feature of near values and checks the [case] feature of $m e$ (checking itself in the process).


## Pchecks accusative

So, in general:A preposition P...

- Has a [P] category feature
- Has a $\left[u N^{*}\right]$ feature, motivating a Merge with its object.

Has an [acc] feature, valuing and checking the [case]
feature of its object.
Thas [T], [uN*] (EPP), [u申:], [nom]
$v$ has [ $v$ ], [ulnfl:], [ $u V^{*}$ ], and, if $v$ assigns a $\theta$-role, it has [ $u \mathrm{~N}^{*}$ ] and [acc].

## Computers break near me

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


## 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 $v P$.
Computers near me break


## Double-object constructions

We've by now covered the sentence
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.

## Adverbs

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

Pat sloppily ate lunch.
Pat ate lunch sloppily.
Pat has sloppily eaten lunch.
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 $v P$.

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

- Temporal adverbs also seem to adjoin high.

Today Pat ate lunch.
Pat ate lunch today.
7) *Pat today ate lunch.

## Adverb positions

Generally speaking, where an adverb attaches depends on its meaning.
$\downarrow$ P for manner adverbs, TP for temporal adverbs, ...
Notice that we predict this now:
Yesterday [Pat completely [finished lunch]].
Yesterday [Pat [finished lunch] completely].
Pat [[finished lunch] completely] yesterday.
Pat [completely [finished lunch]] yesterday.
5) *Pat [[finished lunch] yesterday completely.

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

## 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.
Pretzels were taken (by Pat).
active
passive

## Passives

Pat stole books.
Books were stolen (by Pat).
In both cases, books is getting the Theme/Patient $\theta$-role. By UTAH, it must be originally Merged as NP daughter ofVP, 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, ulnfl:] selects a vunaccusative.
- By selecting for vunaccusative, 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 [ulnfl:] feature, if Pass' own [ulnfl:] 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.

- $\mathrm{T}>(\mathrm{Neg})>(\mathrm{M})>($ Perf $)>($ Prog $)>($ Pass $)>v>V$


## Lunch was eaten

For Lunch was eaten, we Merge eat and lunch to build the VP, then Merge an unaccusative $v . .$.


## Lunch was eaten

T is Merged (HoP).
[nom] on T matches, values, checks [case] on lunch. [ $\phi: 3 \mathrm{sg}$ ] on lunch matches, values, checks [ $u \phi:]$ on T . [past] on T matches, values [ulnfl:] on Pass.


## Lunch was eaten

T is Merged (HoP).
[nom] on T matches, values, checks [case] on lunch. [ $\phi: 3 \mathrm{sg}$ ] on lunch matches, values, checks [ $u \phi:]$ on T . [past] on T matches, values [ulnfl:] on Pass.


## Lunch was eaten

## Lunch was eaten

Lunch moves to SpecTP (checks [uN*] 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.


## 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)



## 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?

## Italian ne-cliticization

Maria ha visto Gianni. Maria lo ha visto.
M has seen $G$. $\quad M$ 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.


[^0]:    - "riots" if $v$ has the feature [ulnfl:pres,sg]
    - "riot" if $v$ has the feature [ulnfl:pres,pl]

