

# CAS LX 522 Syntax I

θ-roles in DP,  
and an introduction to little *n*  
(7.3-7.6)

# 15

## Possessors

- Consider the genitive (possessive) 's in English:
  - John's hat
  - The student's sandwich
  - The man from Australia's book
  - 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*).

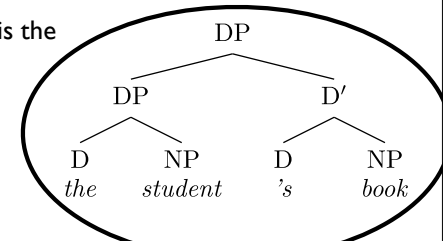
## Possessors

- 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

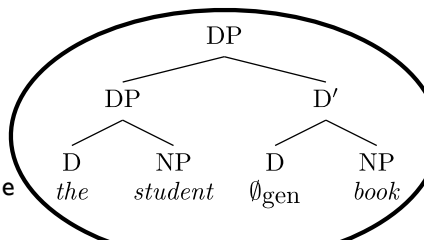
## Possessors?

- 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.



## 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.
  - \*Their's book
  - \*Them's book
  - \*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.

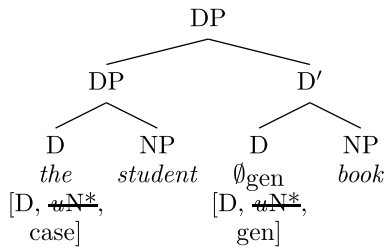


## The king's every whim

- A whim
  - The king's whim
  - 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].

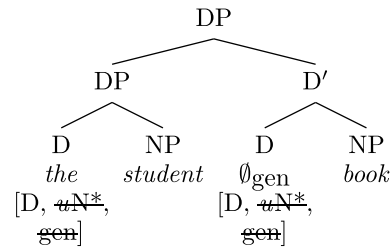
## Checking genitive case

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



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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

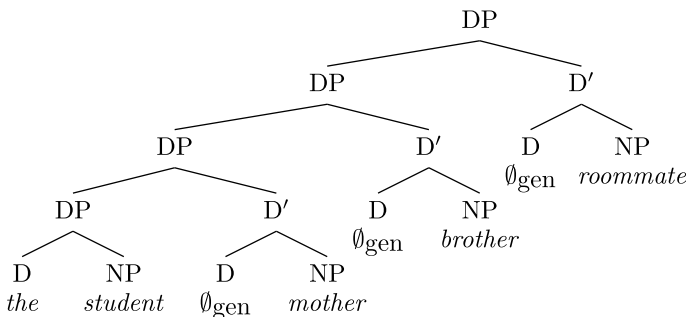
- So we have at this point a couple of different null determiners. They are as different as *the* is from *a* or from *that*, they just happen to be pronounced the same way (like this: " ").
- One is  $\emptyset_{gen}$ , which has a [gen] feature and in whose specifier we find possessors.
- Another is  $\emptyset_{indef}$ , which is a nonsingular indefinite article, in whose complement we find plurals and mass nouns.
 

[ $\emptyset_{indef}$  Milk] spilled. [ $\emptyset_{indef}$  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...
  - The student's father's book*
  - The student's mother's brother's roommate*

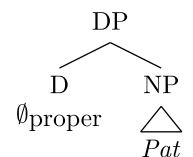
## Recursion



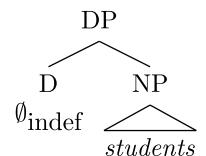
## Proper names

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

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



- $\emptyset_{proper}$  (names are not indefinite; this is probably mostly the same as *the*, but silent).
- Implementation:  $\emptyset_{proper}$  has a [u<sub>proper</sub>] feature, *Pat* has a [proper] feature.

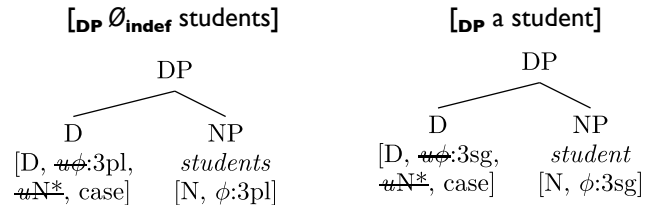


## Number agreement on D

- What is wrong with \* $[\text{DP } A \text{ students}]$  and \* $[\text{DP } student]$ ? It's a lack of agreement in number. It's like \**Students eats lunch*.
- We can encode this in the same way: The indefinite determiner has a  $[\mu\phi:]$  feature, and the N has  $\phi$ -features as always (including a num feature).
- The  $[\mu\phi:]$  feature is valued and checked by the  $\phi$ -features of the N.

## Number agreement

- This means *a* and  $\emptyset_{\text{indef}}$  are in fact pronunciations of the same D (Like *me* and *I* are).
- *A(n)* is the pronunciation when it has a  $[\mu\phi:\text{sg}]$  feature
- $\emptyset$  is the pronunciation otherwise



## Deverbal nouns

- The structure inside the DP can be as complicated as inside a clause, as it turns out.
  - 1) Pat broke the vase.
  - 2) Pat's breaking of the vase startled me.
  - 3) The bees startled me.
- It seems to be possible to convert the whole clause *Pat broke the vase* into a "noun" (a DP).

## Deverbal nouns

- What's more, the relationship between *break*, *Pat*, and *the vase* seems to be the same inside the DP as it is in the clause.
  - 1) Pat broke the vase.
  - 2) Pat's breaking of the vase made me angry.
    - *Pat* is an Agent, *the vase* is a Theme.
  - 3) Pat danced.
  - 4) Pat's dancing startled me.
- Just as the verb *break* assigns  $\theta$ -roles, it seems as if the nominalized *breaking* assigns the same  $\theta$ -roles. The DP is in a way like a little clause.

## TPs and DPs

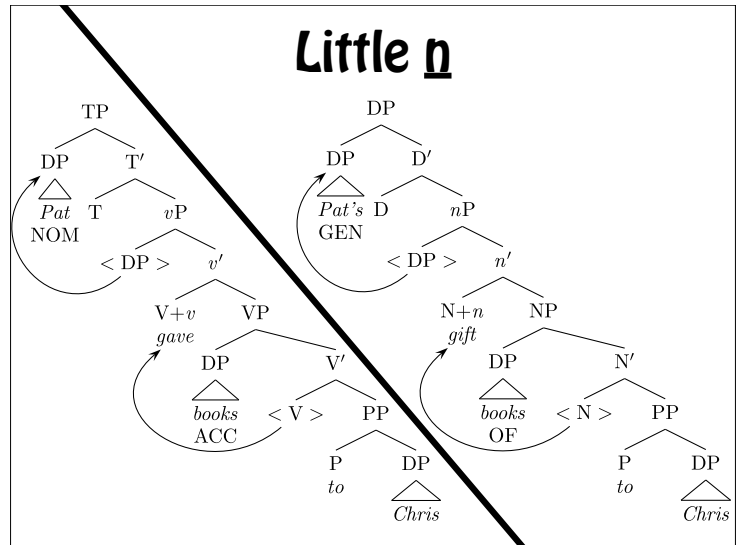
- One difference between clausal DPs and TPs is in the case realized by the arguments.
  - 1) I called him.
    - Agent is nom (from T), Theme is acc (from *v*)
  - 2) My calling of him was unplanned.
    - Agent is gen, Theme looks like a PP introduced by *of*.
- So, the case assigners within a DP are different from the case assigners within a clause.

## Two kinds of N

- Not all N's assign  $\theta$ -roles. Some do, some don't. Generally, the nouns related to a verb that assigns  $\theta$ -roles will assign  $\theta$ -roles. But something like *lunch* doesn't.
  - 1) Pat's lunch was enormous.
  - 2) Pat's eating of lunch was shockingly rapid.
- So, we can either find a DP with a  $\theta$ -role with genitive case, or we can find a possessor with genitive case, in SpecDP.

## Ditransitive N

- Consider the ditransitive verb *give* and the related noun *gift*. Just as *give* is responsible for three  $\theta$ -roles (Agent, Theme, Goal), so can *gift* be:
  - Pat gave an apple to Chris.
  - Pat's gift of an apple to Chris was unexpected.
- The exact same problem arises with ditransitive nouns as arose with ditransitive verbs.
- Binary branching allows for just two arguments in NP. We need an additional projection for the third. Let's try doing this just like we did for verbs...



## DP is like TP

- If we suppose that DP works like TP, we can extend our theoretical machinery in an exactly analogous way.
- Hierarchy of Projections**  
D > n > N
- UTAH**  
DP daughter of nP: Agent  
DP daughter of NP: Theme  
PP daughter of N': Goal

## Case in the DP

- In the DP, the "subject" appears with genitive case.
  - Cf. The subject in TP, which has nominative case, due to a [nom] feature on T.
- So, we say D can have a [gen\*] feature.
  - This checks the genitive case on the subject of the DP, and forces it to move into SpecDP.
- In the DP, the "object" appears with the preposition *of*.
  - Cf. The object in TP, which has accusative case, due to an [acc] feature on *v*.
- So, we say that *n* has an [of] feature.

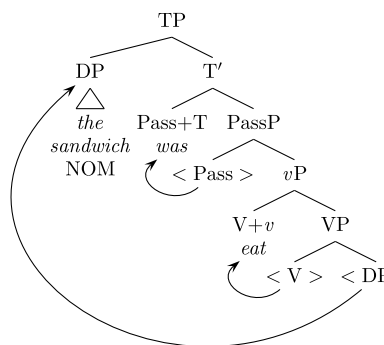
## The of case

- What's the deal with this "of case" that objects in DPs get? Isn't *of* a preposition? Shouldn't *of cheese* in *The gift of cheese to the senator was appreciated* be a PP?
- This *of* is completely meaningless, it acts like a case marker. So, we're going to analyze it as such. *Of cheese* is a DP with the *of* case marking. Just like *Pat's* is a DP with the genitive ('s) case marking.
- Treating *of* as case allows a complete parallel between TP and DP; *v* has an [acc] feature, *n* has an [of] feature.

## Passive nouns

- Last week, we looked at the passive construction:
  - The sandwich was eaten
- Here, the Theme *the sandwich* becomes the subject because the strong feature of T forces it to move to SpecTP. The *v* does not project an Agent.

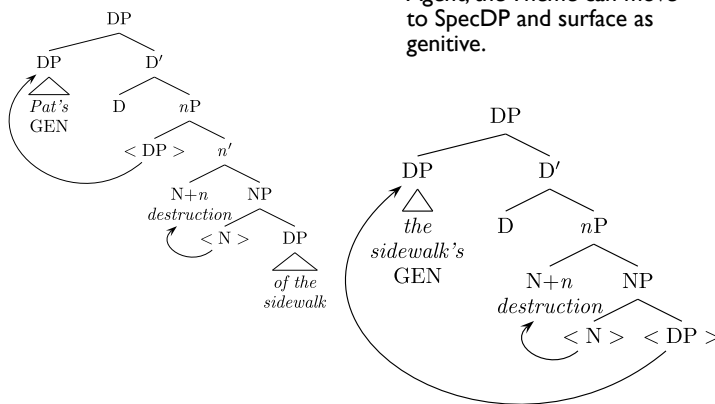
## Passive



- In the passive, *v* does not introduce an Agent, and does not have an [acc] feature.
- T still has a [nom] feature, so it checks the [case] feature on the *sandwich*.
- T has a [ $\mu$ D\*] feature, so the *sandwich* moves to SpecTP to check it.

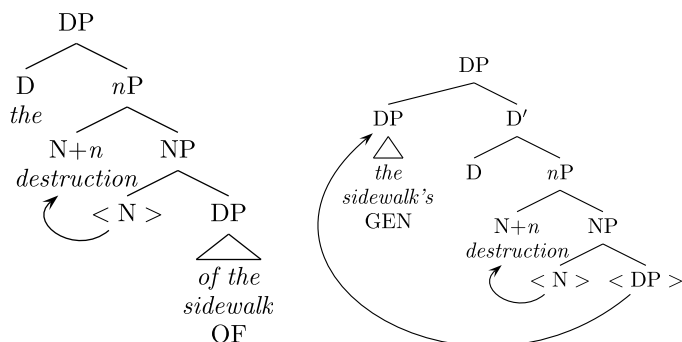
## Passive nouns

Very similar to the passive, if an *n* doesn't introduce an Agent, the Theme can move to SpecDP and surface as genitive.



## Passive nouns

- If the DP has a head D like *the* that does not check genitive case, then there can be no Agent (nothing could check its case), and the Theme stays unmoved (its *of*-case checked by *n*).



## Case and $\theta$ -roles

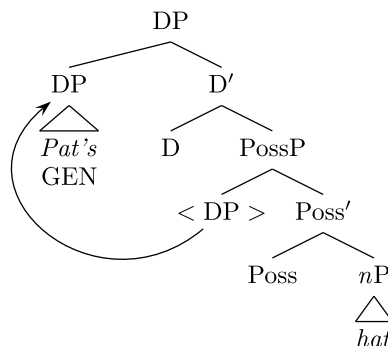
- We now predict the observation Adger makes: Either an Agent or a Theme can show up in the genitive, but only a Theme can show up with *of*-case.
  - 1) Adger's analysis of the DP is simple.
  - 2) The DP's analysis is simple.
  - 3) \*The analysis of Adger is simple.
- This is essentially the same as the generalization that, in a clause, either an Agent or a Theme can show up with nominative case, but only a Theme can show up with accusative case.

- 1) I called her.
- 2) She tripped.
- 3) \*Her tripped.
- 4) \*Tripped her.

## Back to possession

- Prior to today, the genitive case was associated with the possessor. So far today we've been looking at deverbal nouns, where genitive case goes to the subject.
- Our new improved UTAH says, among other things:
  - DP daughter of NP: Theme
  - DP daughter of nP: Agent
- Possessors are neither of these, so possessors need to be initially Merged into a distinct place in the structure.

## Possessors



- Adger proposes that Possessors are introduced by a new head, Poss.

- HoP:  
D > (Poss) > n > N

# Hungarian possessors

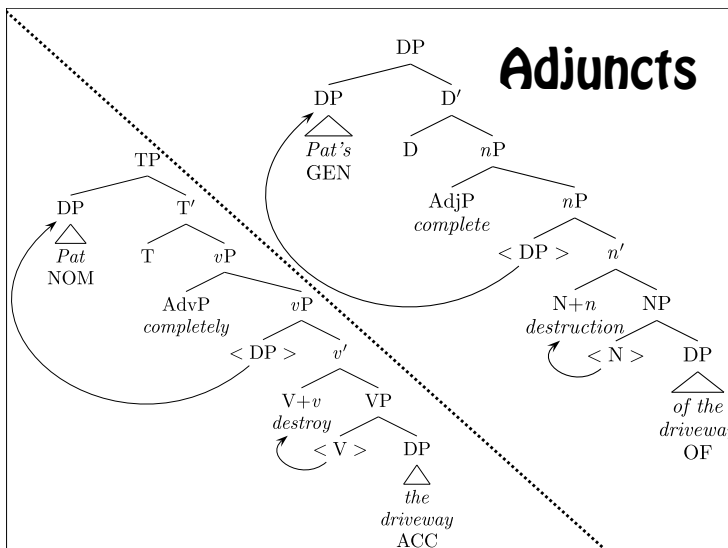
- 1) Az en kalapom  
the I hat  
'my hat'
- 2) A Mari kalapja  
the Mary hat  
'Mary's hat'
- 3) A te kalapod  
the you hat  
'your hat'
- 4) Marinak a kalapja  
Mary the hat  
'Mary's hat'

- Assuming that the DP in Hungarian has the basic structure we've been discussing, what is the structure of this kind of possessive construction?
- How about that (person?) agreement on 'hat'?

# Adjectives

- Adjectives are to nouns as adverbs are to verbs. So what would the structure be for *Pat's complete destruction of the sidewalk*? Or *the silly idea*? Or *the pencil on the desk*?
- In *Pat completely destroyed the sidewalk*, we adjoin *completely* to *vP*. The subject moves to SpecTP.
- In the same way, we adjoin *complete* to *nP*, and *Pat* moves to SpecDP.

# Adjuncts



# The Italian DP

- In Italian, in many cases, there is simply an option (stylistically governed) as to whether you say *The Gianni* or just *Gianni*:
- 1) Gianni mi ha telefonato.  
Gianni me has telephoned  
'Gianni called me up.'
- 2) Il Gianni mi ha telefonato.  
the Gianni me has telephoned  
'Gianni called me up.'

# The Italian DP

However, there is a difference with respect to the order of adjectives and the noun depending on which one you use.

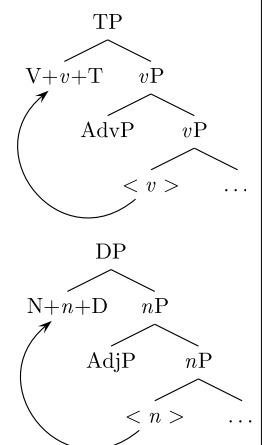
- 1) L' antica Roma  
the ancient Rome  
'Ancient Rome'
- 2) \*Antica Roma  
ancient Rome
- 3) Roma antica  
Rome ancient
- 4) E'venuto il vecchio Cameresei.  
came the older Cameresei
- 5) \*E'venuto vecchio Cameresei  
came older Cameresei
- 6) E'venuto Cameresei vecchio.  
came Cameresei older

**Generalization:** If there's a determiner, the noun follows the adjective. If there isn't the noun precedes the adjective.

# The Italian DP

- We can apply the same analysis to the order nouns and adjectives as we did to the order of adverbs and verbs.
- Recall that in French, verbs precede adverbs, but in English, verbs follow adverbs. We conclude that in French, *v* moves to T.
- In Italian, when the noun precedes the adjective it has moved over it, to D. The generalization is that this happens except if D is already filled.

- L' antica Roma  
the ancient Rome
- Roma antica      \*Antica Roma  
Rome ancient      ancient Rome



## Parameters

- Languages differ on whether  $n$  moves to D, yielding some languages where nouns precede adjectives, and some languages where nouns follow adjectives.
  - Likewise, languages differ on whether  $v$  moves to T, yielding some languages (e.g., French) where verbs precede adverbs, and some languages (e.g., English) where verbs follow adverbs.
- What governs whether  $n$  moves to D is the strength of an uninterpretable feature checked on D or  $n$  by the other. One such feature is  $[\text{unum:}]$ .
  - Italian:  $[\text{unum:*}]$  is strong on null determiners.
  - English:  $[\text{unum:}]$  is weak, even on null determiners.
    - $[\emptyset_{\text{indef}} \text{ Happy students}]$  poured forth from the classroom.

## More Italian, same point

- $[\text{DP } \text{Il mio Gianni}]$  ha finalmente telefonato.  
the my G. has finally called  
'My Gianni has finally called.'
- $*[\text{DP } \text{Mio Gianni}]$  ha finalmente telefonato.
- $[\text{DP } \text{Gianni mio}]$  ha finalmente telefonato.

## Some Hebrew

- harisat ha-oyev 'et ha-'ir  
destruction the-enemy OM the-city  
'The enemy's destruction of the city'
- tipul ha-Siltonot ba-ba'aya  
treatment the-authorities in-the-problem  
'The authorities' treatment of the problem'
- Construct state. What seems to be happening here? Again, parametric variation.
  - $[\text{gen}]$  feature of D is weak in Hebrew, strong (when there) in English. But  $[\text{unum:}]$  feature is strong in Hebrew.
  - Rather like VSO languages, where  $v$  moves to T (like in French, unlike in English), but the subject doesn't move to SpecTP (the  $[\text{uD}]$  feature of T is weak).