The category of pronouns

- We said that bare plurals like students in Students arrived are really DPs, and have a null determiner.
  \[ \text{DP } \varnothing \text{ students } \] arrived.
- How about pronouns, like we in We arrived?
- Although you can say The students arrived, you can't say *The we arrived.
- You can say things like We linguists should stick together. Or You syntacticians are a crazy lot. That is, a pronoun followed by a noun.

This only seems to work with we and you, though.

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?

- 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.

\[
\begin{array}{c}
\text{DP} \\
\text{D} \text{ NP} \\
\text{the} \text{ student} \text{ D}' \text{ NP} \\
\text{book}
\end{array}
\]
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) *Thems’ book
  3) *They’s book
- Accordingly, we will instead suppose that there is a null D, \( \emptyset_{\text{gen}} \)
  that checks genitive case. The genitive case form of a non-pronominal DP is audible in English, as DPs.

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 \([\text{gen}]\).

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

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 \( \emptyset_{\text{gen}} \) which has a \([\text{gen}]\) feature and in whose specifier we find possessors.
- Another is \( \emptyset_{\text{indef}} \) which is a nonsingular indefinite article, in whose complement we find plurals and mass nouns.
  - \([\emptyset_{\text{indef}} \text{Milk}] \) spilled. \([\emptyset_{\text{indef}} \text{People}] \) 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.’

- Ø proper (names are not indefinite; this is probably mostly the same as the, but silent).

- Implementation:
  - Ø proper has a [u proper] feature, Pat has a [proper] feature.

Number agreement on D

- What is wrong with *[DP A students] and *[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 [uϕ:] feature, and the N has ϕ-features as always (including a num feature).

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

Number agreement

- This means ø and Ø indef are in fact pronunciations of the same D (Like me and I are).

- A(n) is the pronunciation when it has a [uϕ:sg] feature

- Ø 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 θ-roles, it seems as if the nominalized breaking assigns the same θ-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 θ-roles. Some do, some don’t.
  - Generally, the nouns related to a verb that assigns θ-roles will assign θ-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 θ-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 θ-roles (Agent, Theme, Goal), so can gift be:
  1) Pat gave an apple to Chris.
  2) 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...

Little n

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.

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 and θ-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.

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

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

1) L’antica Roma
the ancient Rome
‘Ancient Rome’

2) *Antica Roma
ancient Rome

3) Roma antica
Rome ancient

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.

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 [unum:].
- Italian: [unum:*] is strong on null determiners.
- English: [unum:] is weak, even on null determiners.
- [Ø] Happy students] poured forth from the classroom.

More Italian, same point

- [DP Il mio Gianni] ha finalmente telefonato.
the my G. has finally called
‘My Gianni has finally called.’

- *[DP Mio Gianni] ha finalmente telefonato.

- [DP 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.

- [gen] feature of D is weak in Hebrew, strong (when there) in English. But [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 [uD] feature of T is weak).