1 Turning sentences into DPs

Case and θ-roles

Deverbal nouns

   The structure inside a DP can be as complicated as the structure 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 DP. 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. *Pat* is an Agent, *the vase* is a Theme.

   Just as the verb *break* assigns θ-roles, it seems as if the nominalized *breaking* assignes the same θ-roles. The DP is in a way like a little clause.

Case

   One difference between clausal DPs and TPs is in the case realized by the arguments.

(4)   **I**$_{\text{NOM}}$ called **them**$_{\text{ACC}}$.

(5)   **My**$_{\text{GEN}}$ calling **of them**$_{\text{“OF”}}$ was unplanned.

   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.

(6)   Pat's lunch was enormous.

(7)   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.
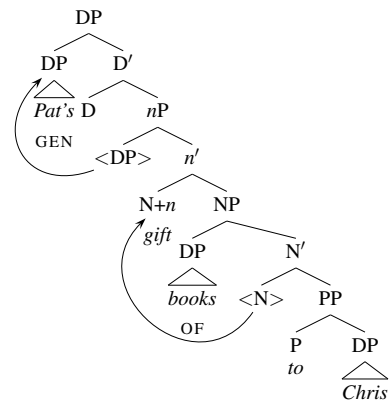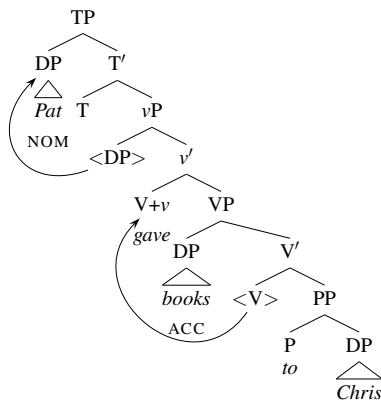
Little *n*

Ditransitive N

   Consider the verb *give* and the related noun *gift*. Just as *give* is responsible for three θ-roles (Agent, Theme, Goal), so can *gift* be:

(8)   Pat gave an apple to Chris.

(9)   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.[1] We need an additional projection for the third.

TP/*v*P and DP/*n*P

TP tree (left):
- TP
  - DP → *Pat* [NOM]
  - T′
    - T
    - *v*P
      - <DP>
      - *v*′
        - V+*v* → *gave* [ACC]
        - VP
          - DP → *books*
          - V′
            - <V>
            - PP
              - P → *to*
              - DP → *Chris*

DP tree (right):
- DP
  - DP → *Pat's* [GEN]
  - D′
    - D
    - *n*P
      - <DP>
      - *n*′
        - N+*n* → *gift* [OF]
        - NP
          - DP → *books*
          - N′
            - <N>
            - PP
              - P → *to*
              - DP → *Chris*

DP is like TP

If we suppose that DP works like TP, we can extend our theoretical machinery in an exactly analogous way.

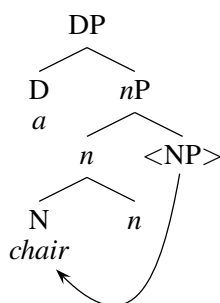**Hierarchy of Projections (DP)**

D > Poss > *n* > N

UTAH (DP)

DP daughter of *n*P: Agent
DP daughter of NP: Theme
PP daughter of N′: Goal

There's always a little *n*

Tree:
- DP
  - D → *a*
  - *n*P
    - *n*
      - N → *chair*
      - *n*
    - <NP>

Just like when we added *v* and committed ourselves to saying that *v* is always there, we're now pretty much saying that *n* is always there too. So, even a DP with a simple noun in it (like *a chair*) would have an N (*chair*), which moves up to a *n*. The *n* in *a chair* does not assign any cases or θ-roles, but it is there anyway.

One rationale/justification for this is that one way to think of why N *destruction* behaves just like V *destroy* is that in fact they're both the same, just $\sqrt{destroy}$. And whether it is treated as a N or a V depends on whether it has a *n* or a *v* above it.

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[1] Assuming just one specifier anyway. Though even allowing for multiple specifiers, the fact that the verb/noun occurs after the first argument means that we need a place for the verb/noun to move to.

2   Handling case

Case in the DP

In the DP, the "subject" appears with genitive case. In the TP analog, this is due to a [$u$case:nom] feature of T. So, we can say that (the relevant) D has a [$u$case:gen] feature, it values and checks genitive case on the subject of the DP.

The subject also moves to the specifier of DP (as it does in TP), so we can say that (the relevant) D has a [uD*] feature too.

In the DP, the "object" appears with the preposition *of*. In the TP, the object gets accusative case. We're going to treat the *of* as a case-marking prefix (much like we treat *'s* as a case-marking suffix). So this is a special case within DP, the analog of accusative, which we will call... "OF-case. So, *n* is a [$u$case: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 a case marker allows us a complete parallel betwen TP and DP. *v* has a [$u$case:acc] feature, and *n* has a [$u$case:OF] feature.

3   Variations within DP

Nouns without Agents

"Passive" nouns

In the TP, comparing the active construction to the passive construction: if *v* does not select an Agent, then it also does not check accusative case, and the Theme moves to become the subject of the sentence and gets nominative case from T.

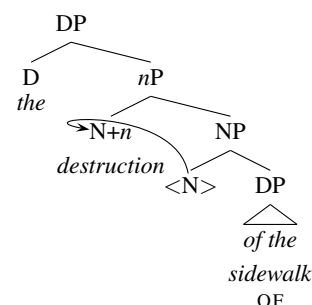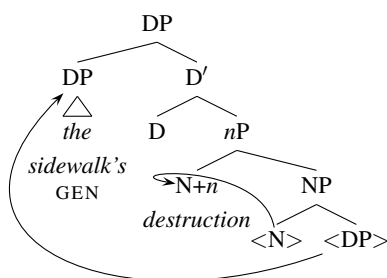(10)   Pat ate the sandwich.

(11)   The sandwich was eaten.

If we do the same in DP, allowing the *n* not to introduce an Agent and not check OF-case, then the Theme will move to the specifier of DP and get genitive case from D.

(12)   Pat's destruction of the sidewalk

(13)   The sidewalk's destruction
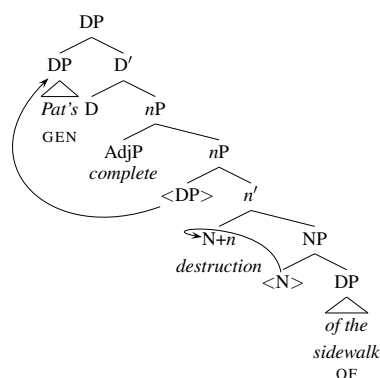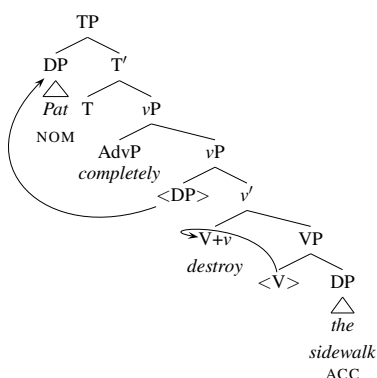
"Passive" nouns

If the DP has a head D like *the* that does not check genitive case, then there can be no Agent and the Theme stays unmoved (its OF-case checked by *n*).

DP
- DP
  - *the*
  - *sidewalk's* GEN
- D′
  - D
  - *n*P
    - N+*n* *destruction*
    - NP
      - <N>
      - <DP>

DP
- D *the*
- *n*P
  - N+*n* *destruction*
  - NP
    - <N>
    - DP *of the sidewalk* OF

Modifiers

Adjuncts

Adjectives are to nouns as adverbs are to verbs. In a TP, *completely* would adjoin to *v*P, and in a DP, *complete* would adjoin to *n*P.

TP
- DP *Pat* NOM
- T′
  - T
  - *v*P
    - AdvP *completely*
    - *v*P
      - <DP>
      - *v*′
        - V+*v* *destroy*
        - VP
          - <V>
          - DP *the sidewalk* ACC

DP
- DP *Pat's* GEN
- D′
  - D
  - *n*P
    - AdjP *complete*
    - *n*P
      - <DP>
      - *n*′
        - N+*n̄* *destruction*
        - NP
          - <N>
          - DP *of the sidewalk* OF

4 Technical details and extensions

Technical details

The *v* generally only has a [*u*D*] feature (for Agent) when it also has a [*u*case:acc] feature. And for *v*Ps that would "normally" have an Agent, a Pass head is needed to suppress it. (*The sandwich was eaten*, never *The sandwich ate*.) Indeed, a Pass head implies a suppressed Agent (*the snow melted* vs. *the snow was melted*).

The world inside the DP seems less constrained. The *n*P-version of a *v*P that would "normally" have an Agent can leave that Agent out seemingly freely (*The sidewalk's destruction*, does not need something like *The sidewalk's being destroyed*). And if no genitive case assigner is around (like when the head D is *the*), any Agent is suppressed (perhaps analogously to Pass in TP), but *n* can still assign OF-case if needed (*the destruction of the sidewalk*).

So, there's clearly more unexplored complexity hiding within the DP, but we'll leave it here for now.

4

The Italian DP

In Italian, there is a difference with respect to the order of adjectives and the noun, depending on which one you use. **Generalization:** If there's a determiner, the noun follows the adjective. If there isn't, the noun precedes the adjective.

(14)   l' antica Roma
         the ancient Rome
         'ancient Rome'

(15)   * antica Roma
         ancient Rome
         ('ancient Rome')

(16)   Roma antica
         Rome ancient
         'ancient Rome'

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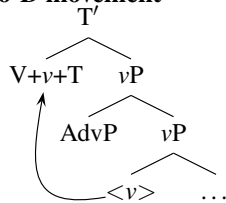
We can apply the same analysis to the order of nouns and adjectives as we did to the order of verbs and adverbs. In French, verbs precede adverbs, but in English, verbs follow adverbs. We conclude that in French, *v* moves to T.
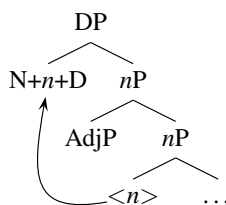
In Italian, when the noun precedes the adjective, it has moved over it, to D. The generalization is that this happens except if D is already filled.