L2 Syntax Lecture 4: Noun phrases and X' theory

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Today

- A recap on VPs and sentences
- Some more terminology for describing trees
- A closer look at NPs
- X' theory

Today's reading

- Carnie (2002), Ch.5 (pp.105-138)
- Copies available from the DSB ground floor resource room, WebCT, or the library

Do so substitution

I ate a chocolate bar on Tuesday and he did so too
I ate a chocolate bar on Tuesday and he did so on Wednesday
*I ate a chocolate bar on Tuesday and he did so an ice cream on Wednesday

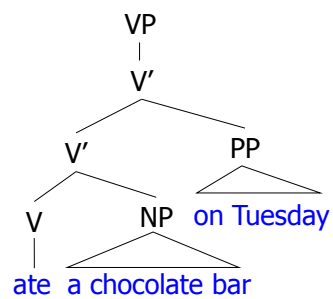
- "ate a chocolate bar on Tuesday" is a constituent
- "ate a chocolate bar" is a constituent
- "a chocolate bar" is a complement of "ate"

Do so substitution

I ate a chocolate bar on Tuesday and he did so too
I ate a chocolate bar on Tuesday and he did so on Wednesday
*I ate a chocolate bar on Tuesday and he did so an ice cream on Wednesday

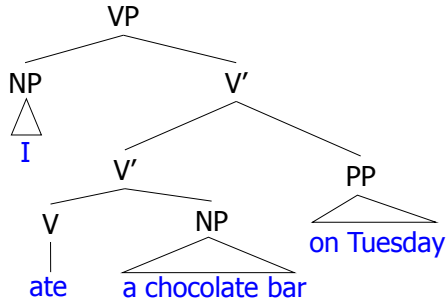
- *Do so* substitutes for a V'.
- Complements obligatorily included, adjuncts optionally included, subjects obligatorily excluded

Our new structure

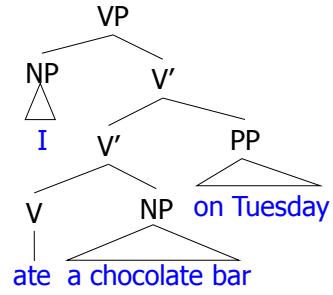


Three levels
- V
- V'
- VP (= V'')

The structure of sentences

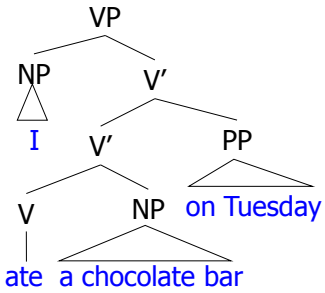


Describing positions in trees



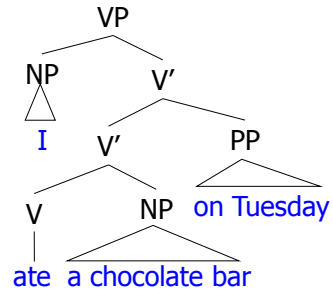
- V is the head of VP
- V projects VP
- VP is the maximal projection of V

Describing positions in trees



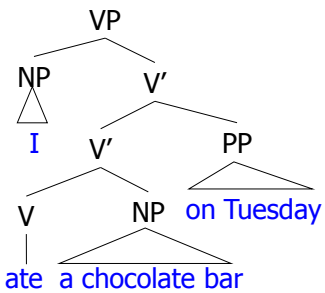
Complement
- obligatory
- position:
  - sister of V
  - daughter of V′

Describing positions in trees



Adjunct(s)
- optional
- position:
  - sister of V′
  - daughter of V′

Describing positions in trees



Specifier
- obligatory (at least, in this case)
- position
  - sister of V′
  - daughter of VP

You try

I swam in the pool	He wore a hat
… and she did so too	… and you did so too
… and she did so in the sea	… and you did so a scarf

- Are these grammatical?
- What are the elementary trees for *swam* and *wore*?
- Is *in the pool* an adjunct or a complement? What about *a hat*?

A closer look at NPs: *one* substitution

one substitution: a constituency test (like *do so* substitution)

- This piece of pie from France is tasty, and that piece of pie from Holland is nasty

A closer look at NPs: *one* substitution

one substitution: a constituency test (like *do so* substitution)

- This piece of pie from France is tasty, and that one is nasty

one substitutes for *piece of pie from France*

What does that substitution tell you?

A closer look at NPs: *one* substitution

This piece of pie from France is tasty and that one is nasty

This piece of pie from France is tasty and that one from Holland is nasty

* This piece of pie from France is tasty and that one of cake from Holland is nasty

Nested constituents and a complement (again)

A closer look at NPs: *one* substitution

This piece of pie from France is tasty and that one is nasty

This piece of pie from France is tasty and that one from Holland is nasty

* This piece of pie from France is tasty and that one of cake from Holland is nasty

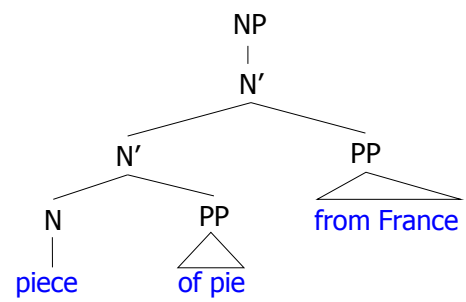
One substitutes for N', just as *do so* substitutes for V'.

Summary of facts

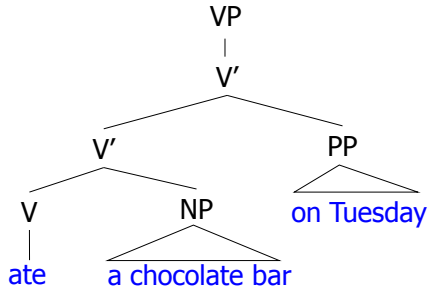
- *piece of pie from France* is a constituent
- *piece of pie* is a constituent
- *of pie* is a complement of *piece*

We need a tree to cover these facts

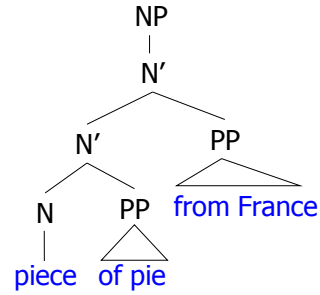
Our new structure



Our new structure



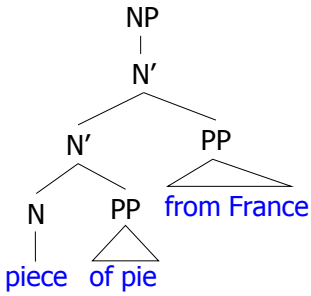
Our new structure explained



Three levels

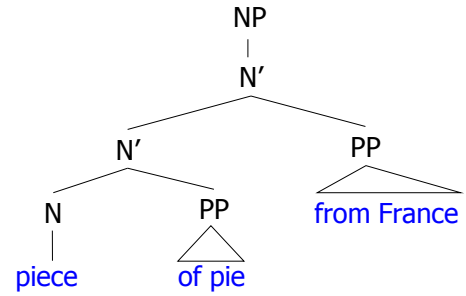
- N
- N′
- NP (= N″)

Our new structure explained

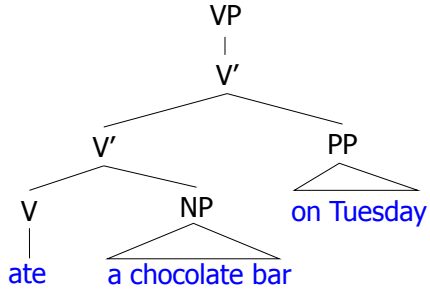


- *piece of pie from France* is a constituent
- *piece of pie* is a constituent
- complements are identified by position

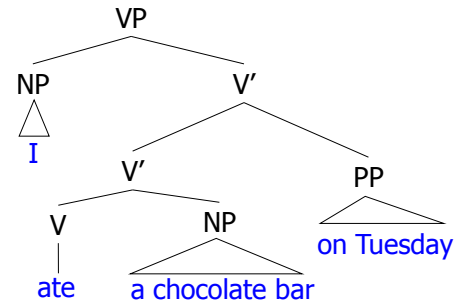
Fitting in the determiner



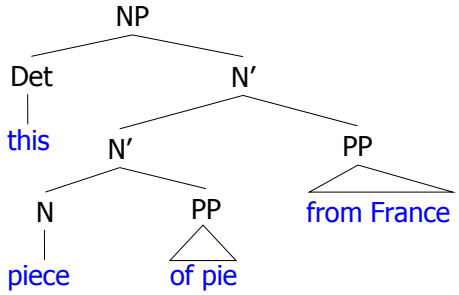
Fitting in the determiner



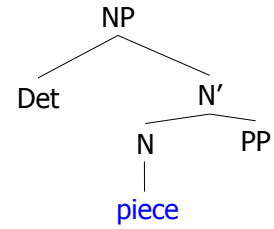
Fitting in the determiner



Fitting in the determiner

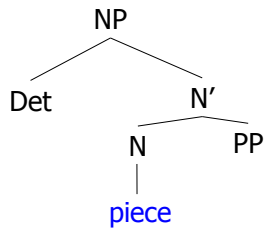


Elementary tree for *piece*



Det-N agreement in English: number

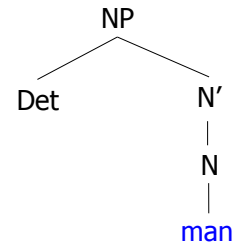
(1) this piece
(2)*this pieces
(3)*these piece
(4) these pieces



Det-N agreement in English: number

(1) this man
(2)*this men
(3)*these man
(4) these men

(5) the man
(6) the men
(7) a man
(8)*a men



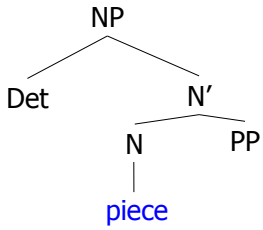
Det-N agreement in Hungarian: number + case

(1)ez a férfi	Nominative, singular
(2)ezek a férfiak	Nominative, plural
(3)ezt a férfit	Accusative, singular
(4)ezeket a férfiakot	Accusative, plural

Det-N agreement in Latin: number + gender + case

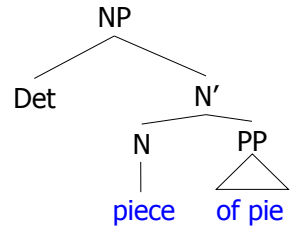
(1) hic vir	Nom., Masc., Sing.
(2) haec femina	Nom., Fem., Sing.
(3) hī virī	Nom., Masc., Plur.
(4) hae feminae	Nom., Fem., Plur.
(5) hunc virum	Acc., Masc., Sing.
(6) hanc feminam	Acc., Fem., Sing.
(7) …	

Building our new structure



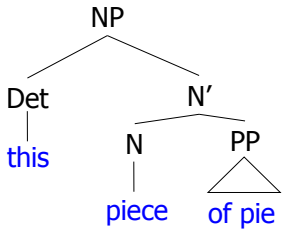
Elementary tree for *piece*

Building our new structure



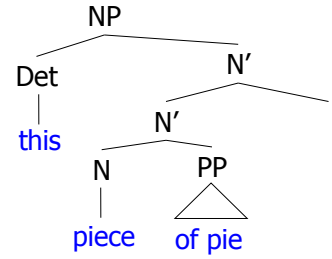
Substitute in PP complement

Building our new structure



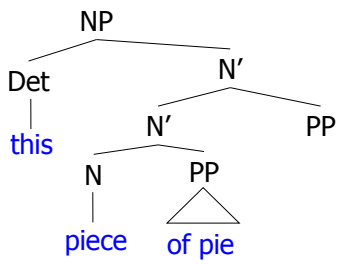
Substitute in Determiner

Building our new structure



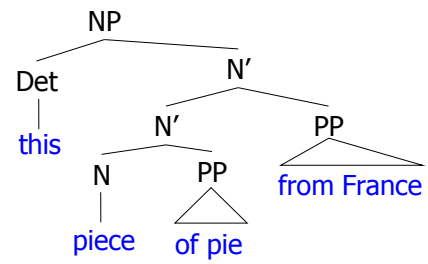
Clone N′

Building our new structure



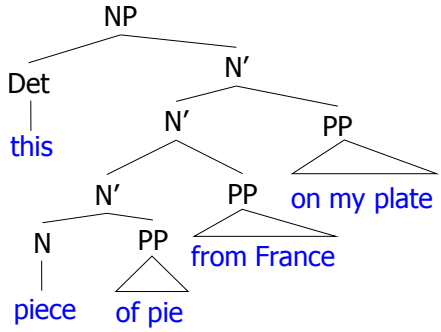
Add PP substitution node

Building our new structure



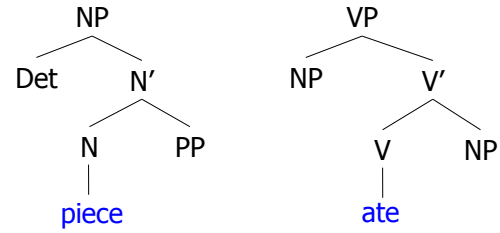
Substitute in adjunct

… and repeat

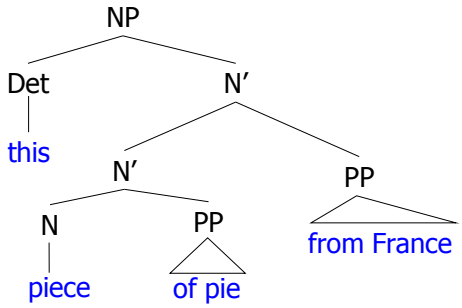


NP-VP parallels

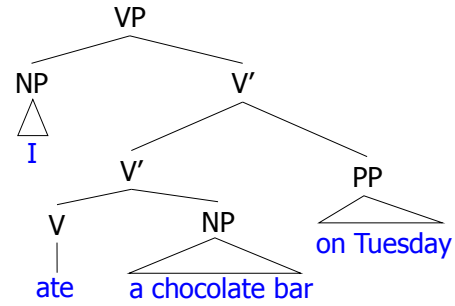
NPs and VPs have similar structure



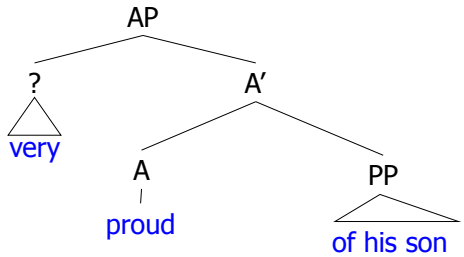
NP-VP parallels



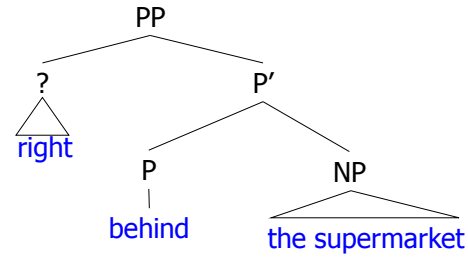
NP-VP parallels



Other categories: AP

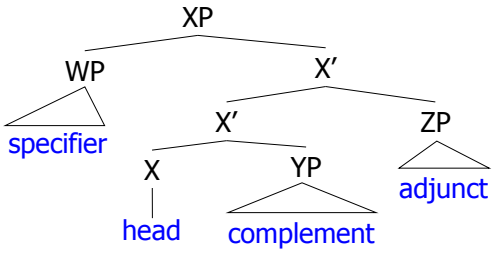


Other categories: PP

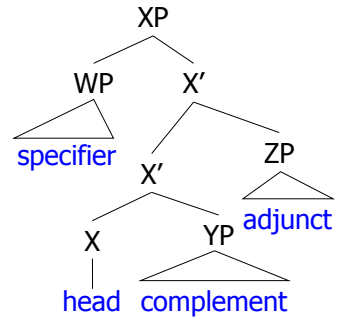


X′ theory

All phrases have similar structure

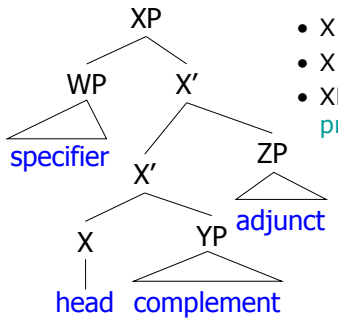


The idea behind X′ theory



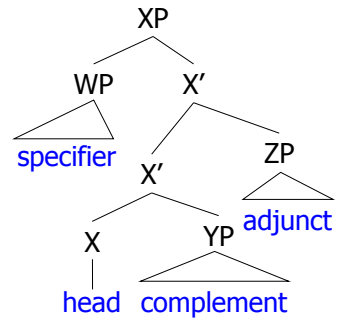
X can be
- V
- N
- P
- Adj
- Adv
- …

The idea behind X′ theory



- X is the head of XP
- X projects XP
- XP is the maximal projection of X

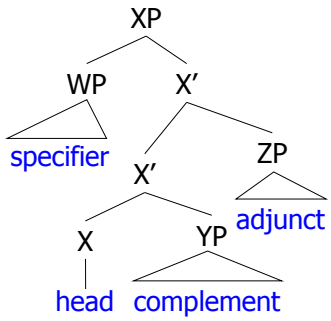
The idea behind X′ theory



Categories of the
- complements
- adjuncts
- specifiers

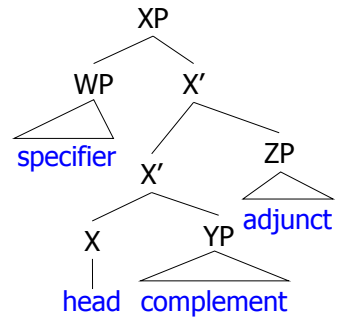
depend on the head

Positions



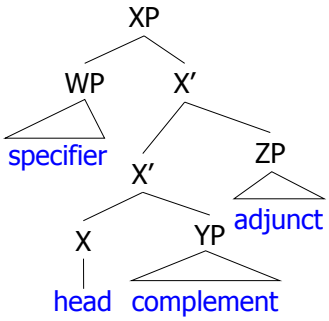
Complement
- obligatory
- position
  - sister of X
  - daughter of X′

Positions



Adjunct(s)
- optional
- position
  - sister of X′
  - daughter of X′

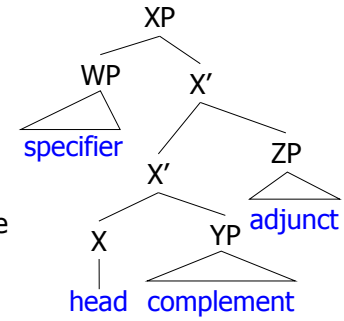
Positions



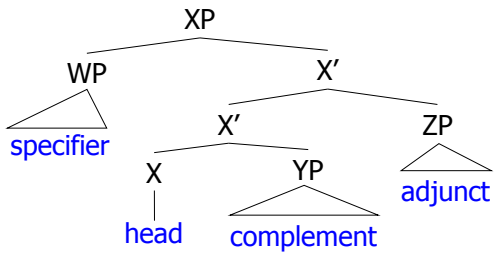
Specifier
- obligatory (perhaps)
- position
  - sister of X′
  - daughter of XP

X′ as language universal?

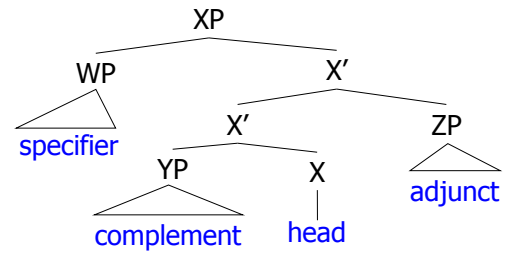
Strong claim:
- all phrases in all languages have this structure
- only difference is linear order



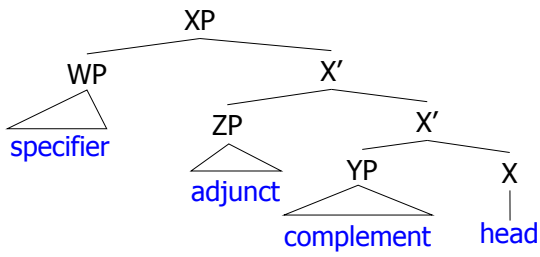
X′ as language universal?



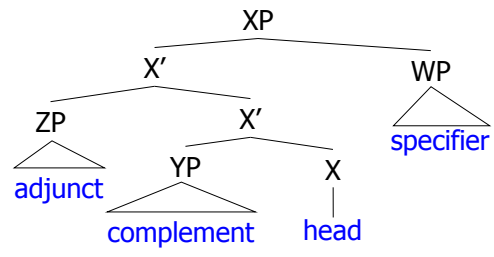
X′ as language universal?



X′ as language universal?

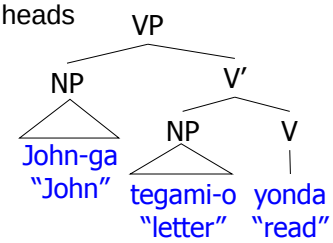


X′ as language universal?



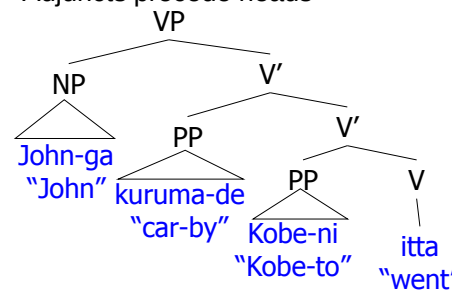
An example: Japanese

- Specifiers and complements precede heads

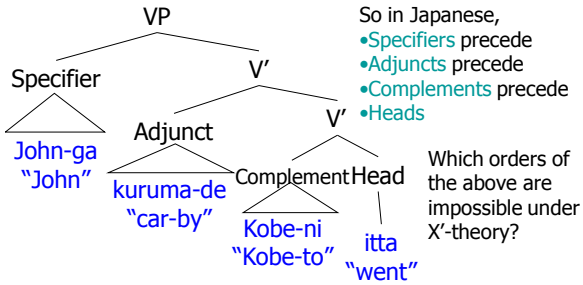


An example: Japanese

- Adjuncts precede heads



An example: Japanese



So in Japanese,
- Specifiers precede
- Adjuncts precede
- Complements precede
- Heads

Which orders of the above are impossible under X'-theory?

Summary

- The structure of verb and noun phrases
- Cross-categorial similarities
- Intermediate categories and X' structure
- head, complement, adjunct, specifier

What's next

- Auxiliaries and functional structure
- A first look at movement
- Verbal inflection and verb position in English and French