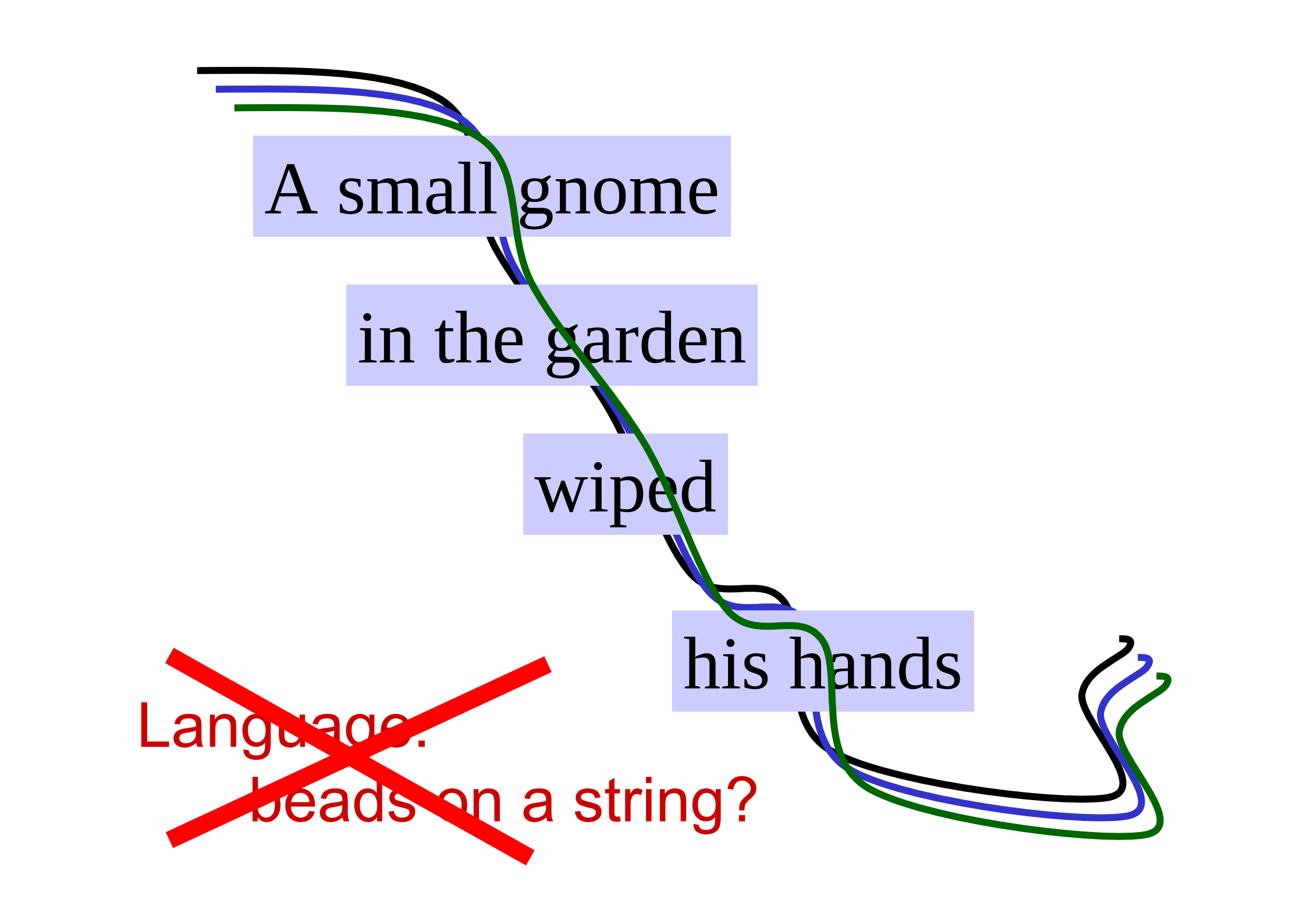
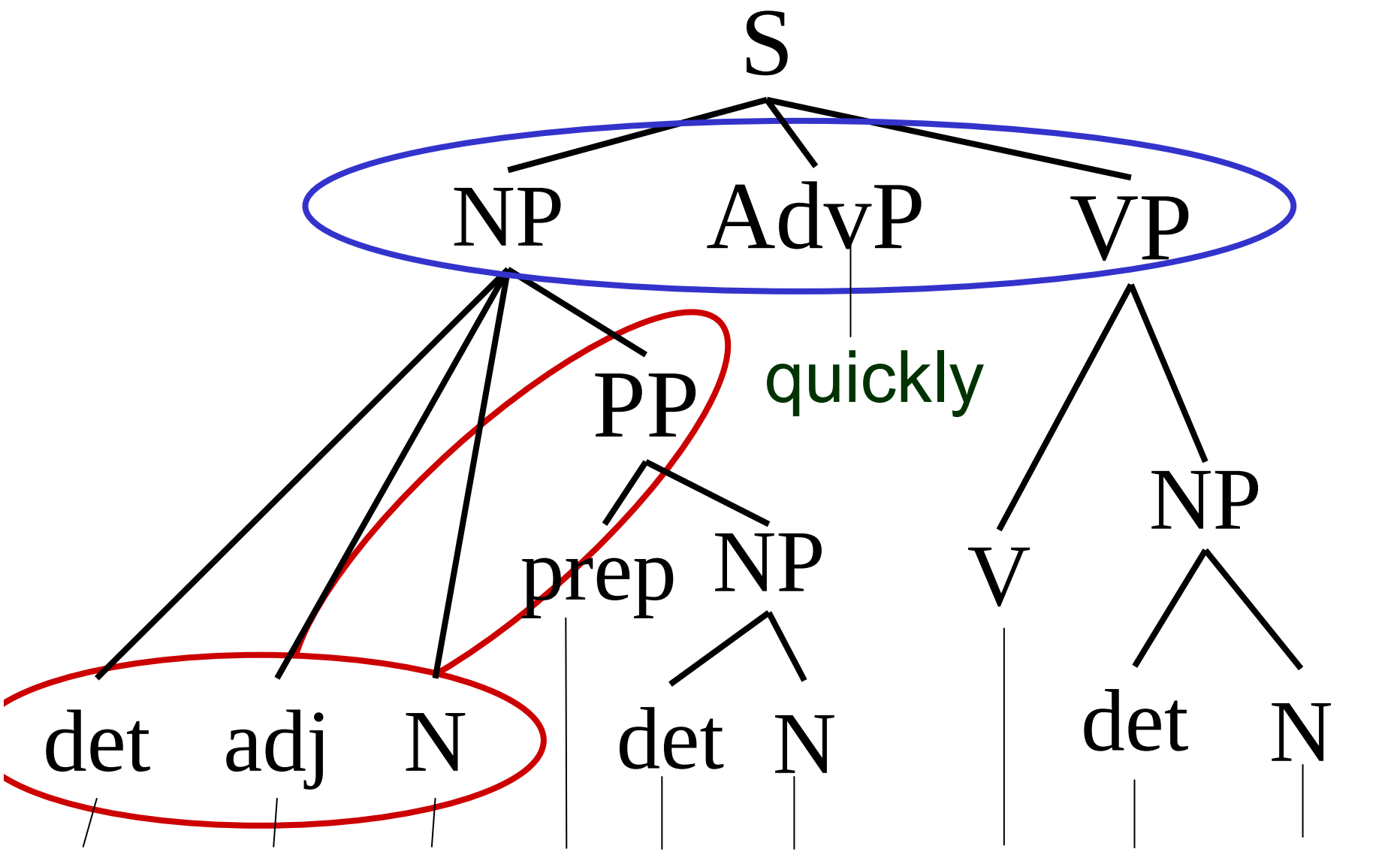
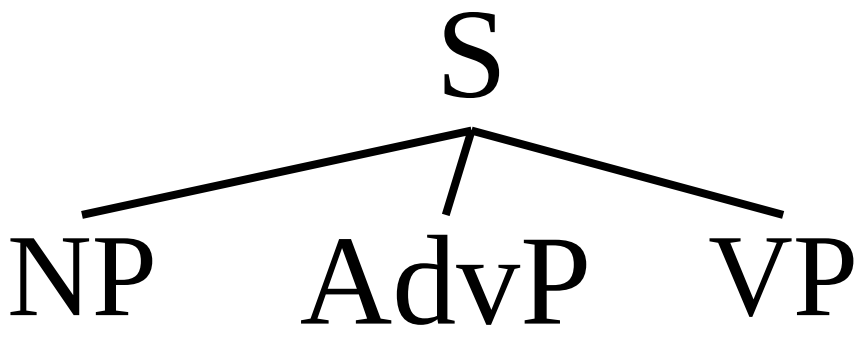
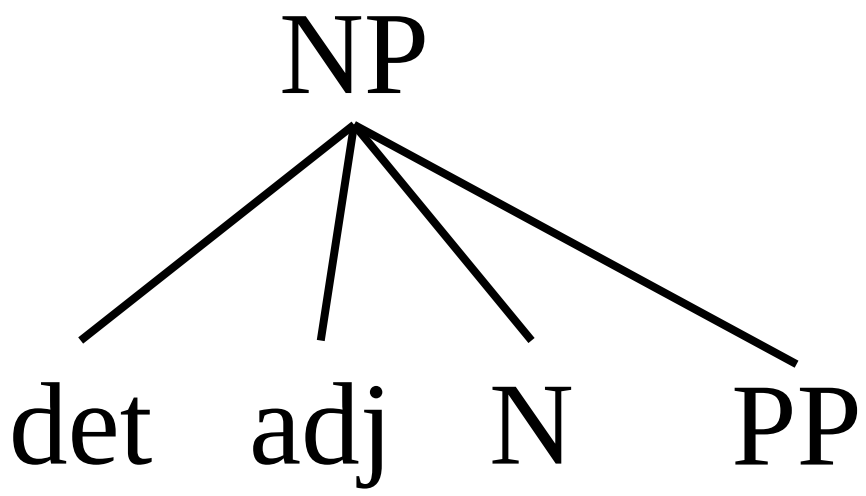
An introduction and motivation of X-bar theory in syntax


A small gnome
in the garden
wiped
his hands
Language:
beads on a string?


S
NP
AdvP
VP
PP
quickly
prep
NP
V
NP
det
adj
N
det
N
det
N
The small gnome in the garden wiped his hands

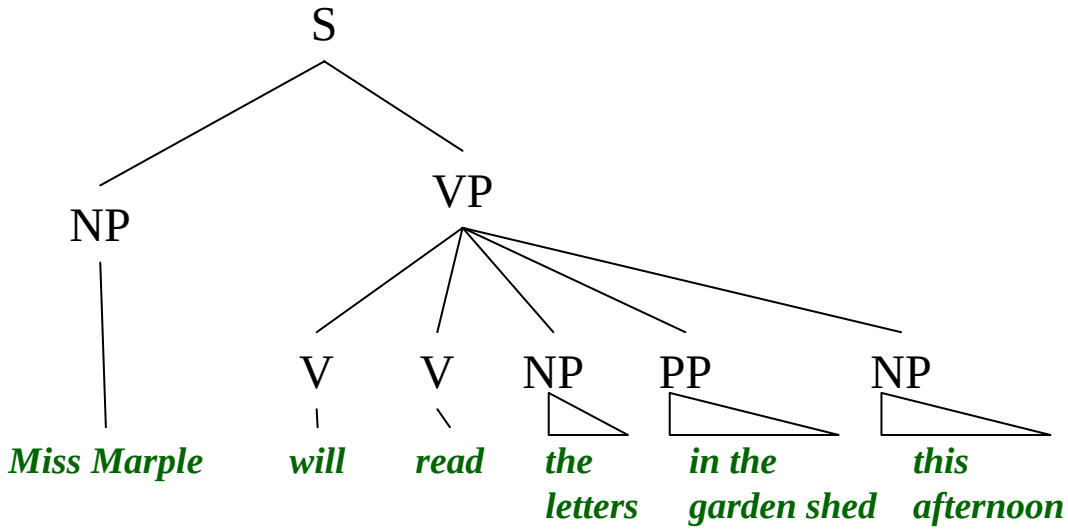
‘flat’ structures



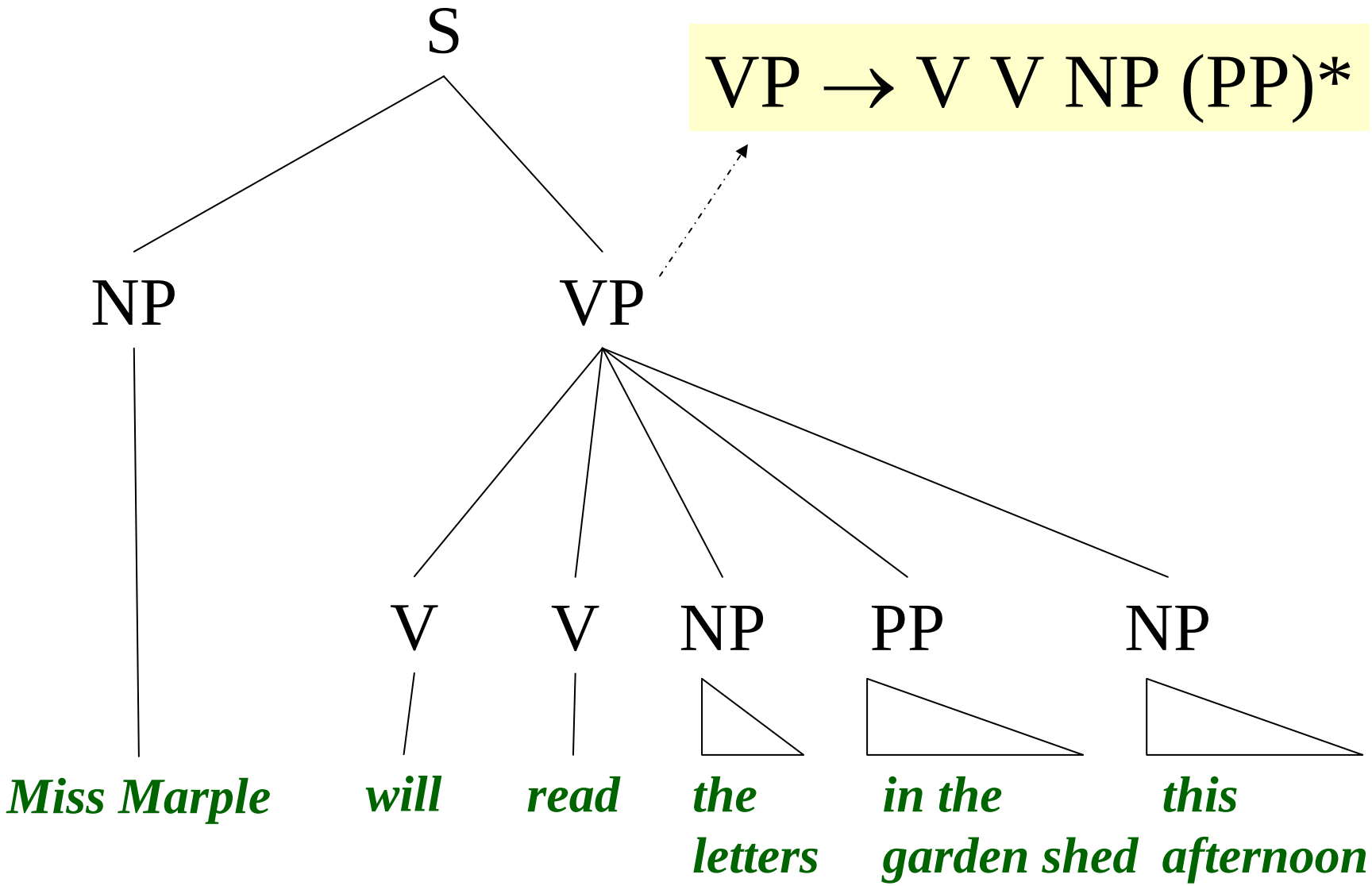


Arguments against ‘flat’ structures:

- Miss Marple will read the letters in the garden shed this afternoon



A sentence structure



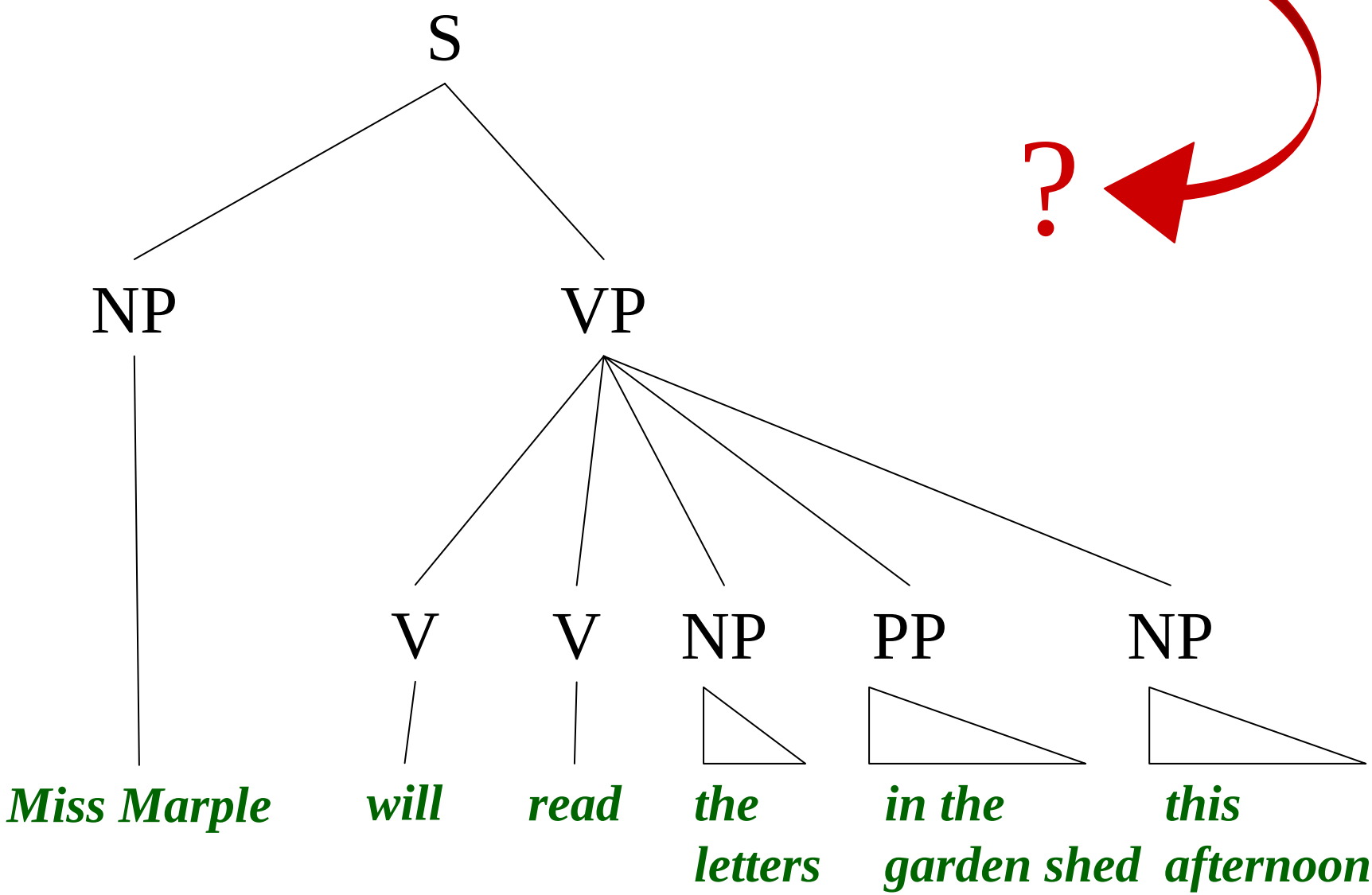
Arguments against ‘flat’ structures:

- Miss Marple will read the letters in the garden shed this afternoon

Arguments against ‘flat’ structures:

- Miss Marple will read the letters in the garden shed this afternoon and Hercule Poirot will **do so too**.

... and HP will do so too



Arguments against ‘flat’ structures:

- Miss Marple will read the letters in the garden shed this afternoon and Hercule Poirot will **do so too**.

Arguments against ‘flat’ structures:

- Miss Marple will read the letters in the garden shed this afternoon and Hercule Poirot will do so too.

- Miss Marple will read the letters in the garden shed this afternoon and Hercule Poirot will **do so tonight**.

Arguments against ‘flat’ structures:

- Miss Marple will read the letters in the garden shed this afternoon and Hercule Poirot will do so too.
- Miss Marple will read the letters in the garden shed this afternoon and Hercule Poirot will do so tonight.

- Miss Marple will read the letters in the garden shed this afternoon and Hercule Poirot will **do so in the garage tonight**.

Arguments against ‘flat’ structures:

- Miss Marple will read the letters in the garden shed this afternoon and Hercule Poirot will do so too.
- Miss Marple will read the letters in the garden shed this afternoon and Hercule Poirot will do so tonight.
- Miss Marple will read the letters in the garden shed this afternoon and Hercule Poirot will do so in the garage tonight.

- * Miss Marple will read the letters in the garden shed this afternoon and Hercule Poirot will do so the diaries in the garage after dinner.

Arguments against ‘flat’ structures:

– VP → V NP (PP)* ?????

- Miss Marple will read the letters in the garden shed this afternoon and Hercule Poirot will do so too.
- Miss Marple will read the letters in the garden shed this afternoon and Hercule Poirot will do so tonight.
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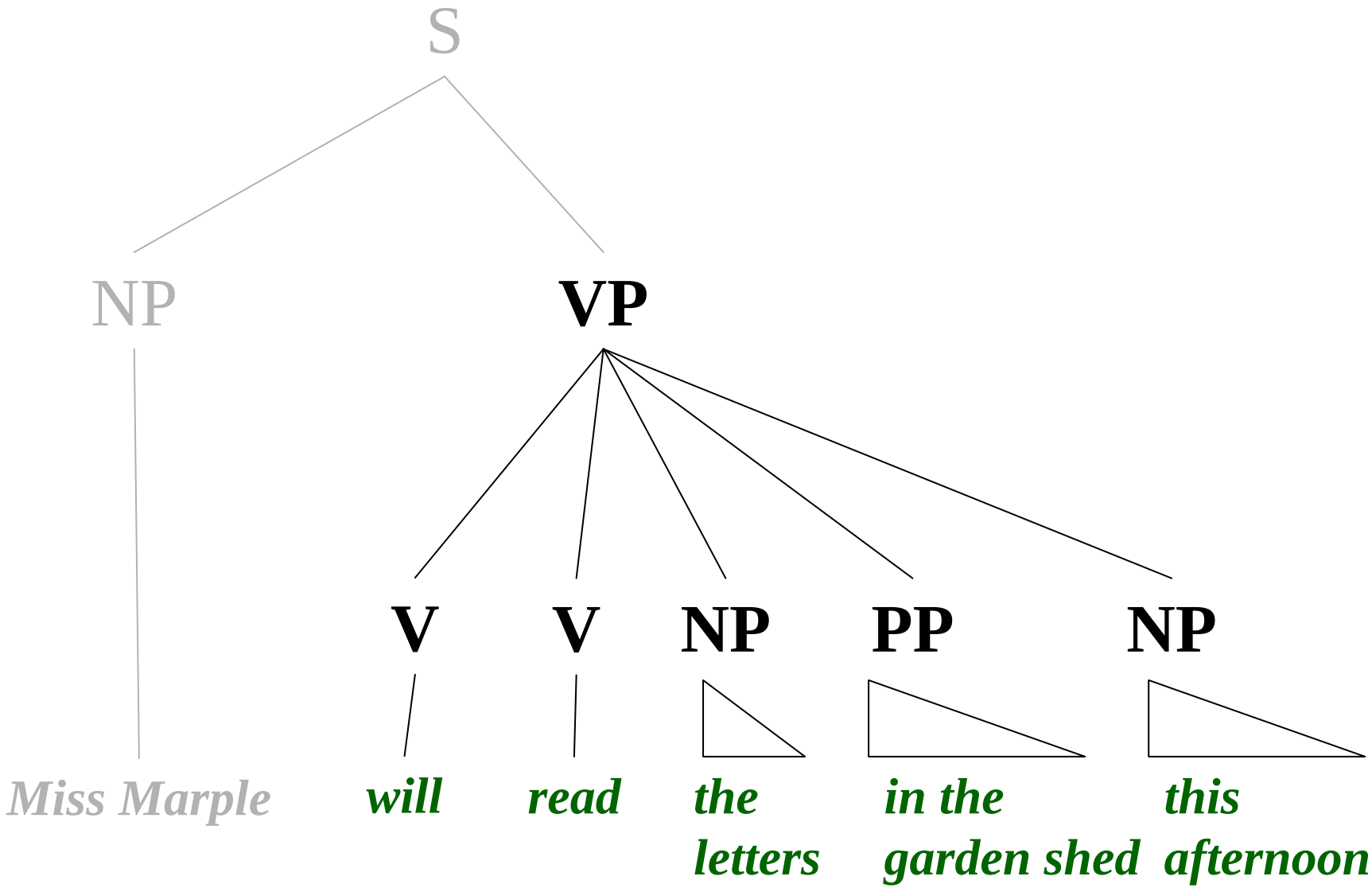
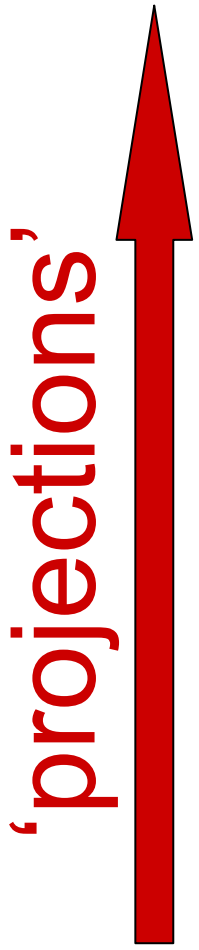
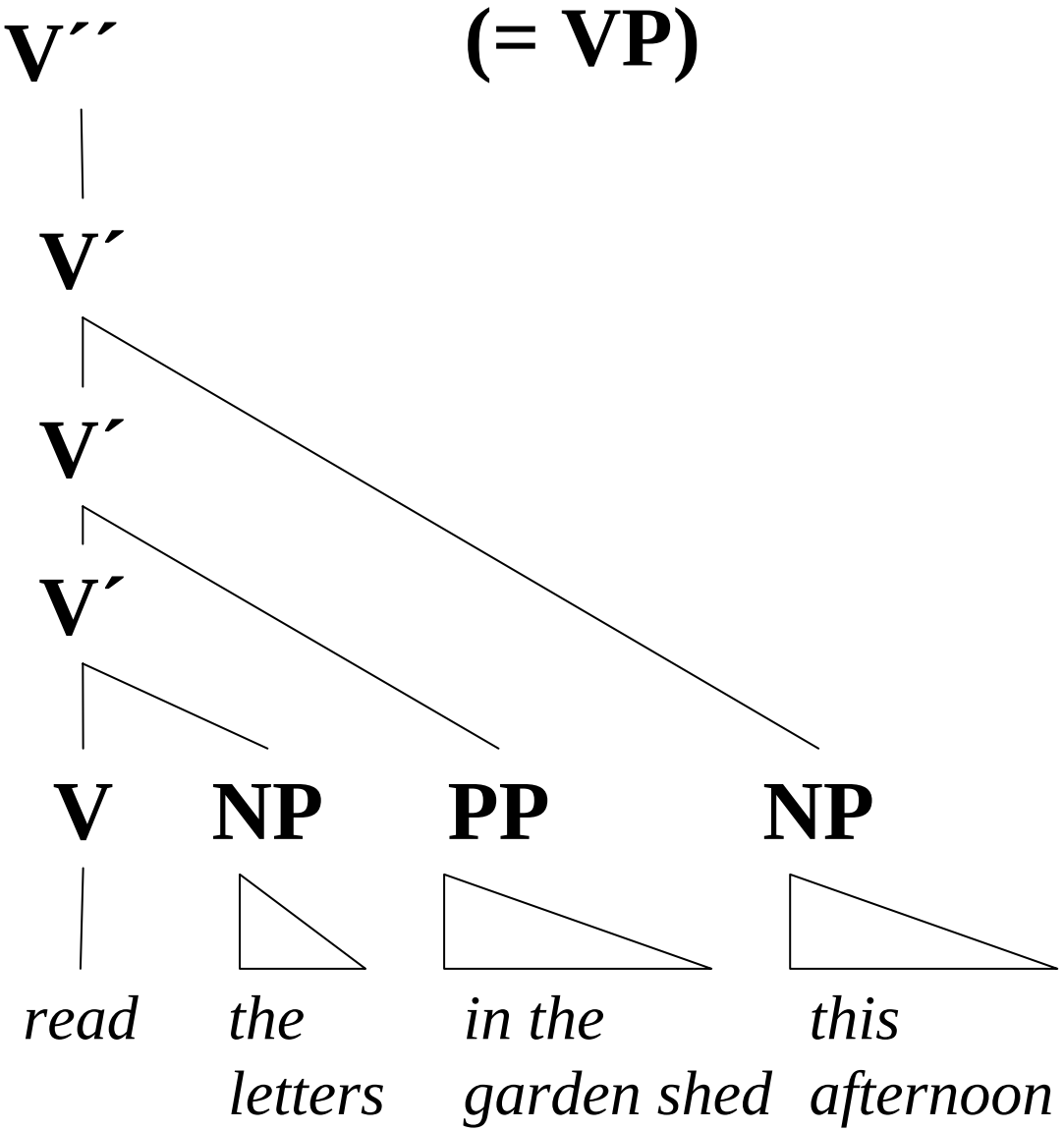
- * Miss Marple will read the letters in the garden shed this afternoon and Hercule Poirot will do so the diaries in the garage after dinner.

The old VP structure

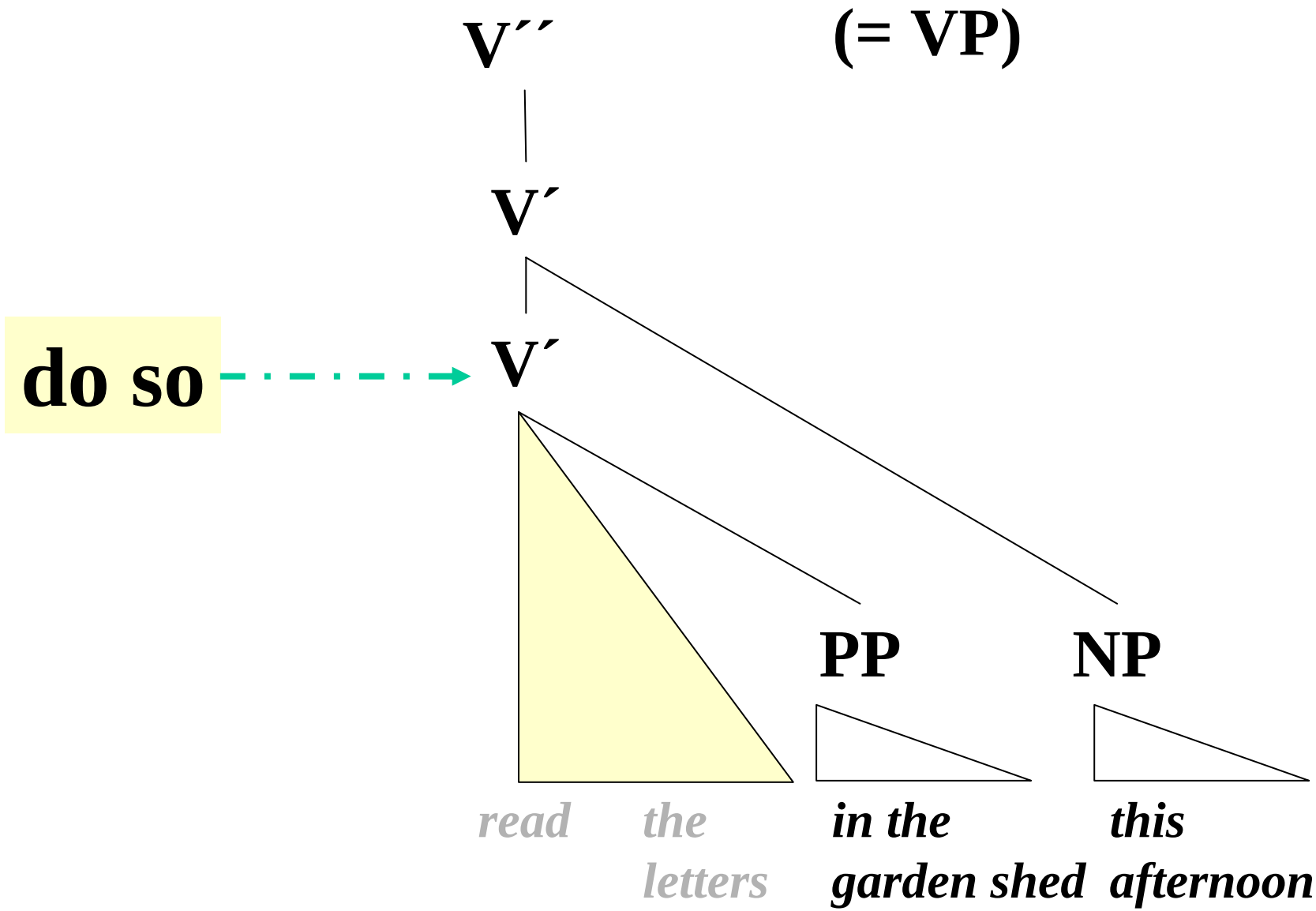


The new VP structure

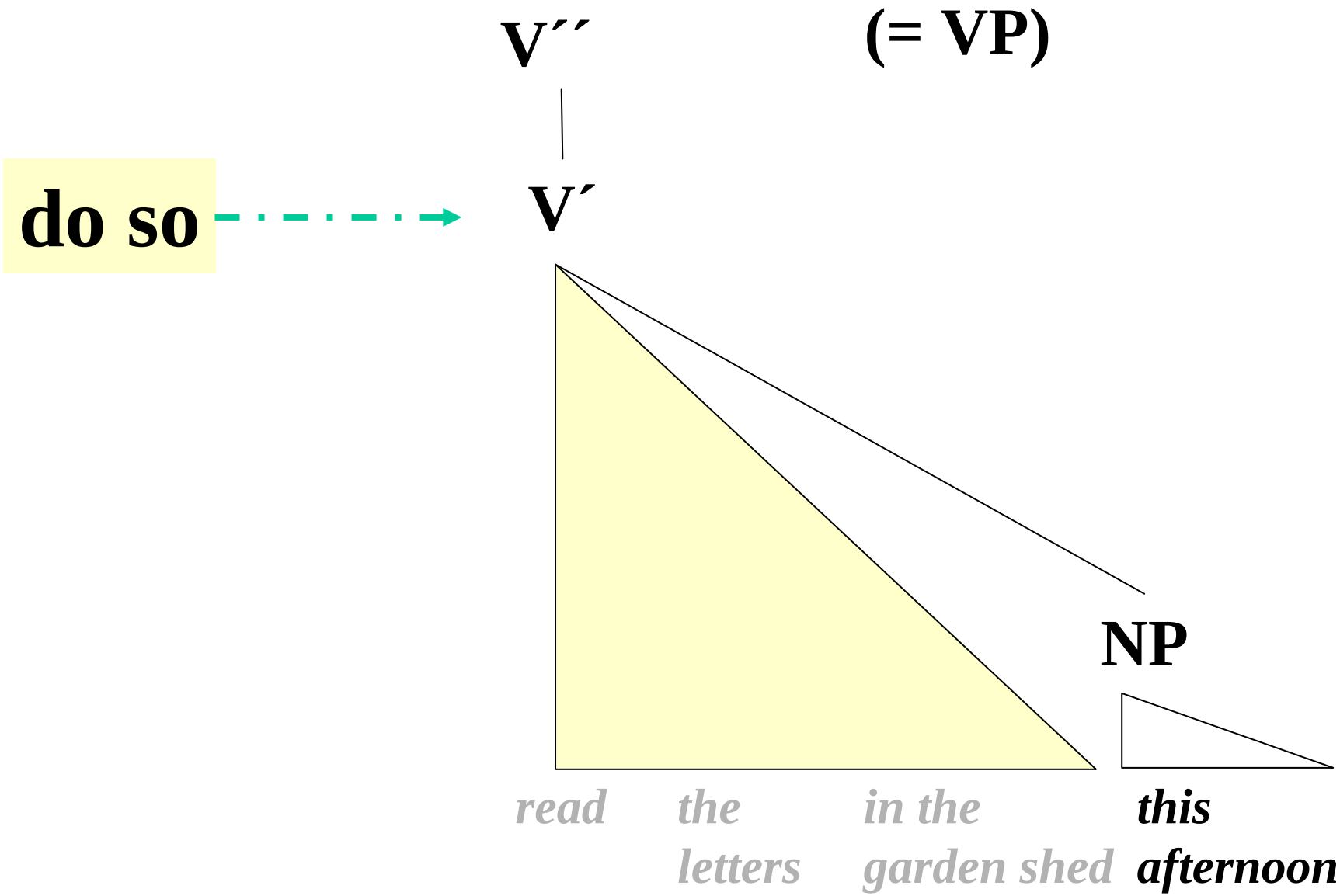




The new VP structure

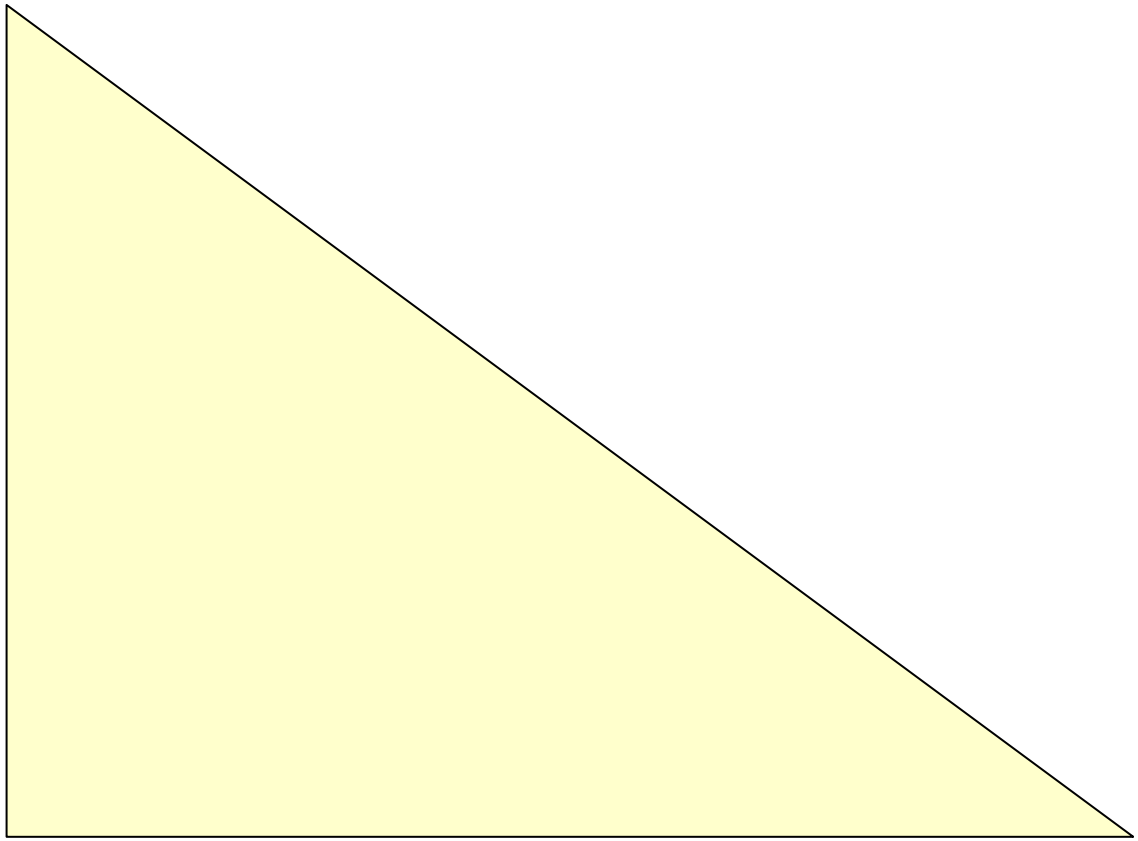


The new VP structure



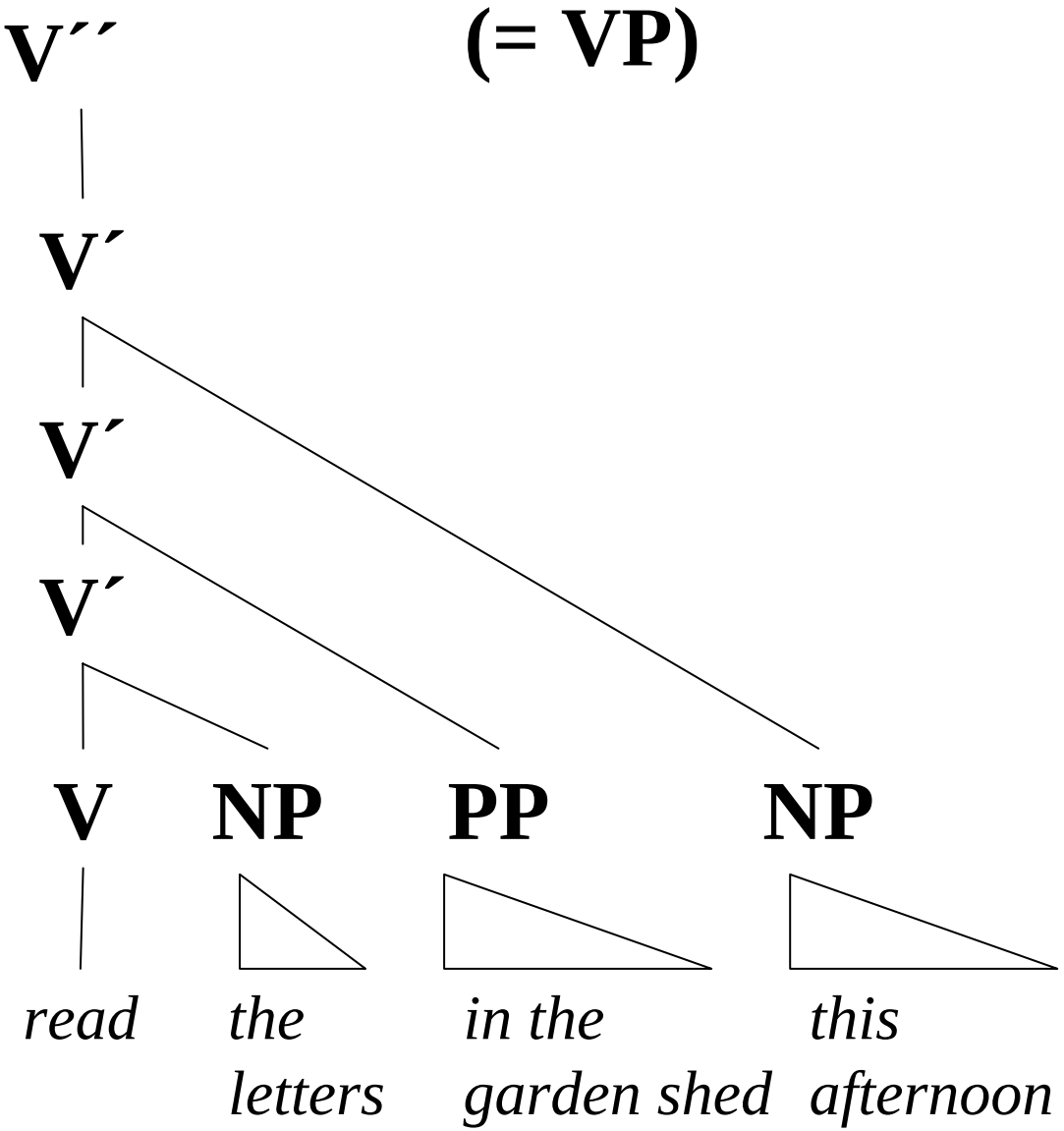
The new VP structure

do so ⇢ **V´´** **(= VP)**



read *the letters* *in the garden shed* *this afternoon*

The new VP structure

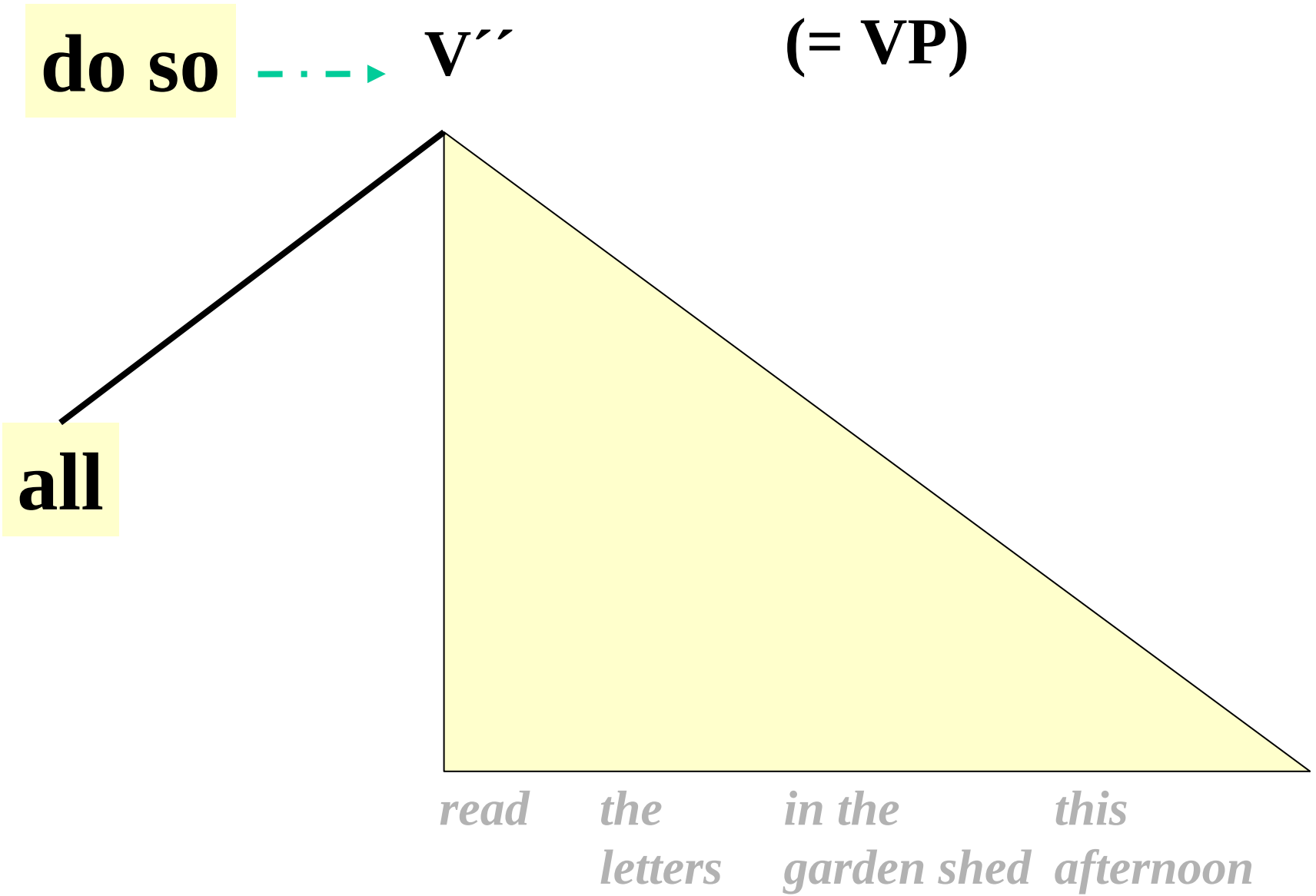


- All the detectives have read the letters in the garden shed after lunch.
- They have?

- All the detectives have read the letters in the garden shed after lunch.
- They have?

- The detectives have **all** read the letters in the garden shed after lunch.
- * They have **all**?
- The police have **all** done so too.

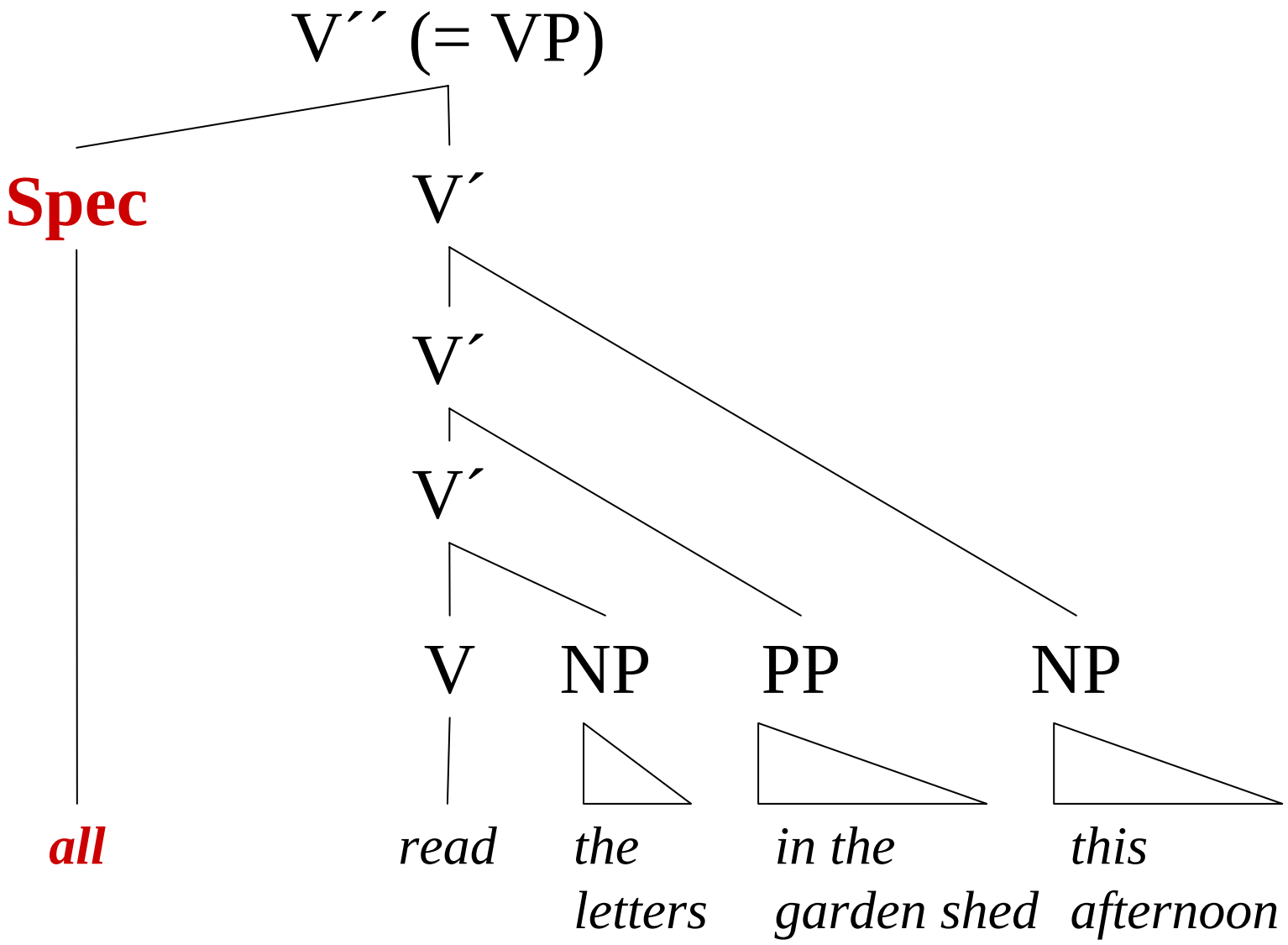
The new VP structure



A new constituent: **Specifier**

- The detectives have all read the letters in the garden shed after lunch.
- The police have all done so too.
- The police have all done so after lunch.
- The police have all done so in the garden shed after lunch

The new VP structure: ‘projections’



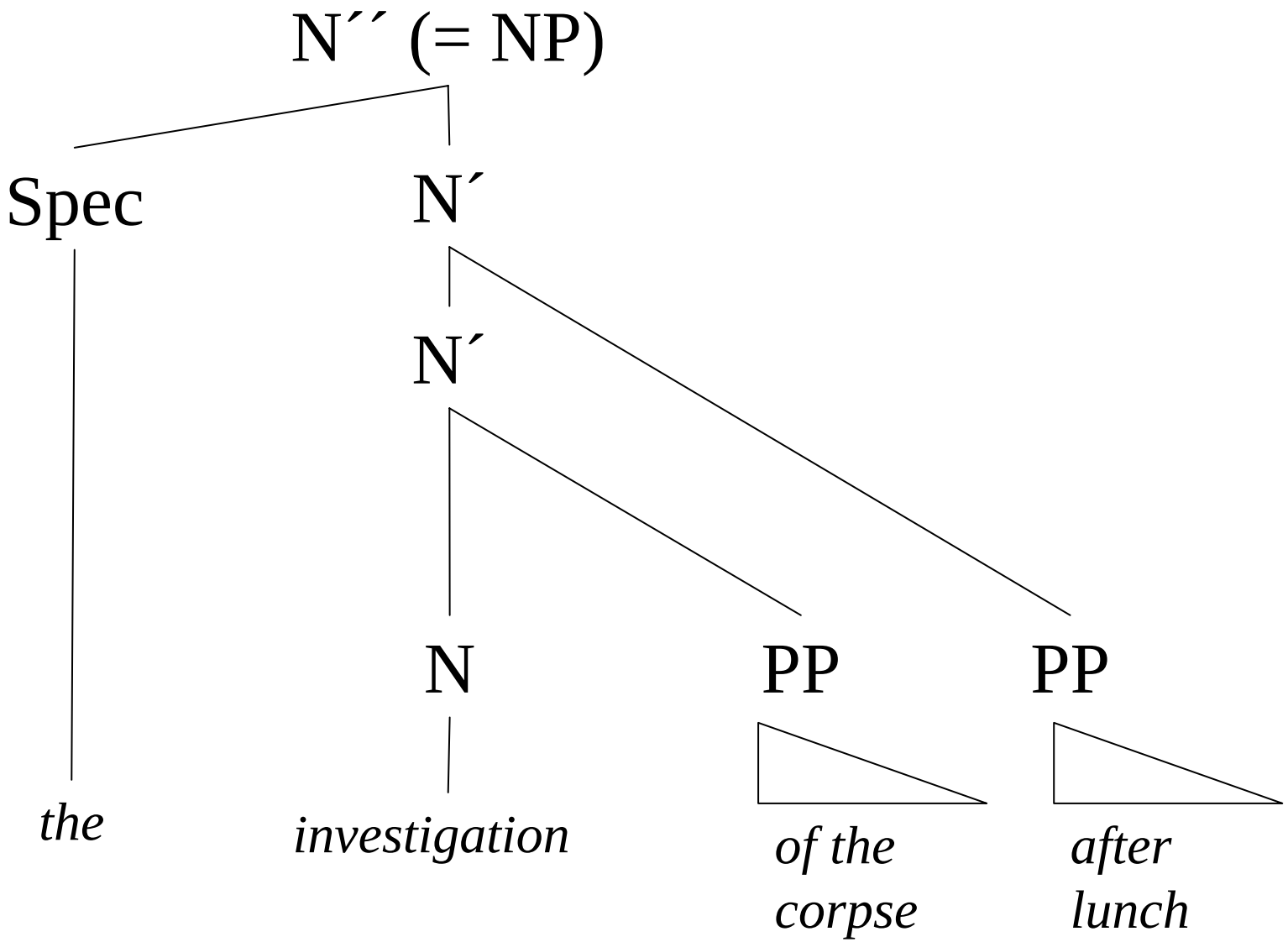
Nominal Phrases

- the investigation of the corpse after lunch
- the investigation of the corpse after lunch was less horrible than the one after dinner
- they investigated the corpse *vs.*
  the investigation of the corpse

Nominal Phrases

- NP $\rightarrow$ Det N (PP)* ??????

The new NP structure: ‘projections’



Adjective Phrases

- Jeeves is envious
- Jeeves is envious of Poirot
- Jeeves is rather envious of Poirot

- He is true to his principles
- Er ist seinen Grundsätzen treu.

Prepositional Phrases

- across the bridge
- right across the bridge

- Prepositions: *by* car, *mit* dem Auto
- Postpositions: kuruma-*de*

Some phrases...

- frequently open the door in the morning
- early in the morning on Wednesday
- extremely fond of chocolate with breakfast
- a painter of portraits in the 1920’s

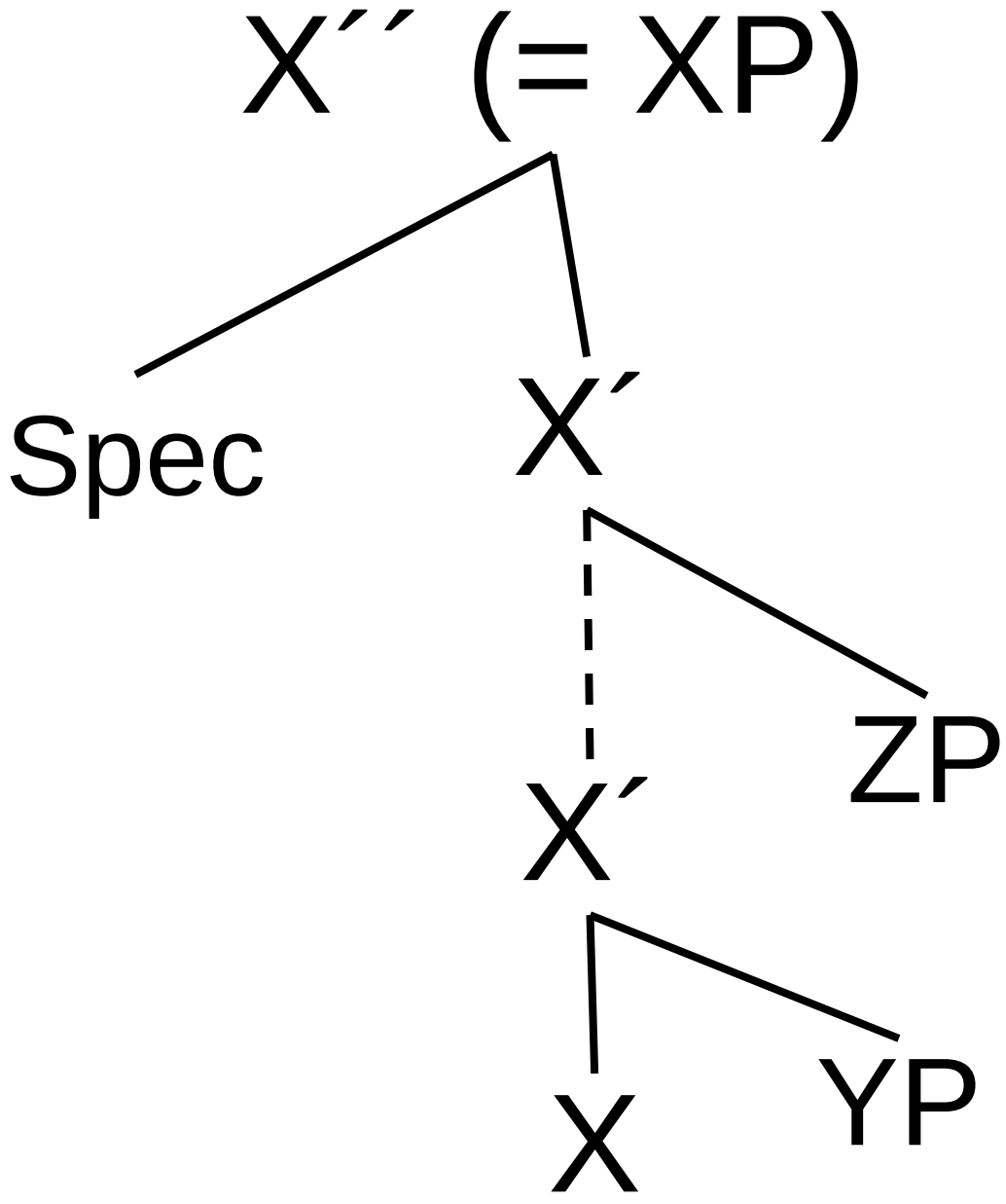
- a famous painter of portraits in the 1920’s

The rise of ‘X-bar’ syntax

- Arguments against ‘flat’ structures
- Basic reoccurring patterns in the *different types of phrases* that we find in a language
- Basic reoccurring patterns in the structures found *across languages*

The X-bar schema

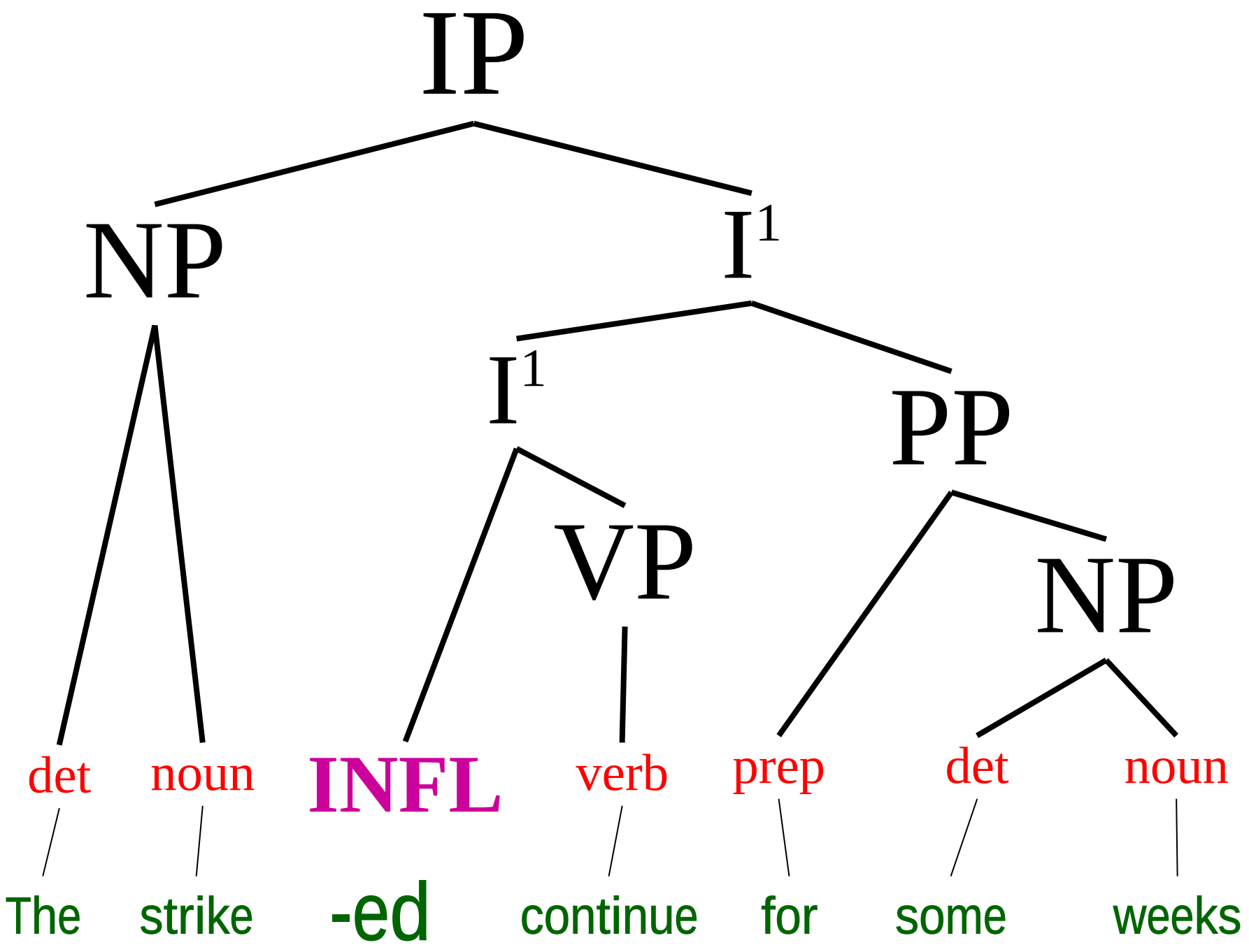
Noam Chomsky

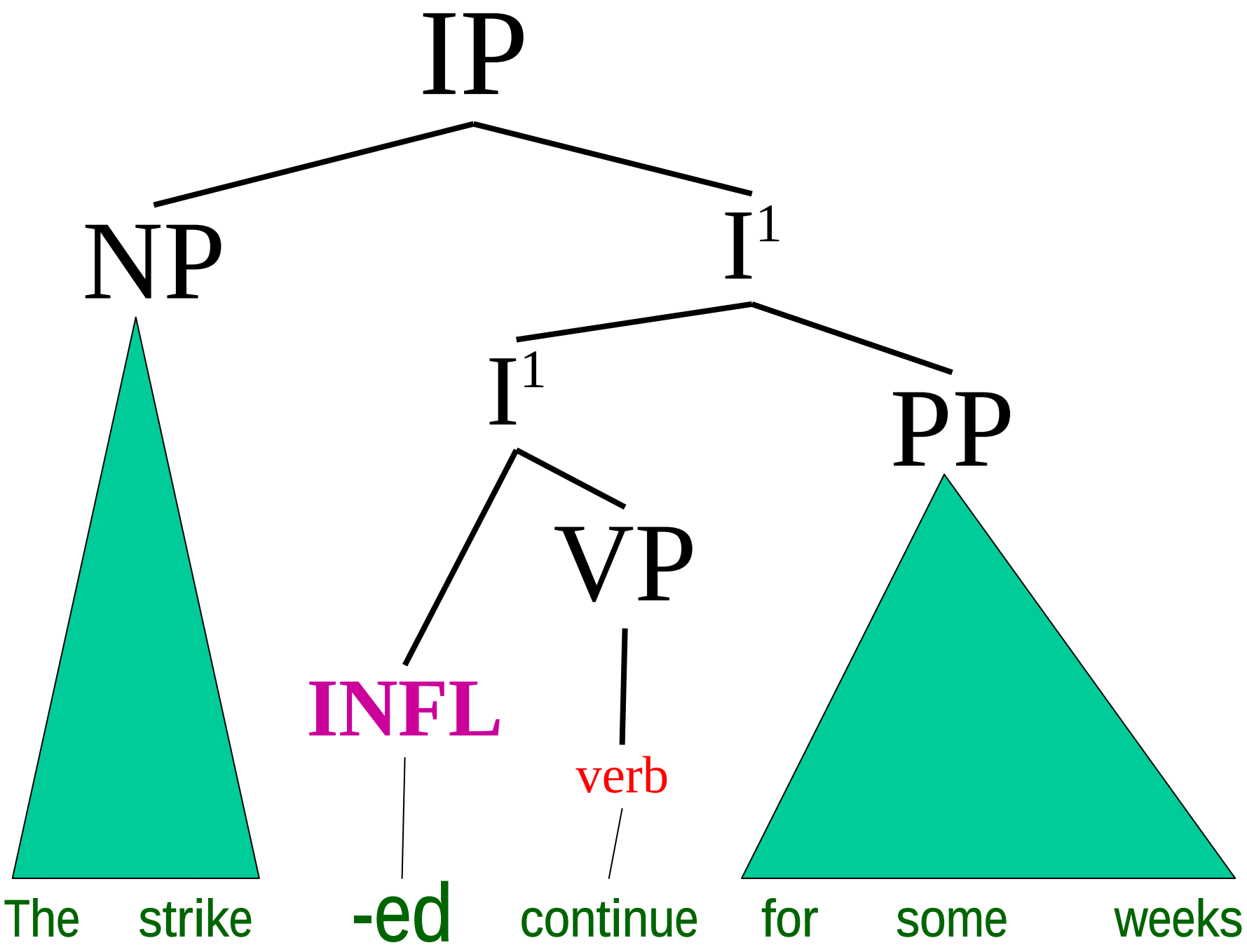


X-bar Theory

- X´´ → Spec; X´
- X´* → X´; ZP
- X´ → X; YP

The strike continued for some weeks


IP
NP
I1
I1
PP
VP
NP
det
noun
INFL
verb
prep
det
noun
The
strike
-ed
continue
for
some
weeks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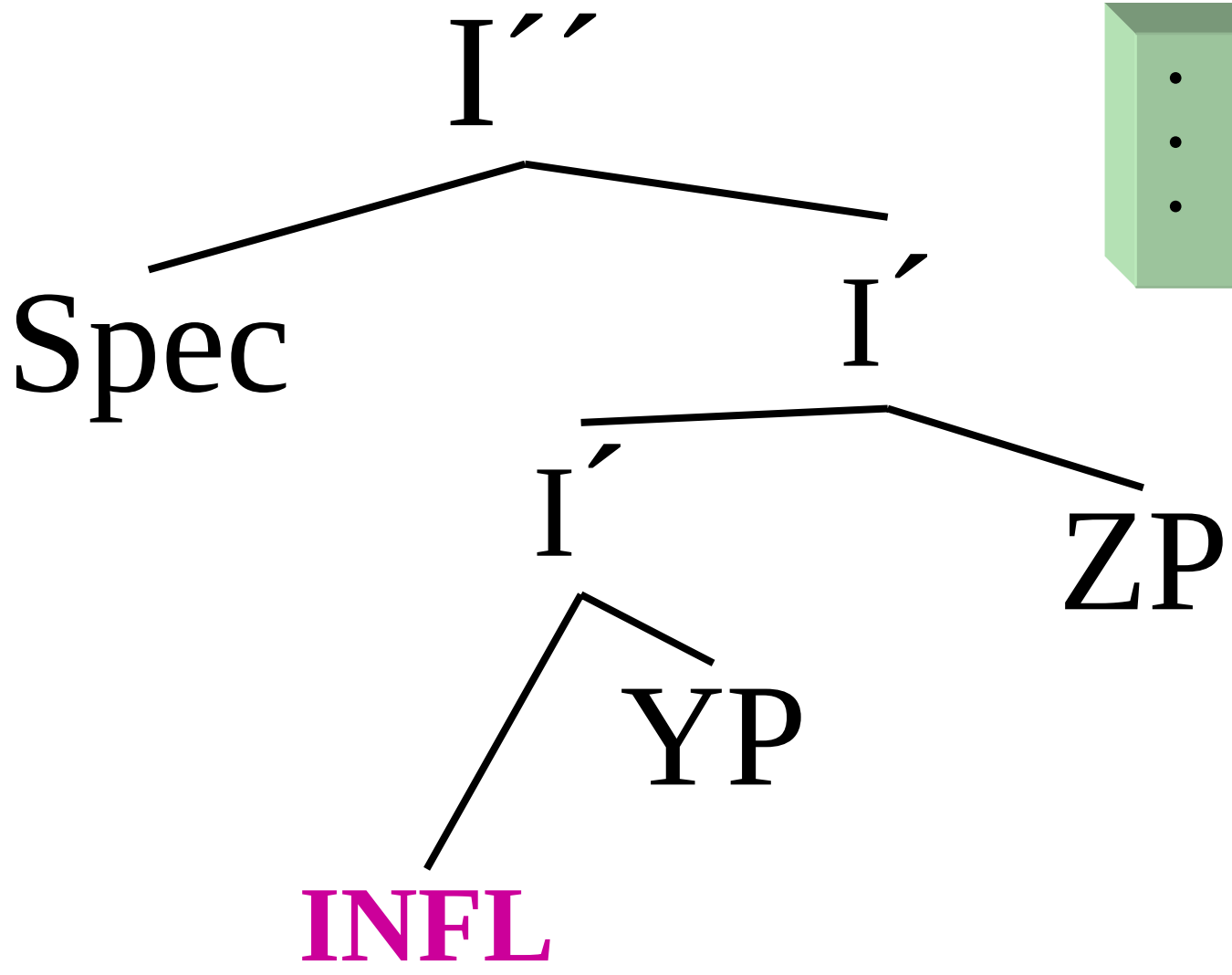

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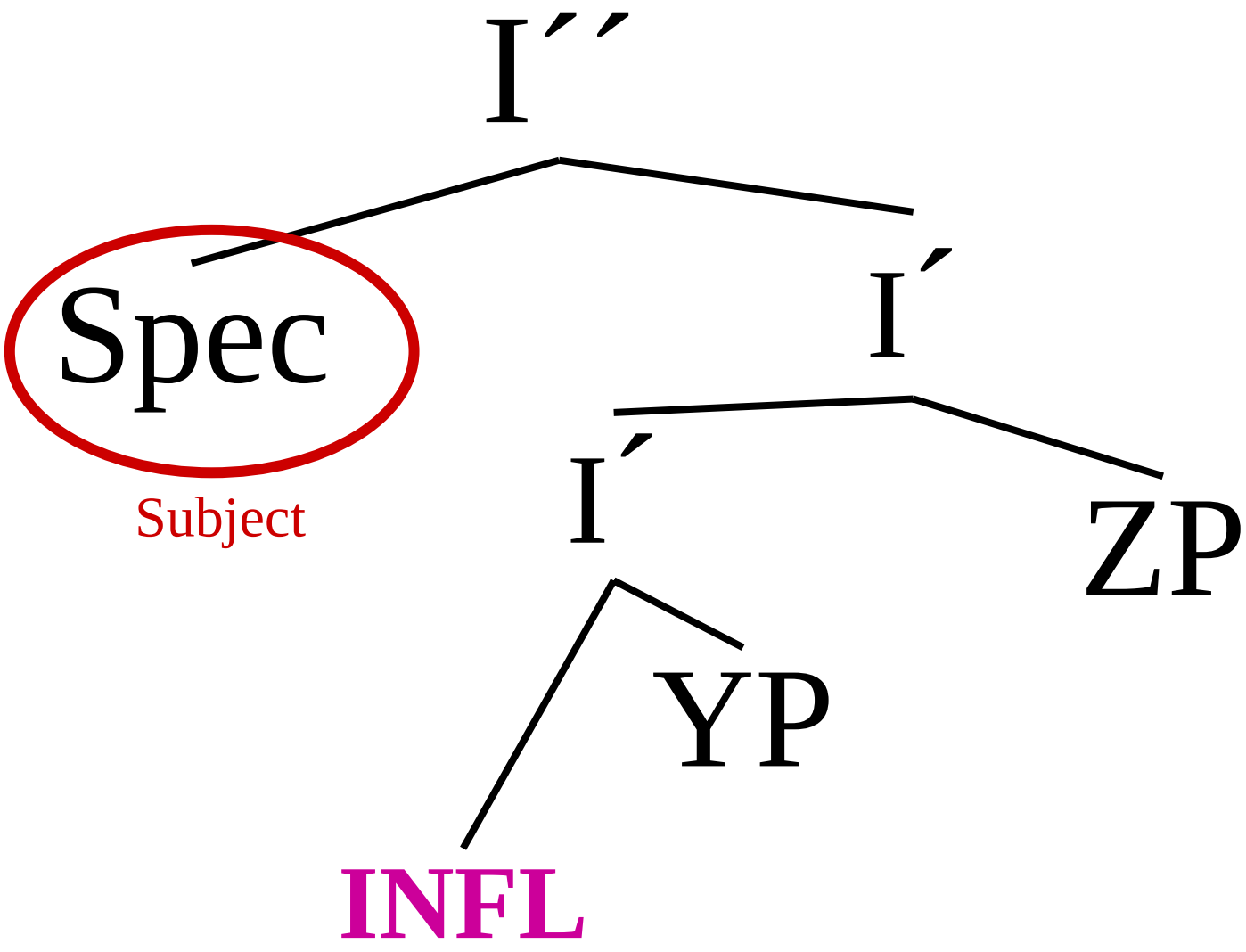
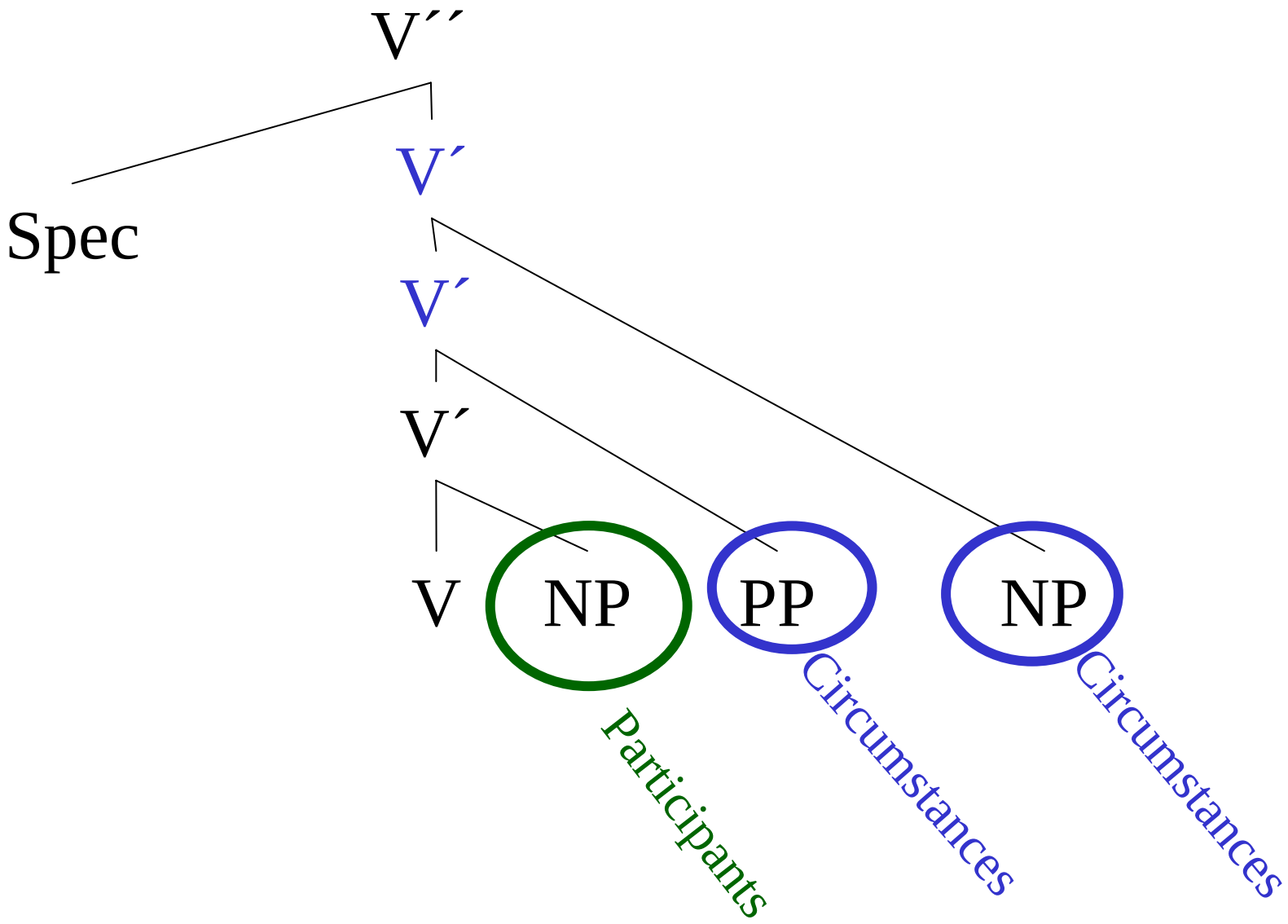
(I´´ = IP = S)



(I´´ = IP = S)

Relation between form and function



X-bar Theory

- X´´ → Spec; X´
- X´* → X´; ZP
- X´ → X; YP

- "If we can treat phrase structure universally in terms of this general projection schema, then we may further assume that the child learning a language need not construct this schema as part of its grammar. The principles of X-bar theory will be part of [Universal Grammar], they are innate." (Haegeman, 1991:96)

Binary Branching and ‘Language Acquisition’

- Less options for the child to discriminate amongst.....
  - a sensible claim?

  - “Mummy must go now.”

    how many trees?

Exercises... What would be sensible X-bar trees for the following sentences?

- Poirot will meet the new governess in the foyer of the opera.
- Miss Marple cleaned the knife carefully with a handkerchief.
- Maigret is quite fond of his assistant.
- The announcement of the news on local radio surprised the students of linguistics from England.