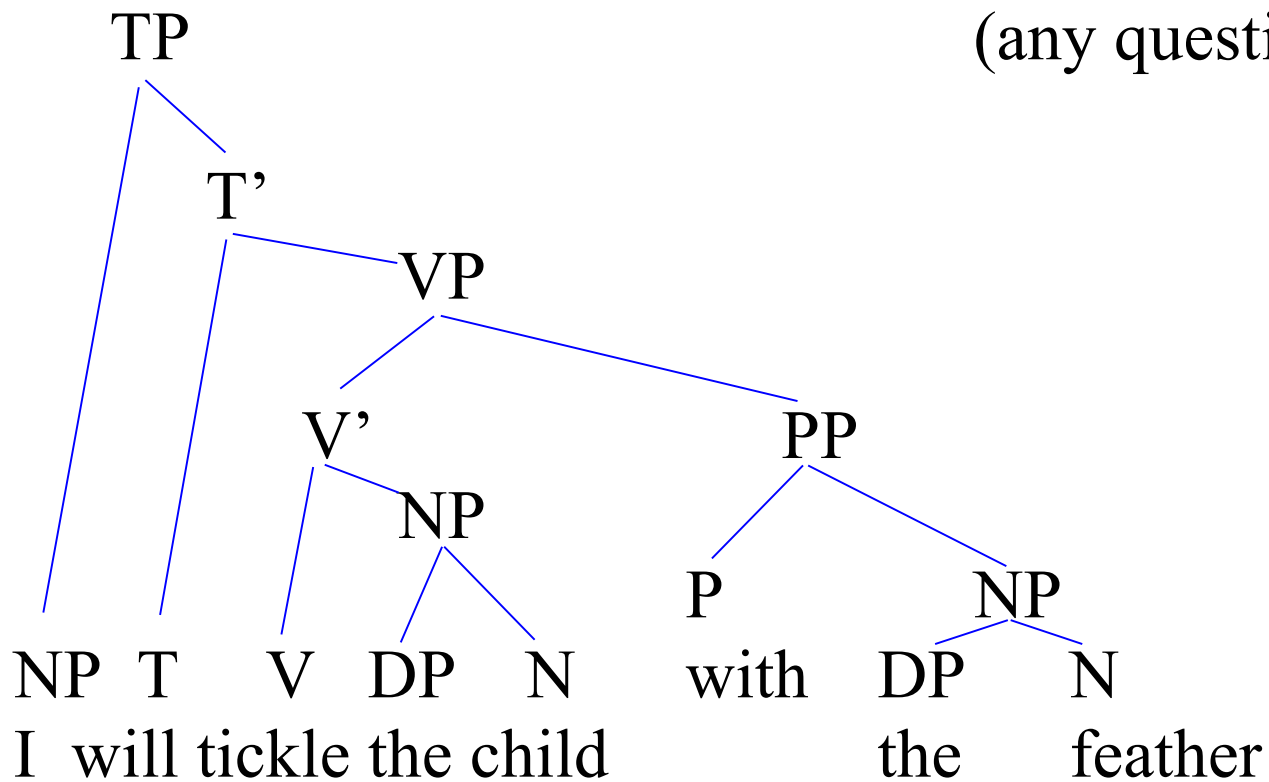


Syntax 4

A kind of tree that we've been drawing:

(any questions?)



We've talked about the idea that some of the properties of this tree follow from *selection*: for example, the V 'tickle' *selects* the object NP 'the child'.

We've talked about the idea that some of the properties of this tree follow from *selection*: for example, the V 'tickle' *selects* the object NP 'the child'.

- not every verb can be followed by "the child"

I will tickle **the child**

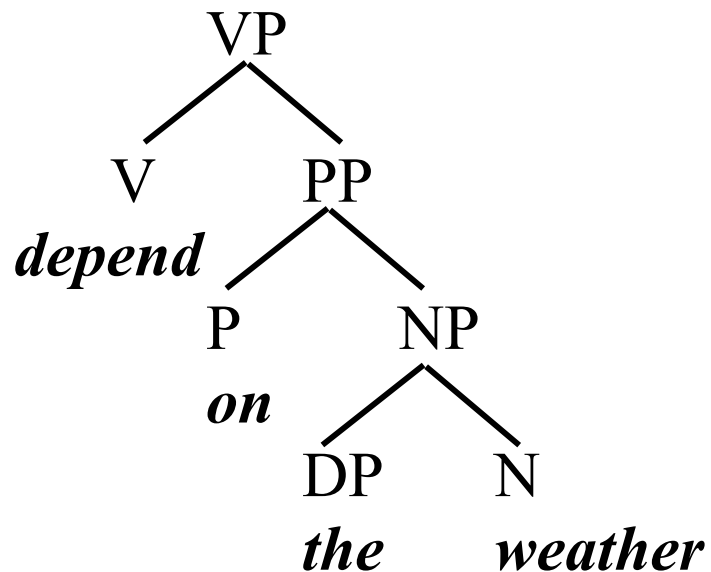
I will devour **the child**

I will write **the child**

*I will thrive **the child**

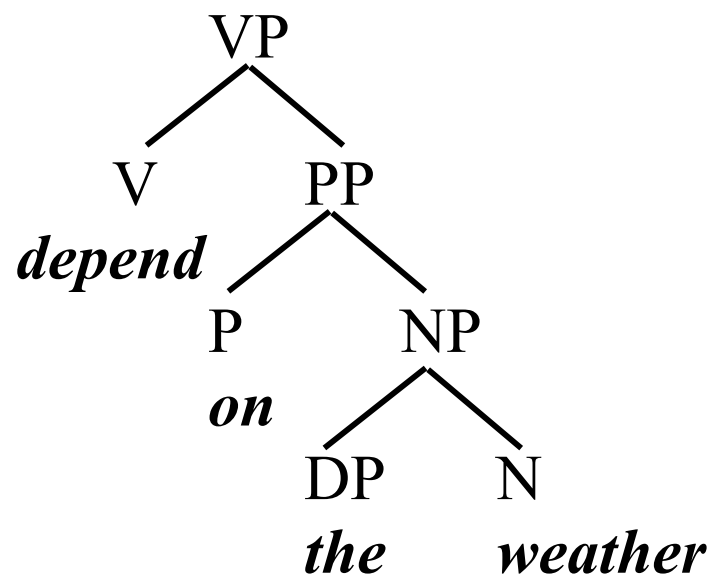
selection, when it's for something specific, seems to be for properties of the *head* of the selected phrase:

it depends on (*at, *from...) the weather



selection, when it's for something specific, seems to be for properties of the *head* of the selected phrase:

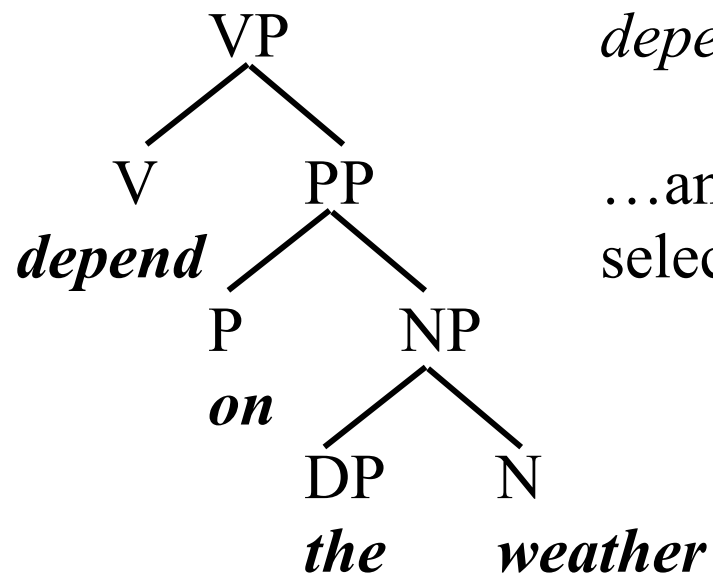
it depends on (*at, *from...) the weather



depend selects for a PP with the head *on*...

selection, when it's for something specific, seems to be for properties of the *head* of the selected phrase:

it depends on (*at, *from...) the weather



depend selects for a PP with the head *on*...

...and we're never going to find a verb that selects for a PP with the object *tomatoes*...

(there are also verbs that select other things...)

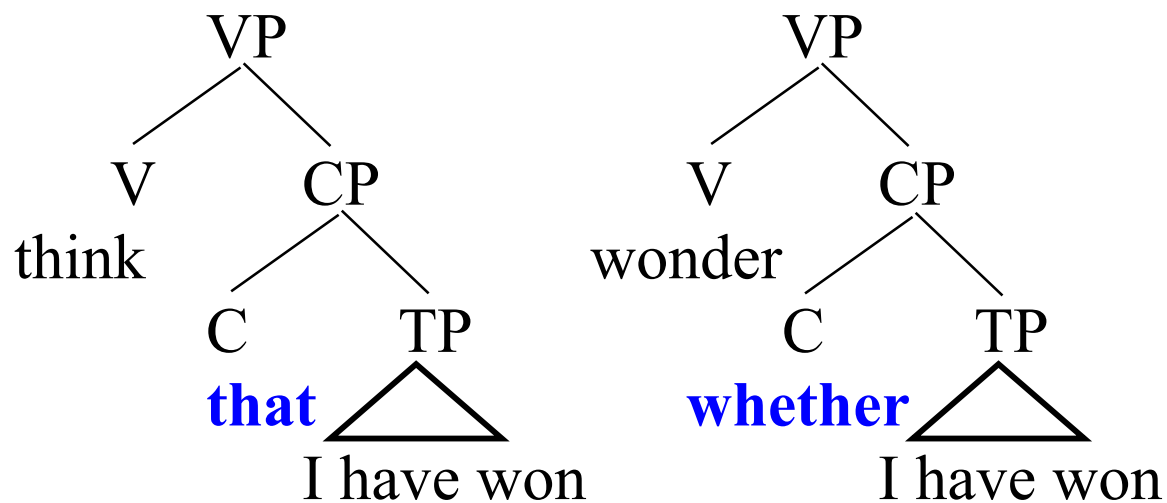
I think **that** I have won the lottery

I wonder **whether** I have won the lottery

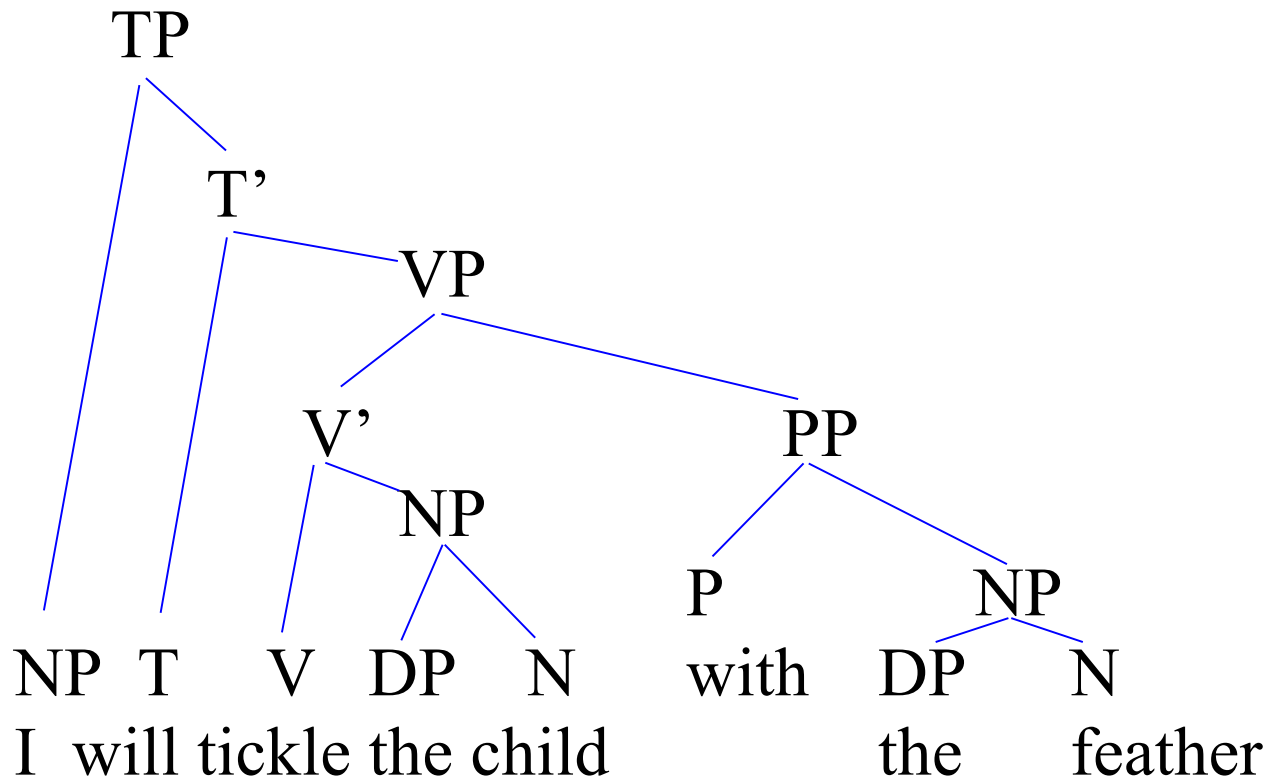
*I think **whether** I have won the lottery

*I wonder **that** I have won the lottery

complementizers (C)



Back to the original tree:



Doesn't seem right to say that 'child' or 'tickle' *selects* 'with a feather':

- you can do anything with a feather
- anybody and anything (not just a child) can be 'with a feather'

I will tickle the child **with this feather**

I will devour the child **with this feather**

I will write a novel **with this feather**

I will thrive **with this feather**

Doesn't seem right to say that 'child' or 'tickle' *selects* 'with a feather' (as opposed to "the child", which is selected):

- you can do anything with a feather
- not every verb can be followed by "the child"

I will tickle **the child** **with a feather**

argument **adjunct**

arguments versus adjuncts

- arguments are 'picky' about which heads they can combine with; adjuncts aren't ('with a feather' can modify anything, unlike 'the child')
- but there are optional arguments:

I wrote (a novel)

I danced (a hornpipe)

I ate (an apple)

...

arguments versus adjuncts

I decided on the boat.

arguments versus adjuncts

I decided on the boat.

- "I made my decision (about something) while on the boat"
- "I chose the boat"

arguments versus adjuncts

I decided on the boat.

- "I made my decision (about something) while on the boat"
- "I chose the boat"

Is *on the boat* an argument or an adjunct?

arguments versus adjuncts

I decided on the boat.

→ "I made my decision (about something) while on the boat"

→ "I chose the boat"

argument

adjunct

Is *on the boat* an argument or an adjunct? **Yes.**

arguments versus adjuncts

I decided on the boat.

→ "I made my decision (about something) while on the boat"

→ "I chose the boat"

argument

adjunct

Is *on the boat* an argument or an adjunct? **Yes.**

I decided **on the boat on the plane.**

How many things can this mean?

(please ignore boats that are on planes...)

arguments versus adjuncts

I decided on the boat.

→ "I made my decision (about something) while on the boat"

→ "I chose the boat"

argument

adjunct

Is *on the boat* an argument or an adjunct? **Yes.**

I decided **on the boat on the plane.**

*I decided **on the boat on the plane.**

arguments versus adjuncts

- arguments are 'picky' about which heads they can combine with; adjuncts aren't ('with a feather' can modify anything, unlike 'the child')
- If a head has both an argument and an adjunct, the argument is closer to the head.

I think this much has been review. Any questions?

arguments versus adjuncts: another handy test

I decided on the boat, and Mary decided on the plane

(ambiguous)

arguments versus adjuncts: another handy test

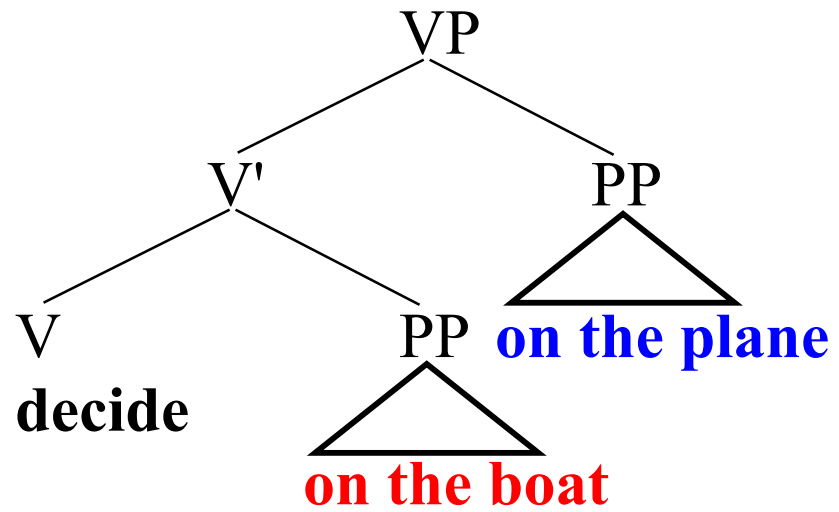
I decided on the boat, and Mary decided on the plane

(ambiguous)

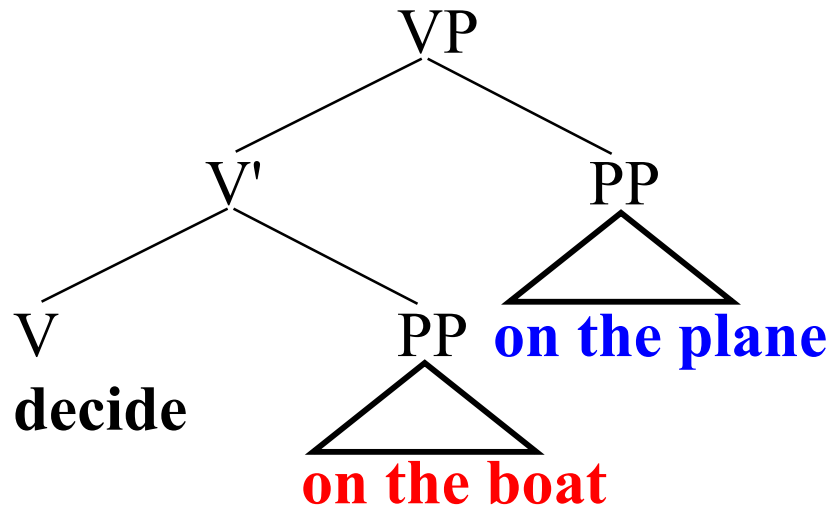
I decided on the boat, and Mary **did so** on the plane

VP-pronominalization

arguments versus adjuncts

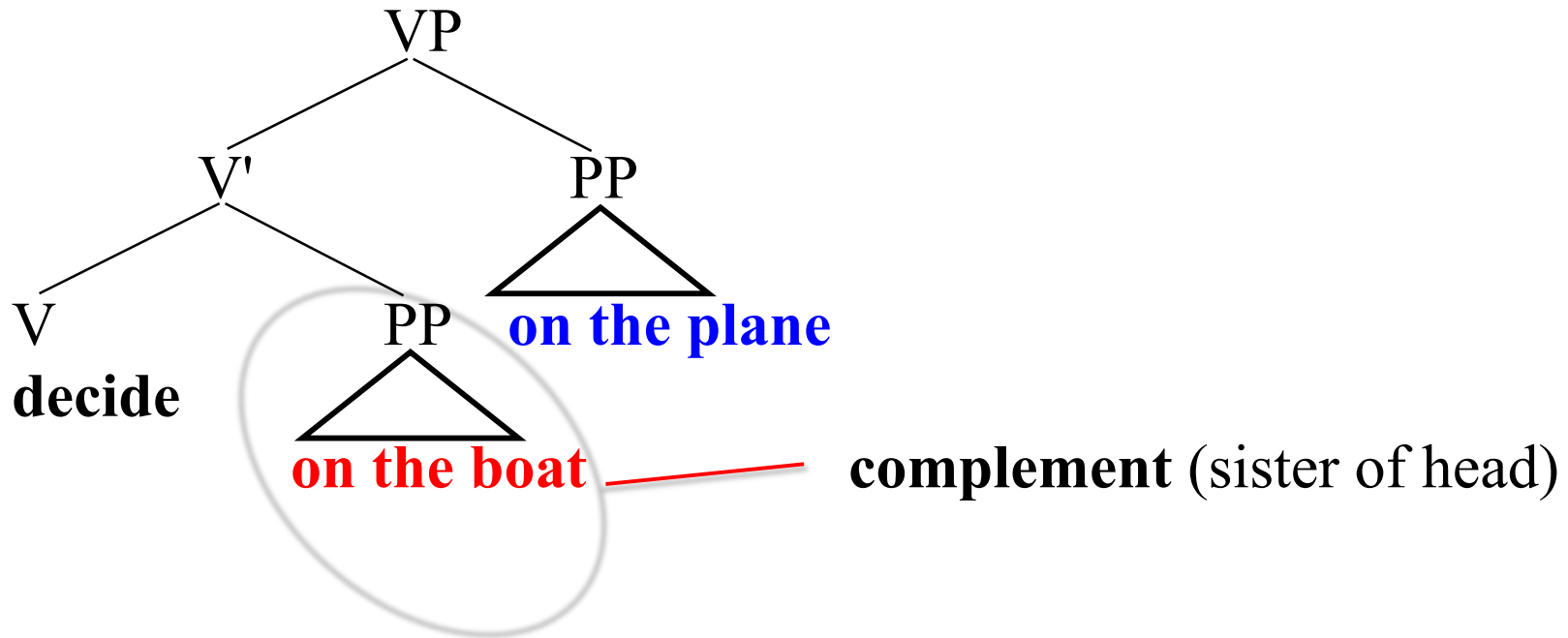


arguments versus adjuncts

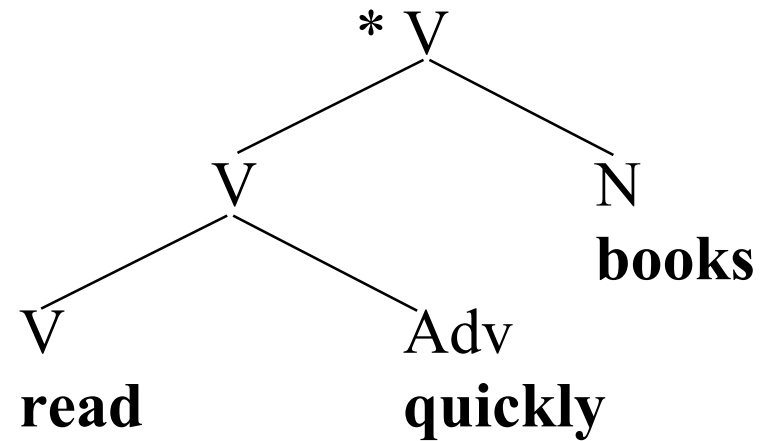
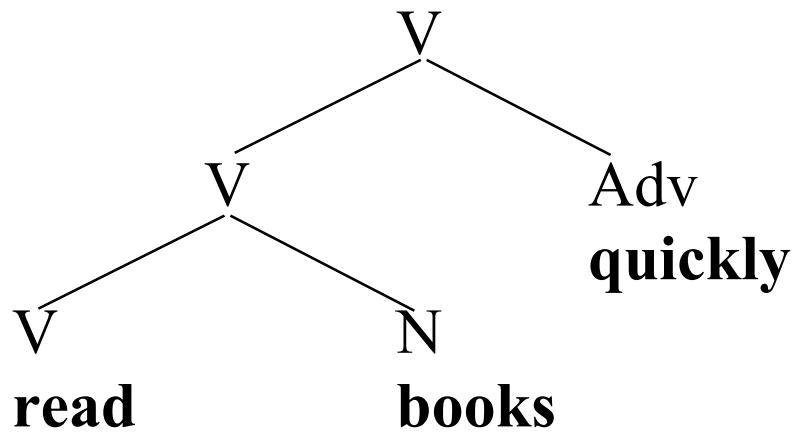


Mary will [decide on the boat] and [read a novel] on the plane.

arguments versus adjuncts



Projection Principle: If a head selects for an argument, Merge the head with the argument first (make the argument a **complement**)



where we are now

- Trees are constructed by binary Merge.
- Merge is constrained by selection, via the **Projection Principle**:
if a head selects for some thing X, then X should be Merged to the head first (becoming its complement (sister)).

Mary wrote the novel on a typewriter
*Mary wrote on a typewriter the novel

Mary wrote the novel on a typewriter
*Mary wrote on a typewriter the novel

What did Mary write on a typewriter?

Mary wrote the novel on a typewriter
*Mary wrote on a typewriter the novel

What did Mary write on a typewriter?

two possible responses:

- oh, well, so much for the Projection Principle.

Mary wrote the novel on a typewriter

*Mary wrote on a typewriter the novel

What did Mary write on a typewriter?

two possible responses:

- oh, well, so much for the Projection Principle.
- the Projection Principle lives!

Mary wrote **what** on a typewriter

Mary wrote the novel on a typewriter

*Mary wrote on a typewriter the novel

What did Mary write on a typewriter?

two possible responses:

- oh, well, so much for the Projection Principle.
- the Projection Principle lives!

What did Mary write _____ on a typewriter?

One reason to think that *what* ends up into CP:

I don't know [**whether** he ate the ants]

I think [**that** he ate the ants]

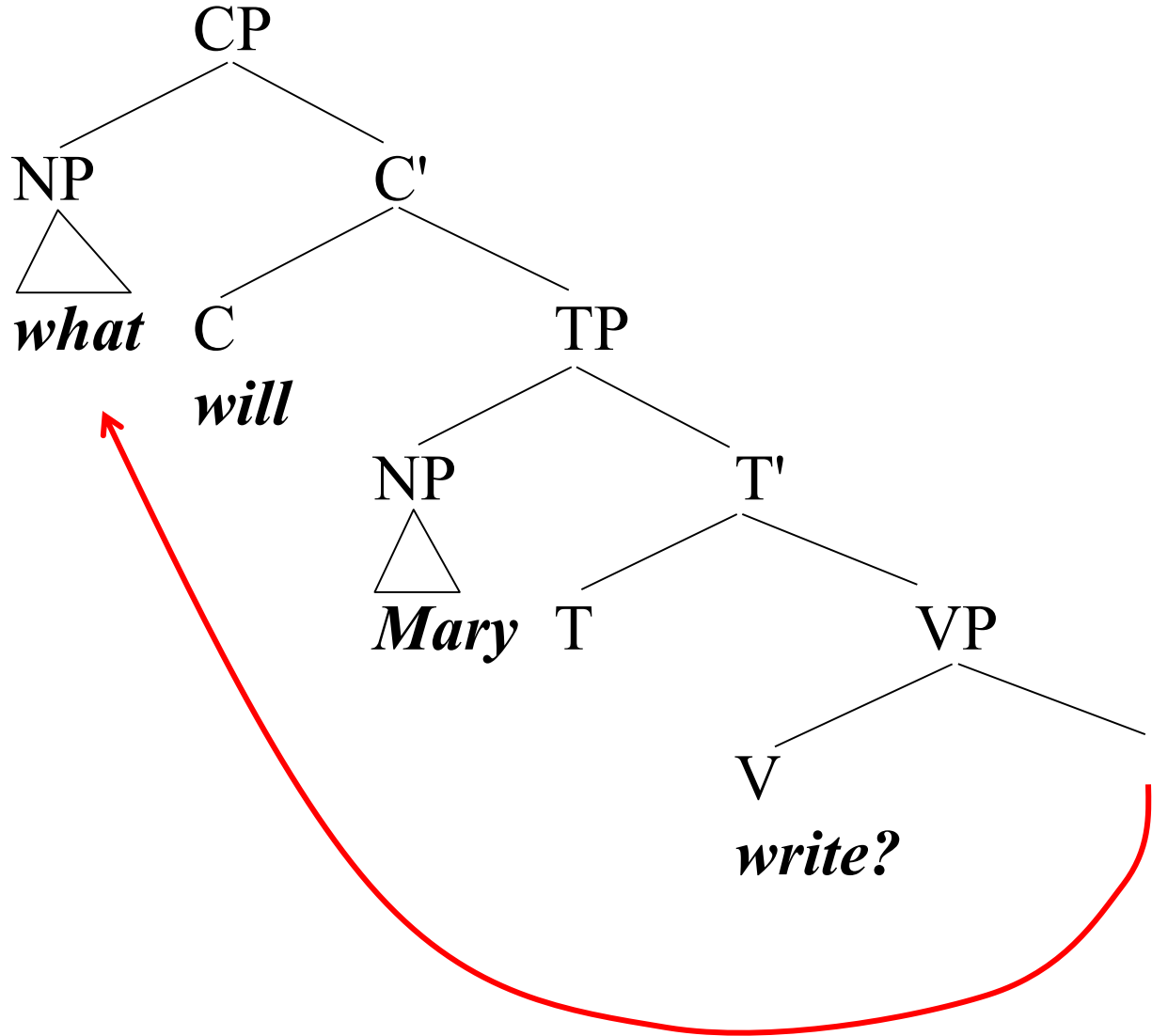
I don't know [**what** he ate]

*I don't know [**what that**he ate]

*I don't know [**what whether**he ate]

And maybe one reason to think that it *moves* there (we'll see others):

Mary wrote *what* on a typewriter??



wh-movement

What did you put ___ on the table?

Ano ang inilagay mo ___ sa lamesa? [*Tagalog*]
what put you on table

Mihin panen vaatteeni ___ ? [*Finnish*]
where I.put my.clothes

wh-in-situ

Zhangsan mai-le sheme?
Zhangsan bought what
'What did Zhangsan buy?'

[*Chinese*]

Suu ki yuu akə?
Suu TNS buy what
'What did Suu buy?'

[*Bafut*]

Ya um hakiy tuwa?
Q you who-ACC found
'Who did you find?'

[*Hopi*]

rightward wh-movement: unattested?

You put ___ on the table **what?**

...easy to imagine, but may not exist...

multiple-wh

What did you give ___ to whom?

multiple-wh

What did you give ___ to whom?

Kakvo na kogo e dal ___ ___?
what to whom he-gave

[*Bulgarian*]

Takhróri úhka nahóta ___ wa'ehnínu' ___
tell-me who what bought
'Tell me who bought what.'

[*Mohawk*]

unattested?

- movement of up to two wh-phrases

who what ___ gave ___ to whom?

Logical problem of language acquisition

$$f(1)=1$$

$$f(2)=2$$

$$f(3)=3$$

$$f(4)=4$$

$$f(5)=??$$

Logical problem of language acquisition

$$f(1)=1$$

$$f(2)=2$$

$$f(3)=3$$

$$f(4)=4$$

$$f(5)=\underline{29}$$

$$f(n)=(n-1)(n-2)(n-3)(n-4) + n$$

acquisition of wh-strategies

Kakvo na kogo e dal ___ ___?

what to whom he-gave

'What did he give to whom?'

[*Bulgarian*]

acquisition of wh-strategies

Kakvo na kogo e dal ___ ___?

[*Bulgarian*]

what to whom he-gave

'What did he give to whom?'

- move all wh-phrases?
- move two wh-phrases?
- move up to three wh-phrases?
- move up to four wh-phrases?

...

acquisition of wh-strategies

Kakvo na kogo e dal ___ ___?

[*Bulgarian*]

what to whom he-gave

'What did he give to whom?'

- **move all wh-phrases**
- move two wh-phrases?
- move up to three wh-phrases?
- move up to four wh-phrases?

...

MIT OpenCourseWare

<https://ocw.mit.edu>

24.900 Introduction to Linguistics Spring 2022

For more information about citing these materials or our Terms of Use, visit <https://ocw.mit.edu/terms>.