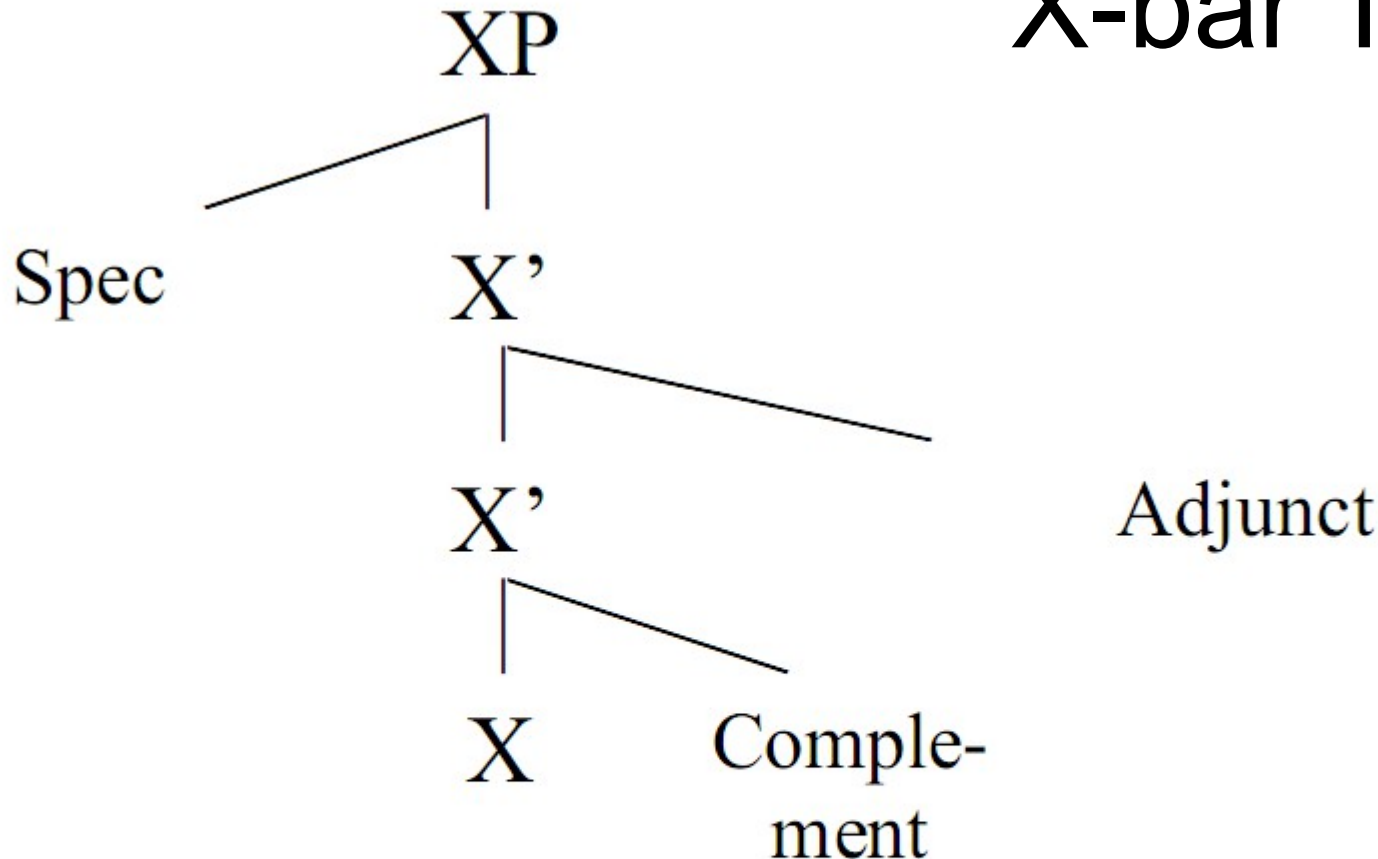


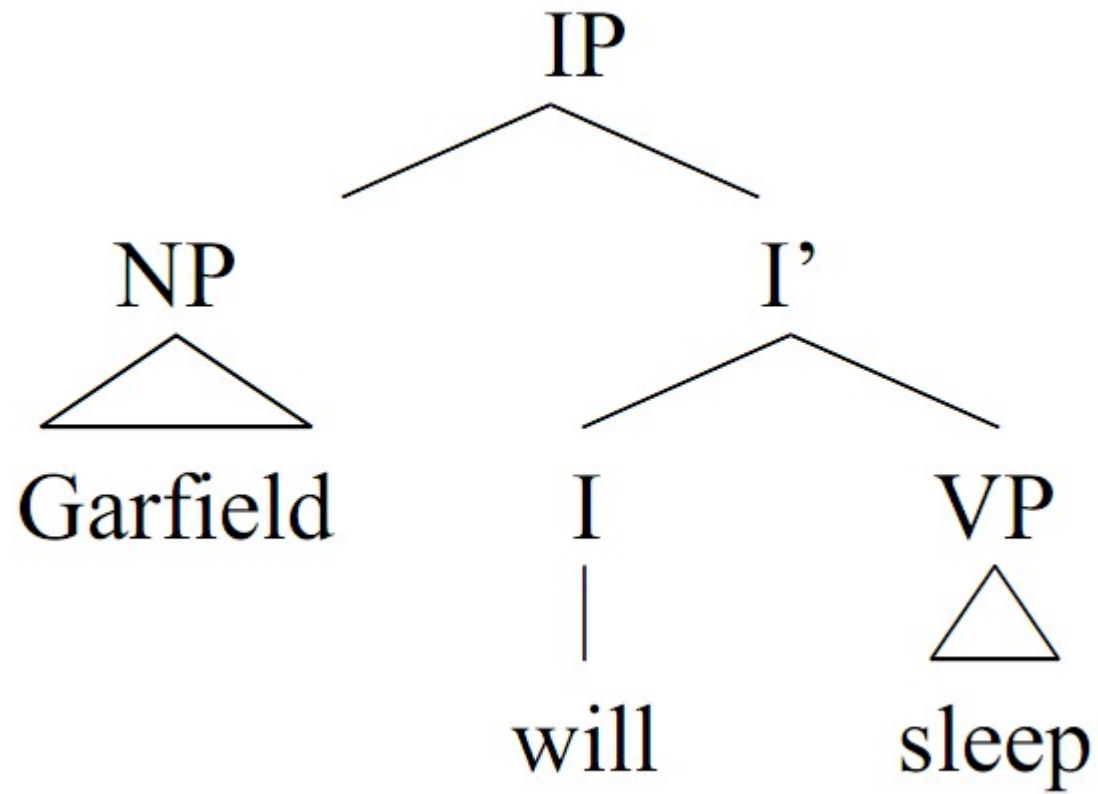
Movements

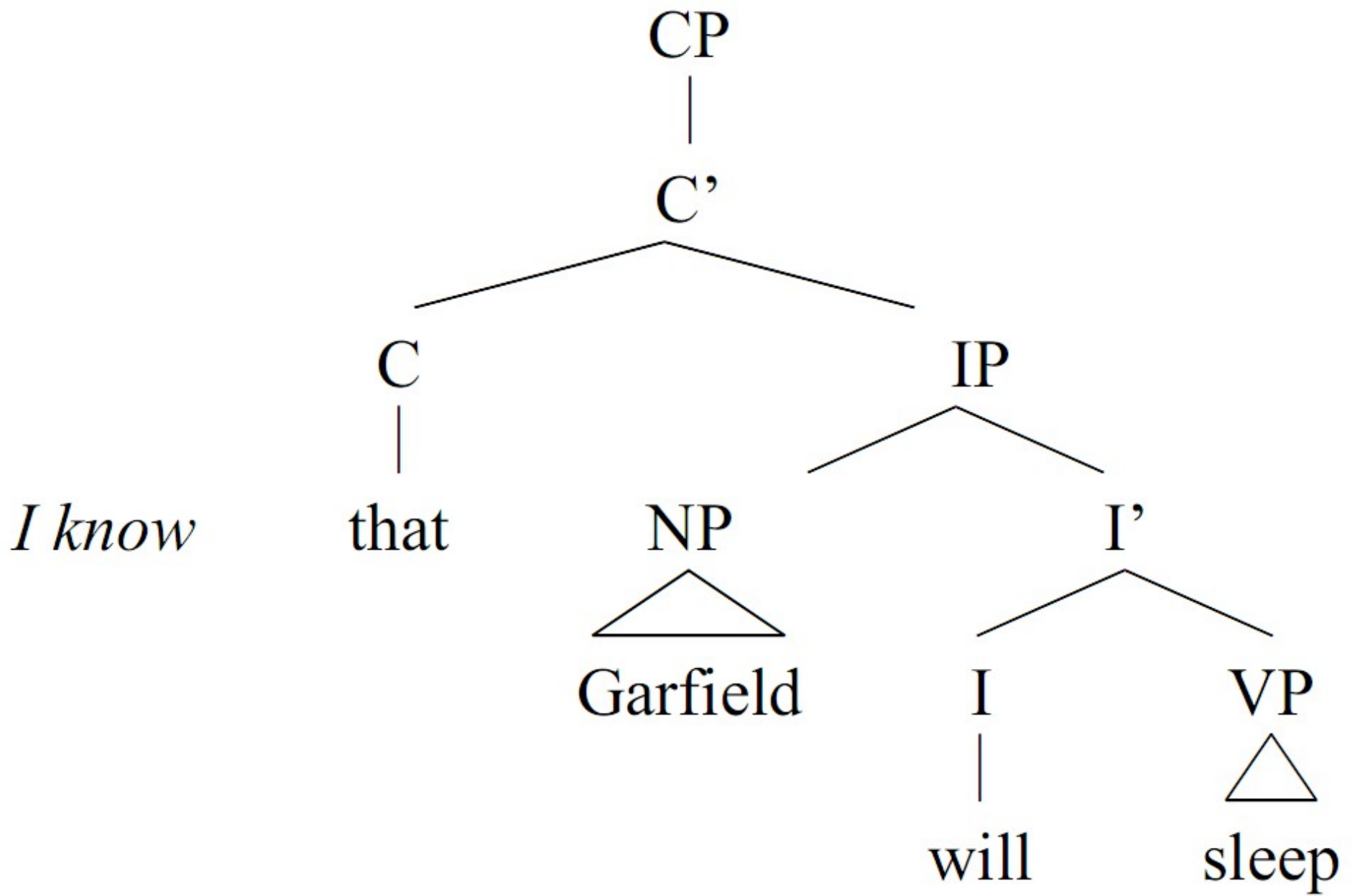
BBK

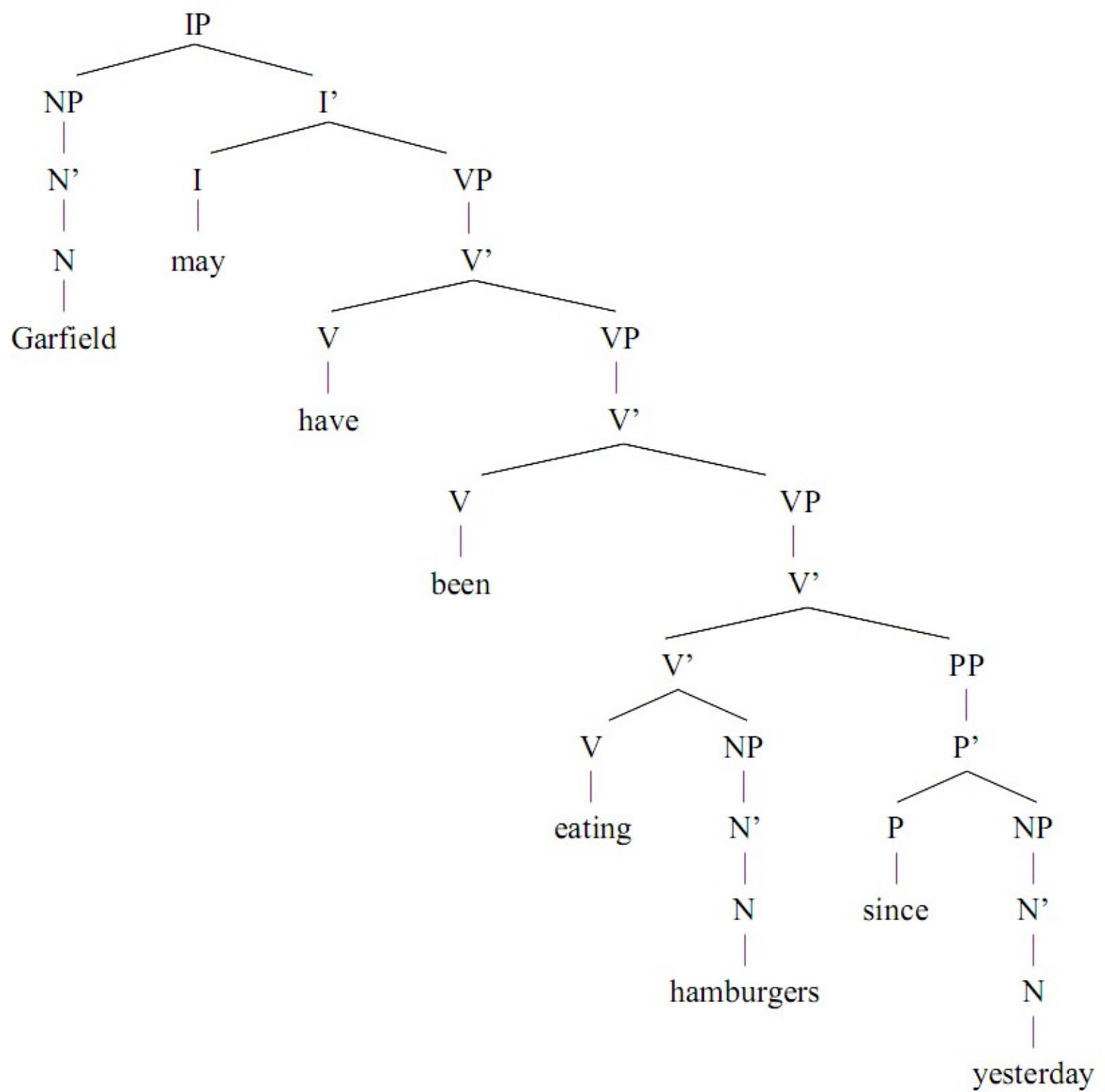
X-bar Theory

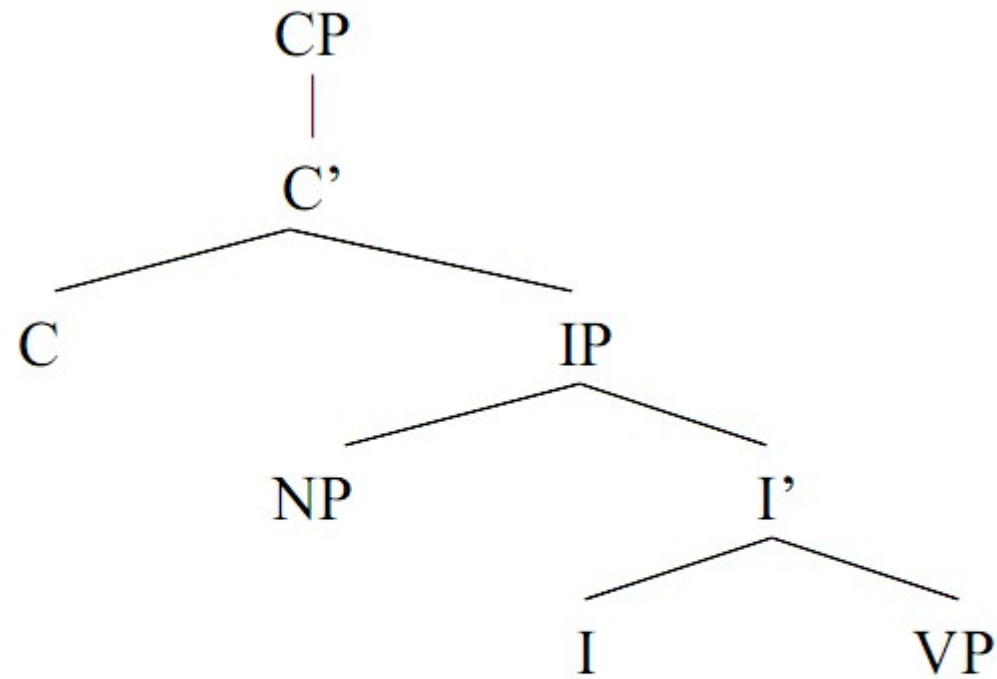


<i>the robber's</i>	<i>attack</i>	<i>on him</i>	<i>at night</i>
<i>so</i>	<i>cross</i>	<i>with me</i>	<i>over the car</i>
	<i>play</i>	<i>baseball</i>	<i>at university</i>
<i>quite</i>	<i>at</i>	<i>odds</i>	<i>with his neighbours</i>





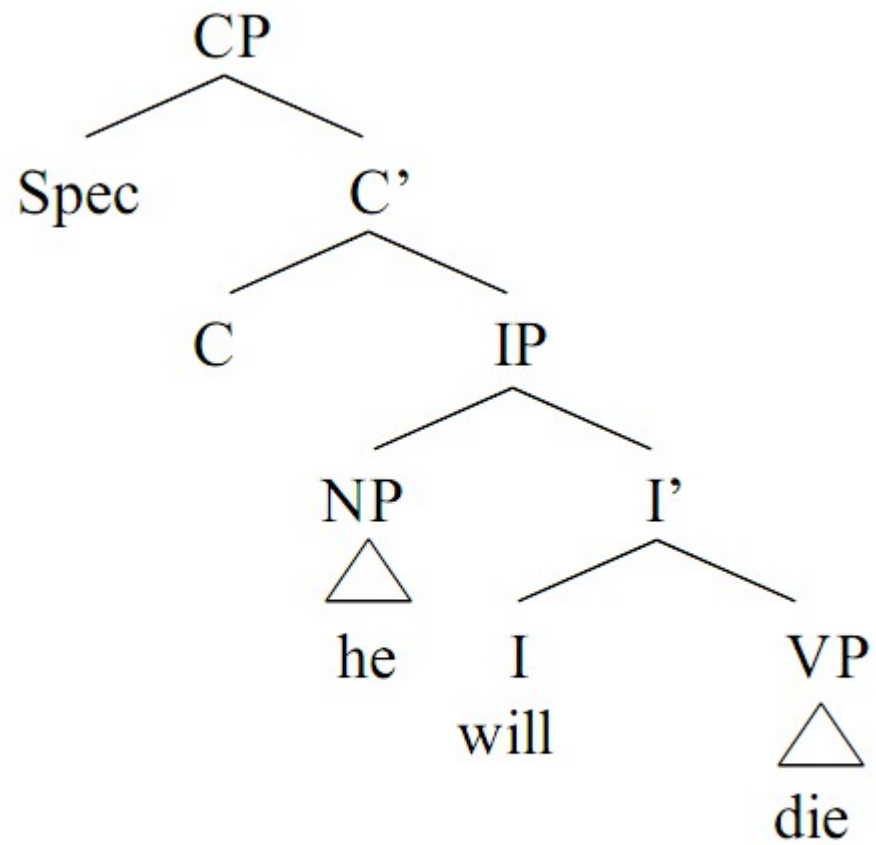




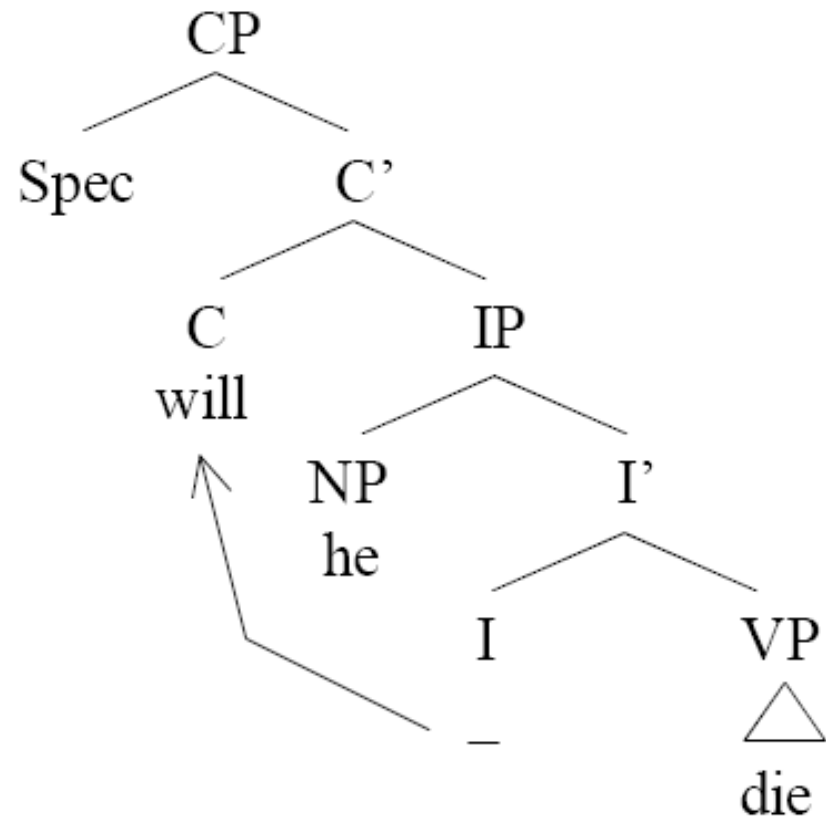
<i>I bet</i>	(that)	Garfield	will	eat this pizza
<i>I expect</i>	for	Garfield	to	eat this pizza
<i>I wonder</i>	if	Garfield	will	eat this pizza
<i>I wonder</i>	whether	<u>e</u>	to	eat this pizza

Movement types:

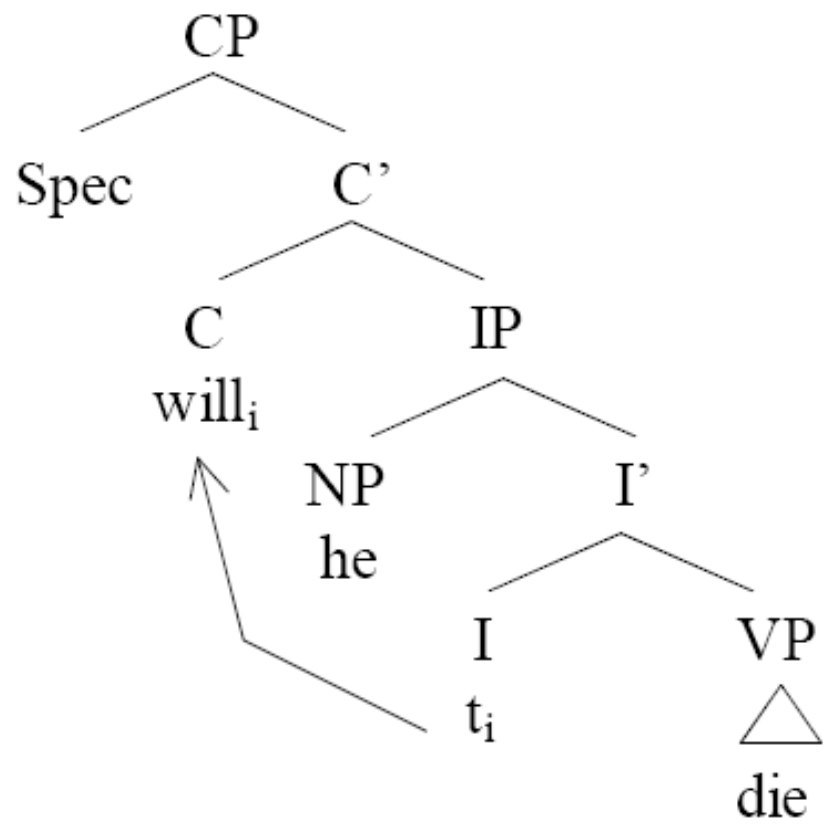
- Head movement: a head category (e.g., V, I) moves into the position of another head
- Phrasal movement: a phrasal category (e.g., NP, PP) moves into another phrasal position (in fact, always a Specifier position)



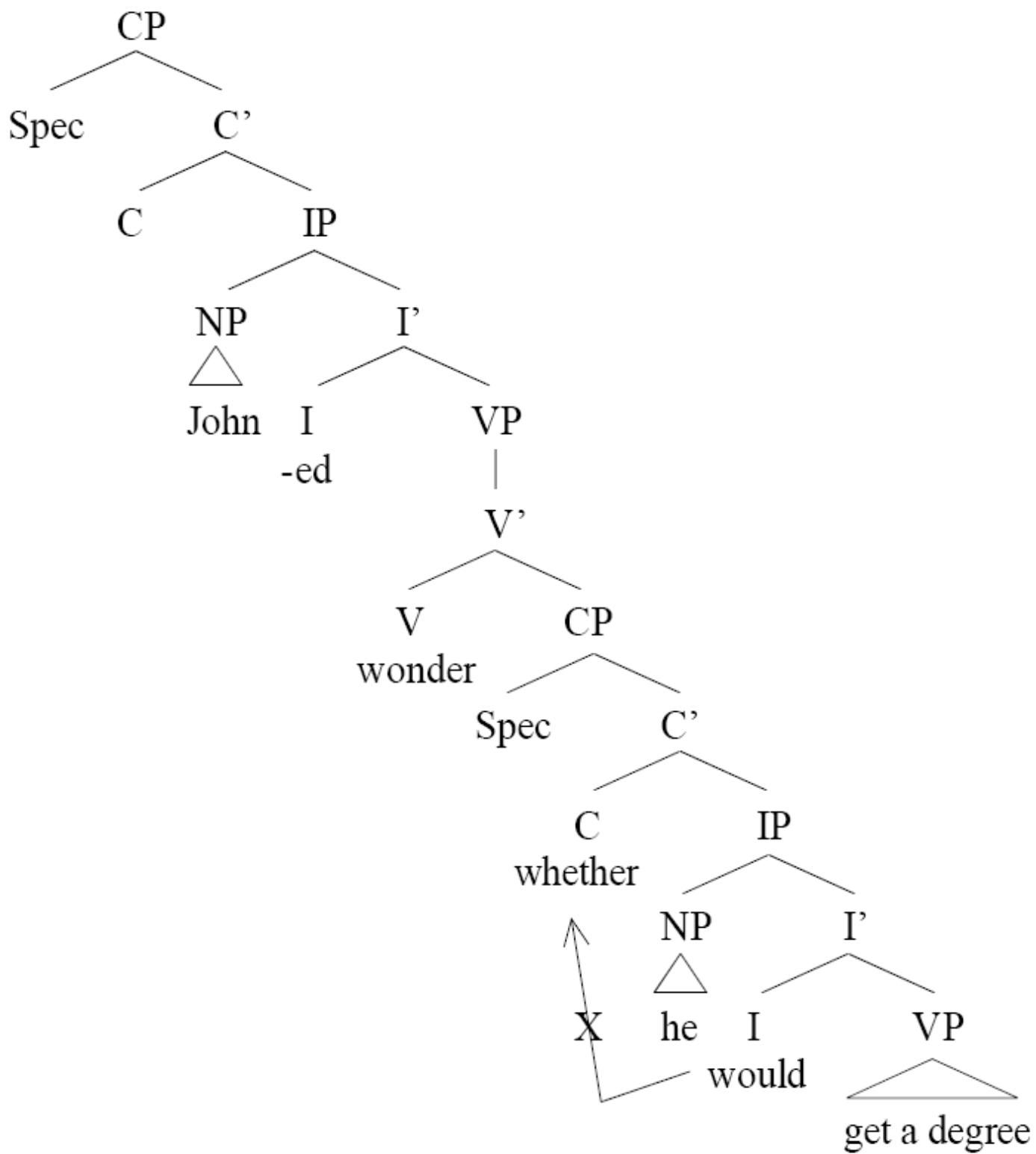
He will die. - no movement

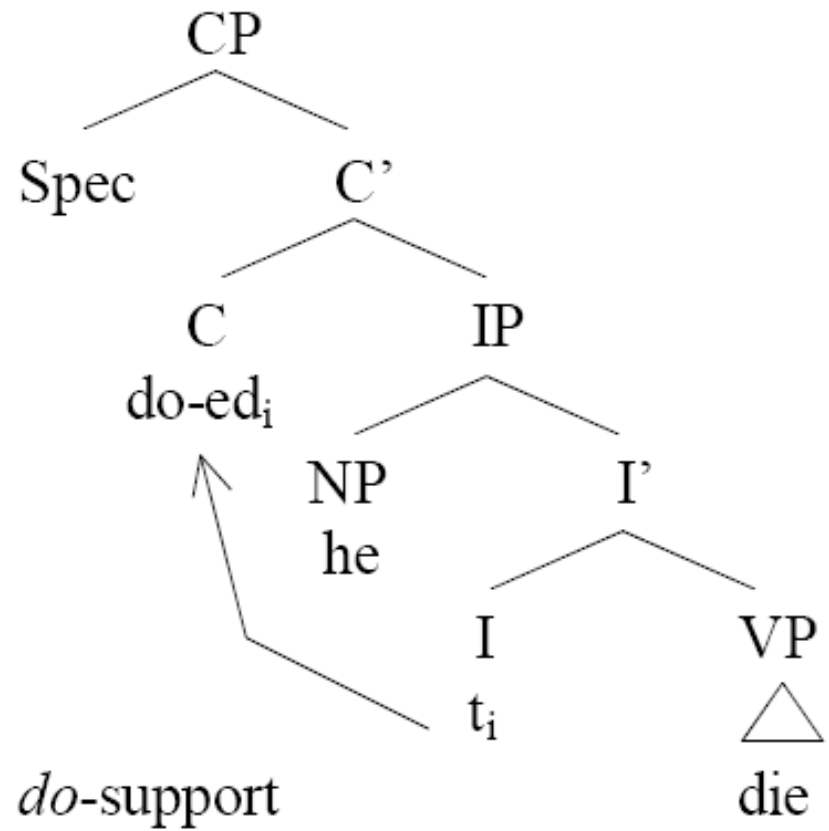
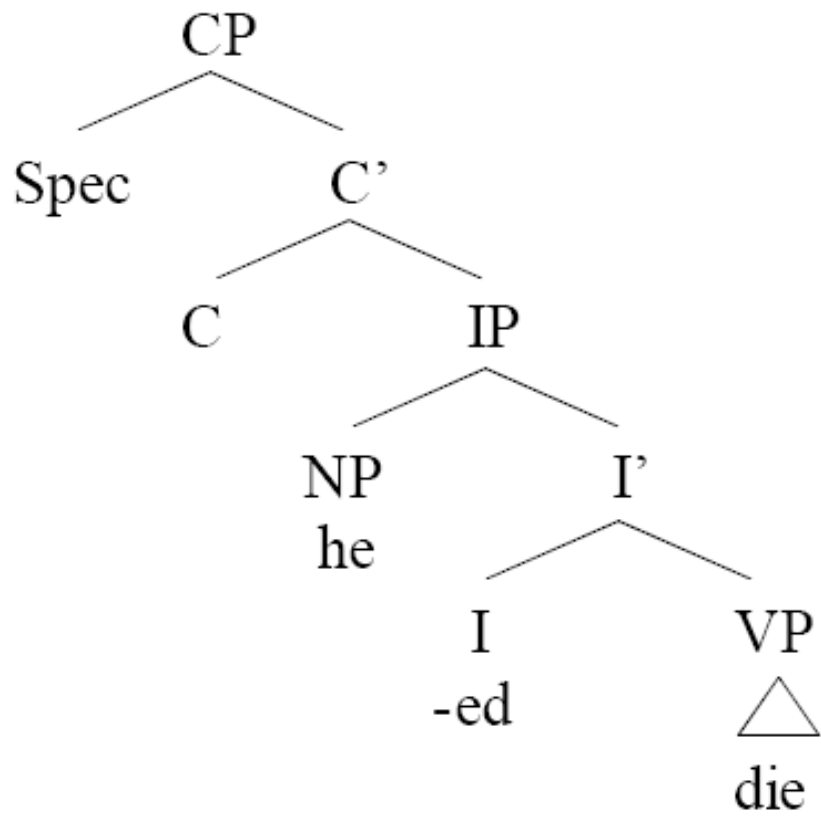


Will he die?

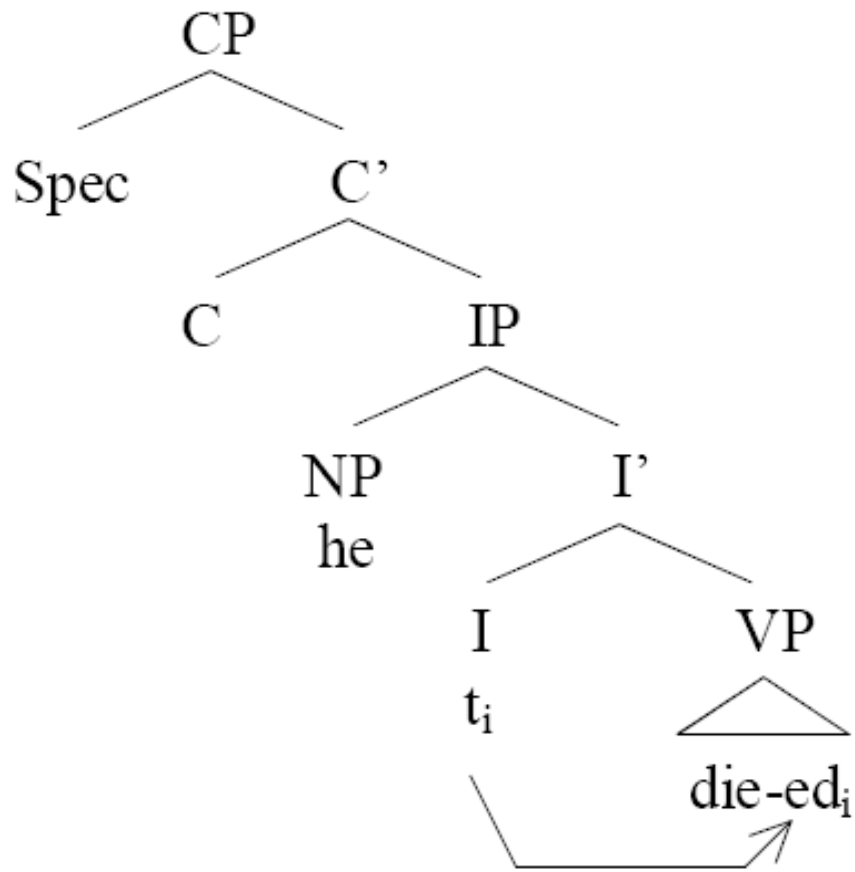


Will he die? - I-to-C movement



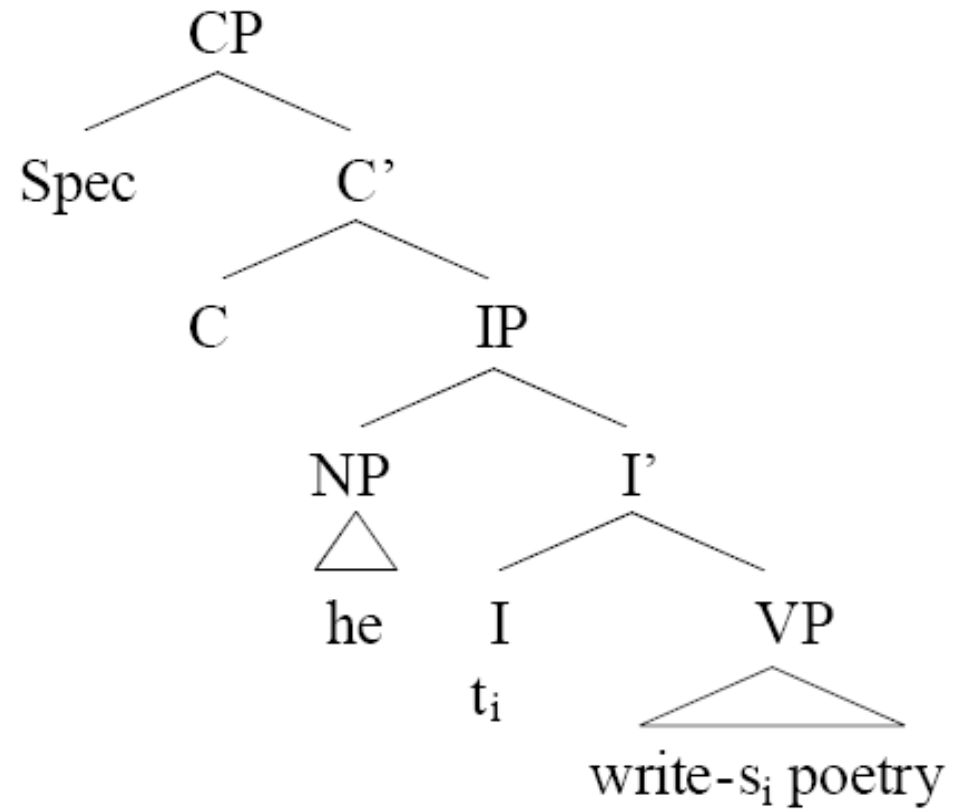


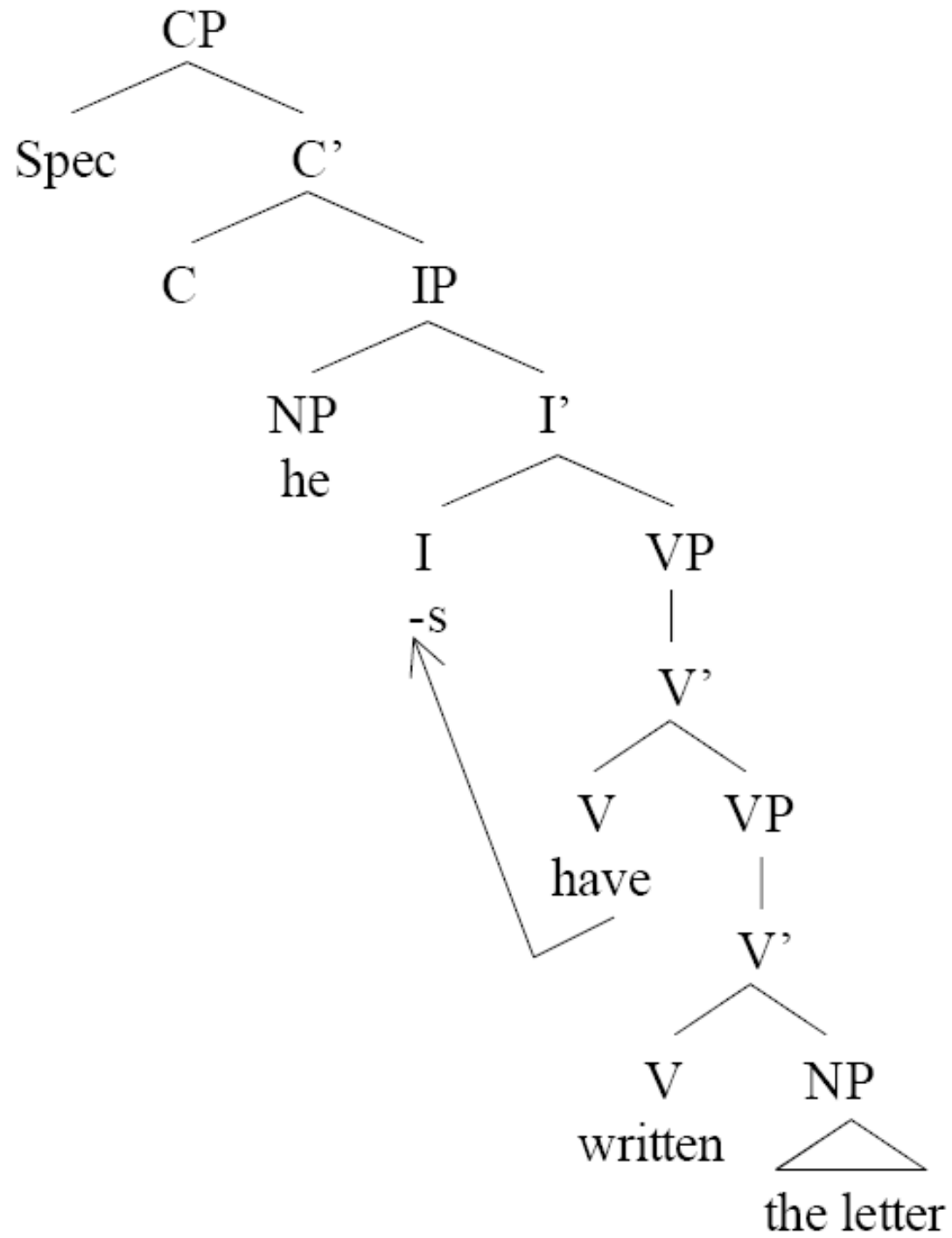
Did he die?

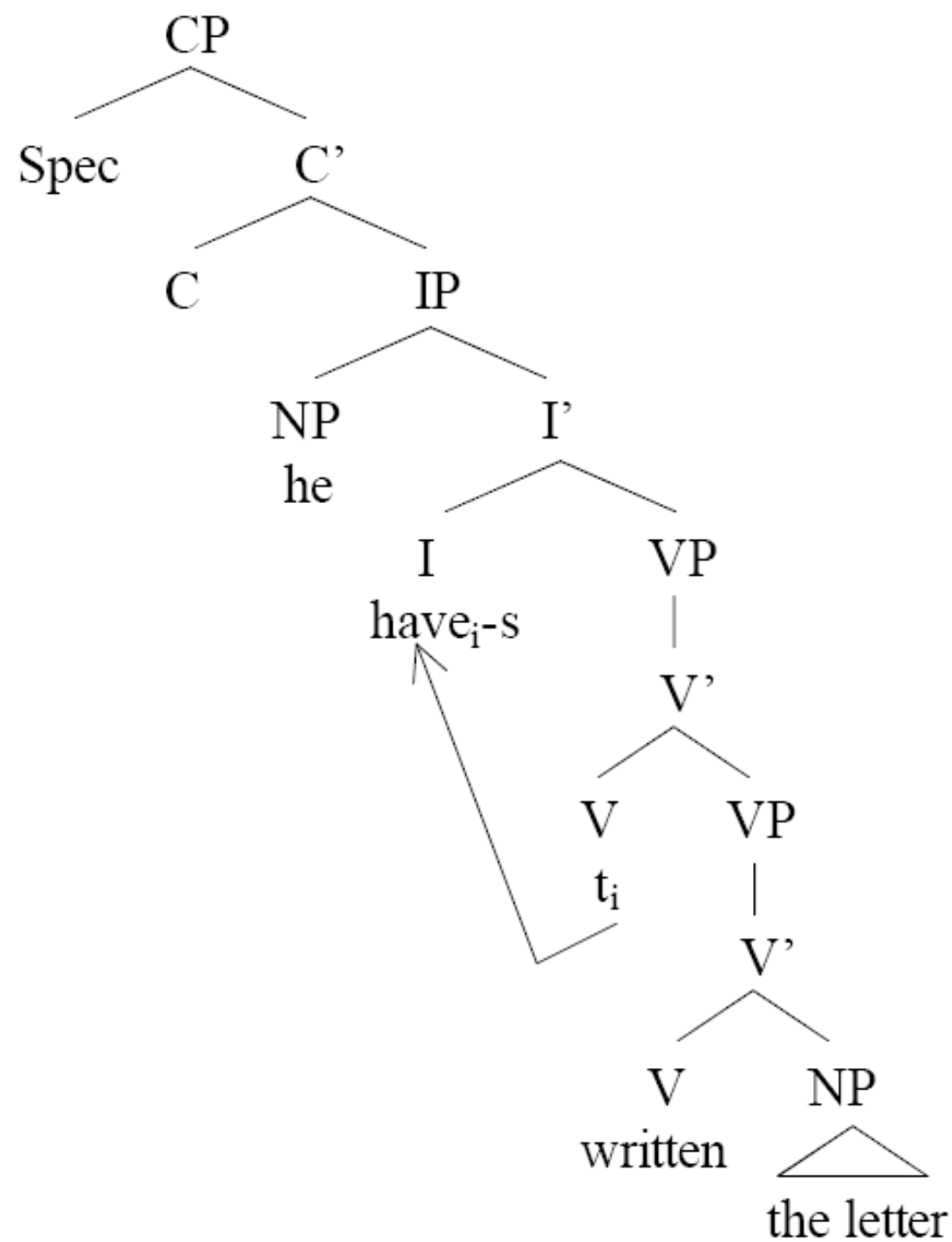


He died.

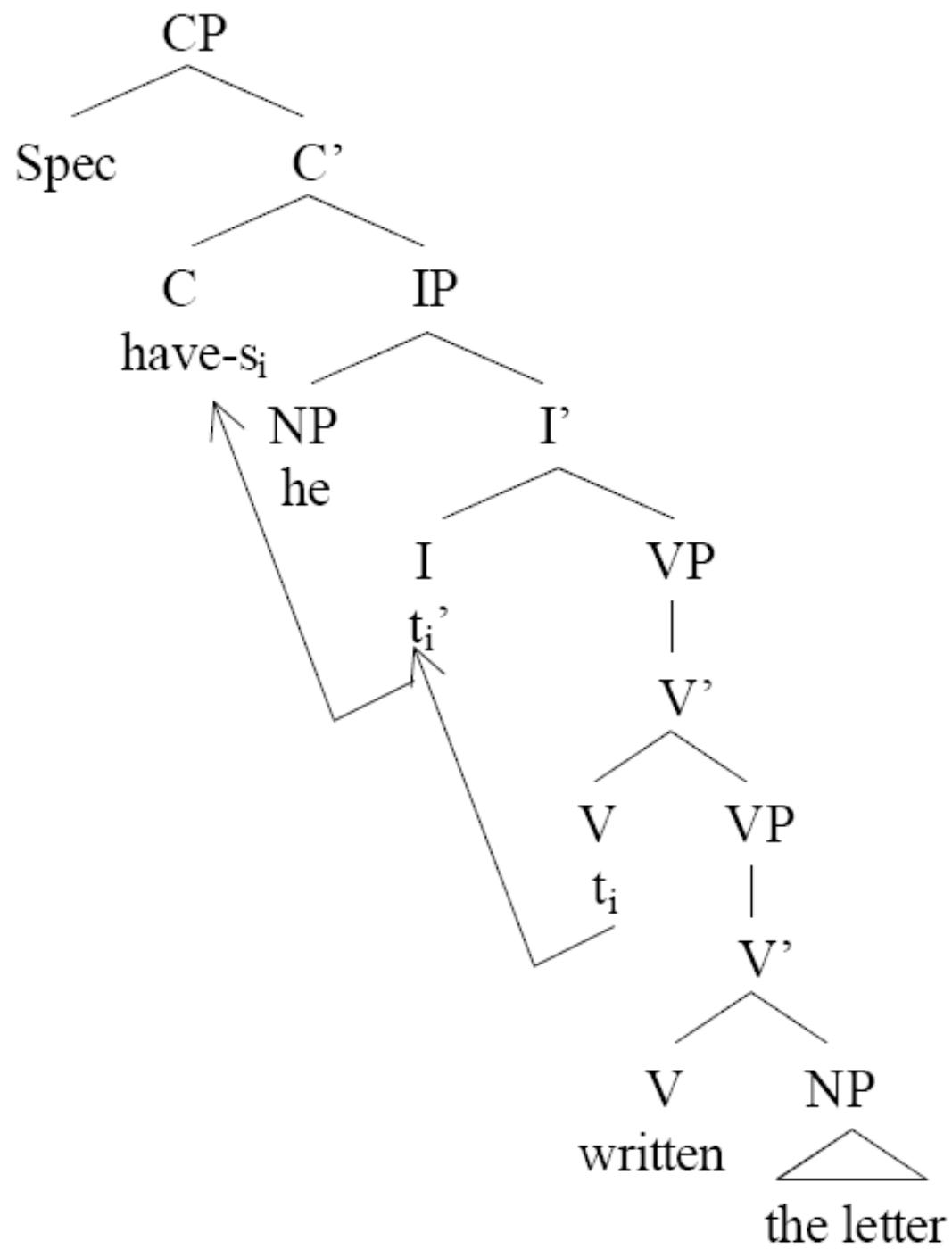
- Affix Hopping







He has written the letter. - V-to-I mvt



Has he written the letter? - V-to-I and I-to-C

Phrasal movement

- a phrase moves from a phrasal position (complement, adjunct, specifier) into another phrasal position (i.e., phrase-to-phrase movement)

- types:

type	subtype	extraction site	landing site	motivation
NP- mvt	passivization	complement of passive V	specifier of IP	Case Theory: NP in caseless position has to move (Case Filter)
	raising	specifier of [-F] subclause	specifier of higher IP	
	mvt of the subject under the SIH	specifier of VP	specifier of IP	
	mvt of the complement of unaccusative verbs	complement of unacc. V	specifier of IP	
<i>wh</i> - mvt	direct <i>wh</i> -question	any phrasal position	specifier of CP	the <i>wh</i> -phrase moves to produce (a) the interrogative force; (b) a RC
	indirect <i>wh</i> -question			
	Relative Clause (RC)			
			↓ always a specifier	

Wh-movement¹: in (direct and indirect) *wh*-questions and relative clauses, a NP/AP/AdvP/PP moves into [Spec, CP]

Recall:

type	subtype	extraction site	landing site	motivation
<i>wh</i> -mvt	direct <i>wh</i> -question	any phrasal position	specifier of CP	the <i>wh</i> -phrase moves to produce (a) interrogative force; (b) a RC
	indirect <i>wh</i> -question			
	Relative Clause (RC)			

¹ *Double-u aitch* (NOT *vee-aitch*)!!!

type	subtype	extraction site	landing site	motivation
<i>wh</i> -mvt	direct <i>wh</i> -question	any phrasal position	specifier of CP	the <i>wh</i> -phrase moves to produce (a) interrogative force; (b) a RC
	indirect <i>wh</i> -question			
	Relative Clause (RC)			

examples:

subtype	from complement position	from adjunct position	from specifier position
direct <i>wh</i> -question	<i>Who(m) did you meet t?</i>	<i>Where did you meet him t?</i>	<i>Who t met him?</i>
indirect <i>wh</i> -question	<i>I know who(m) you met t</i>	<i>I know where you met him t</i>	<i>I know who t met him</i>
RC	<i>the boy (who(m)/that) you met t</i>	<i>the place (where/that) you met him t</i>	<i>the girl who/that t met him</i>

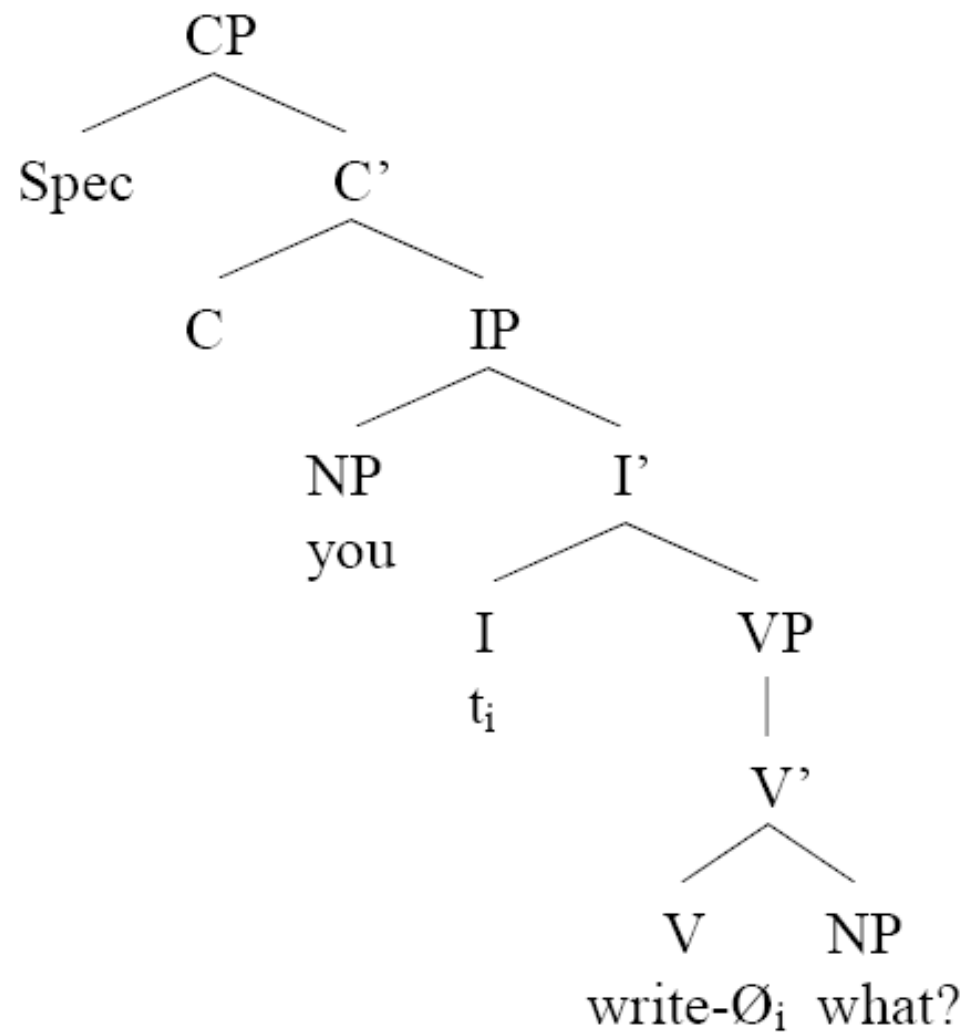
wh-phrases: categorial diversity:

- NP: *who(m), what, which* + any NP containing a *wh*-word (e.g., *which book, what kind of..., how many cats, how much money*)
- AP: any AP containing a *wh*-word (usually *how*, e.g., *how old, how tall*)
- AdvP: *where, when, why, how* + any AdvP containing a *wh*-word (usually *how*, e.g., *how quickly*)
- PP: any PP containing a *wh*-word (e.g., *in which city, to what degree, with whom, from where*)

Direct *wh*-questions

Cf. (1) and (2) below:

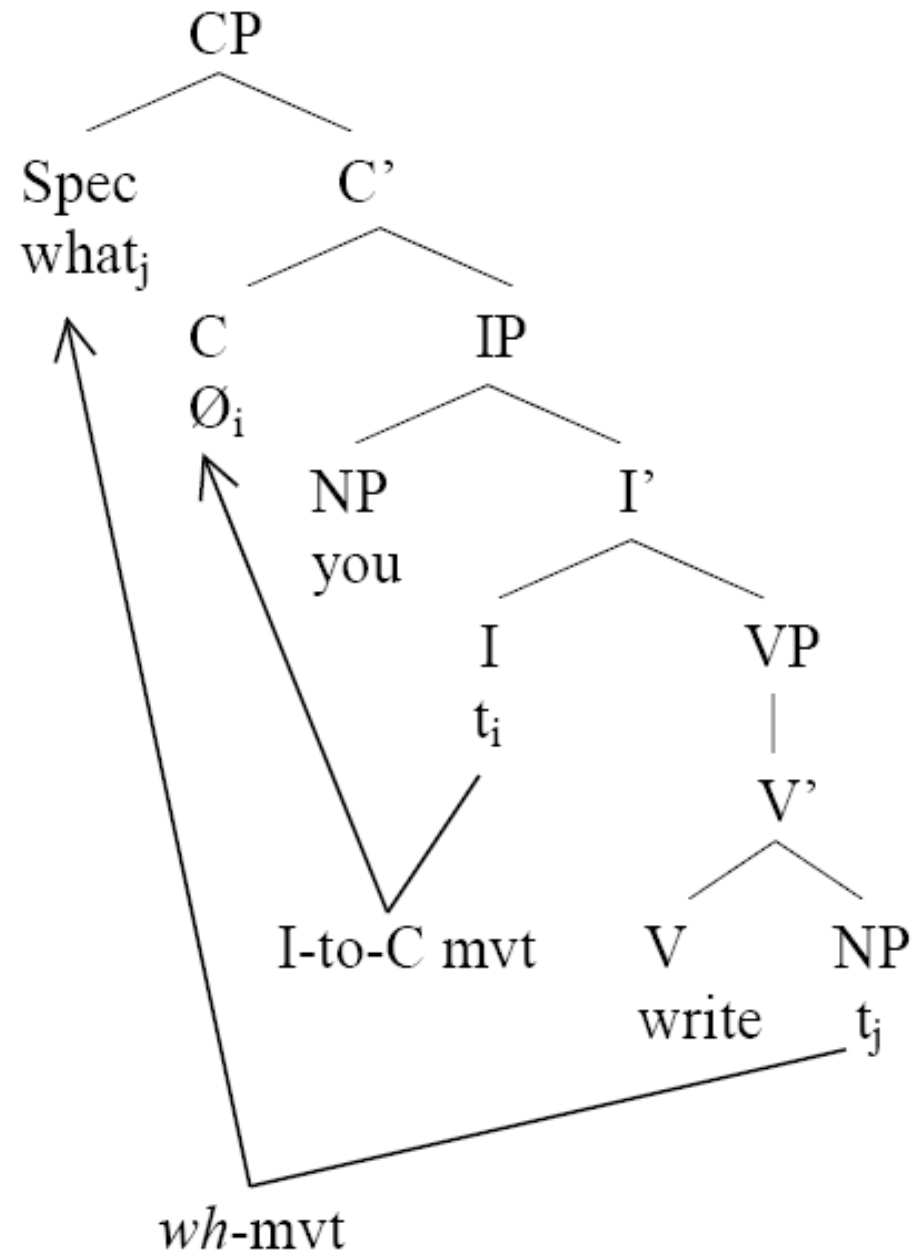
(1)



You write what?

- echo-question, no *wh*-movement (*wh*-in-situ)

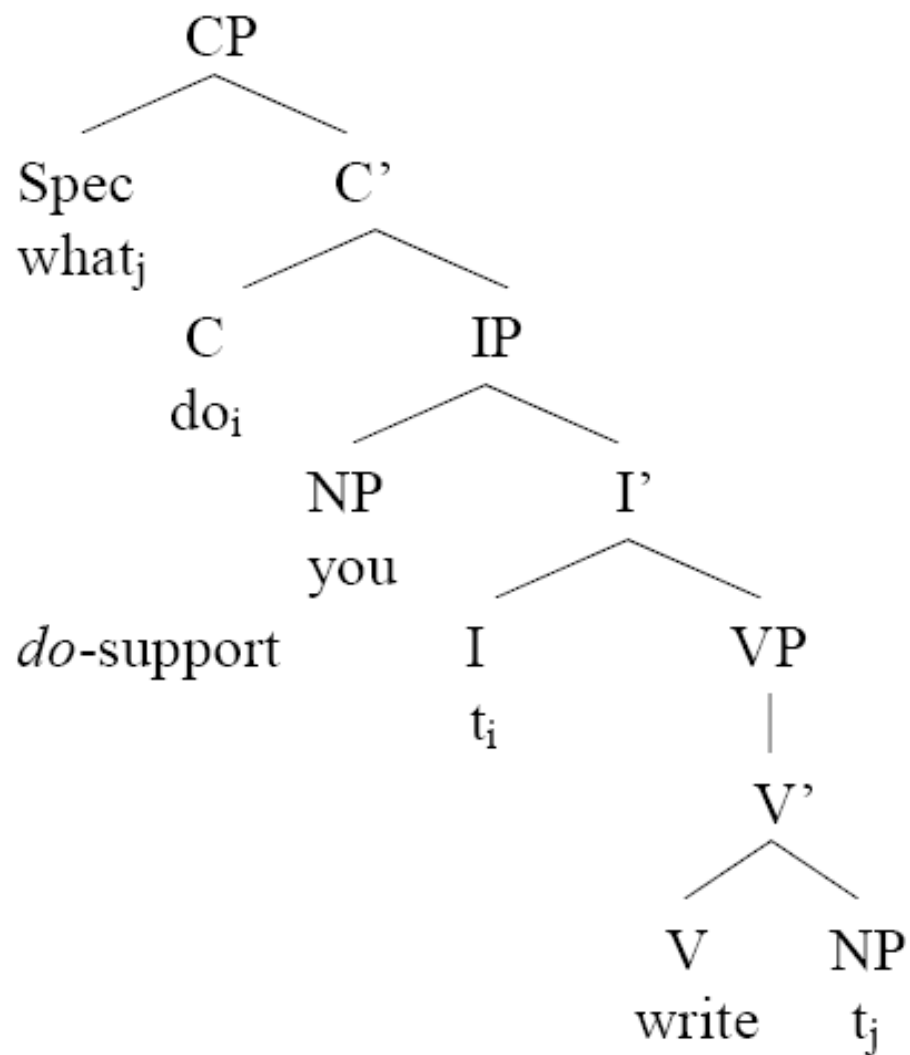
(2)



In a direct question, both *wh*-mvt and I-to-C mvt apply.

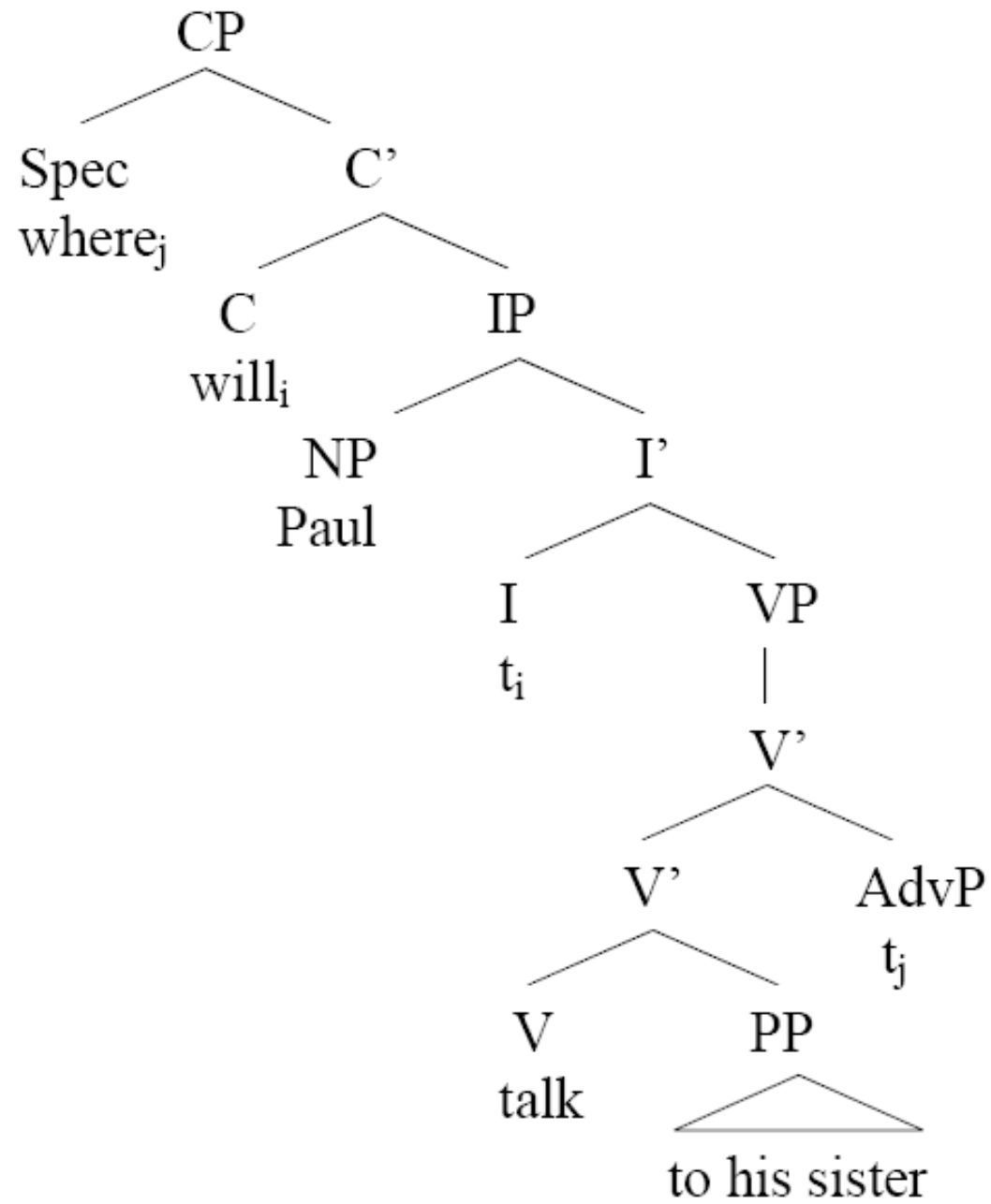
do-support (*do-insertion*)

(3)

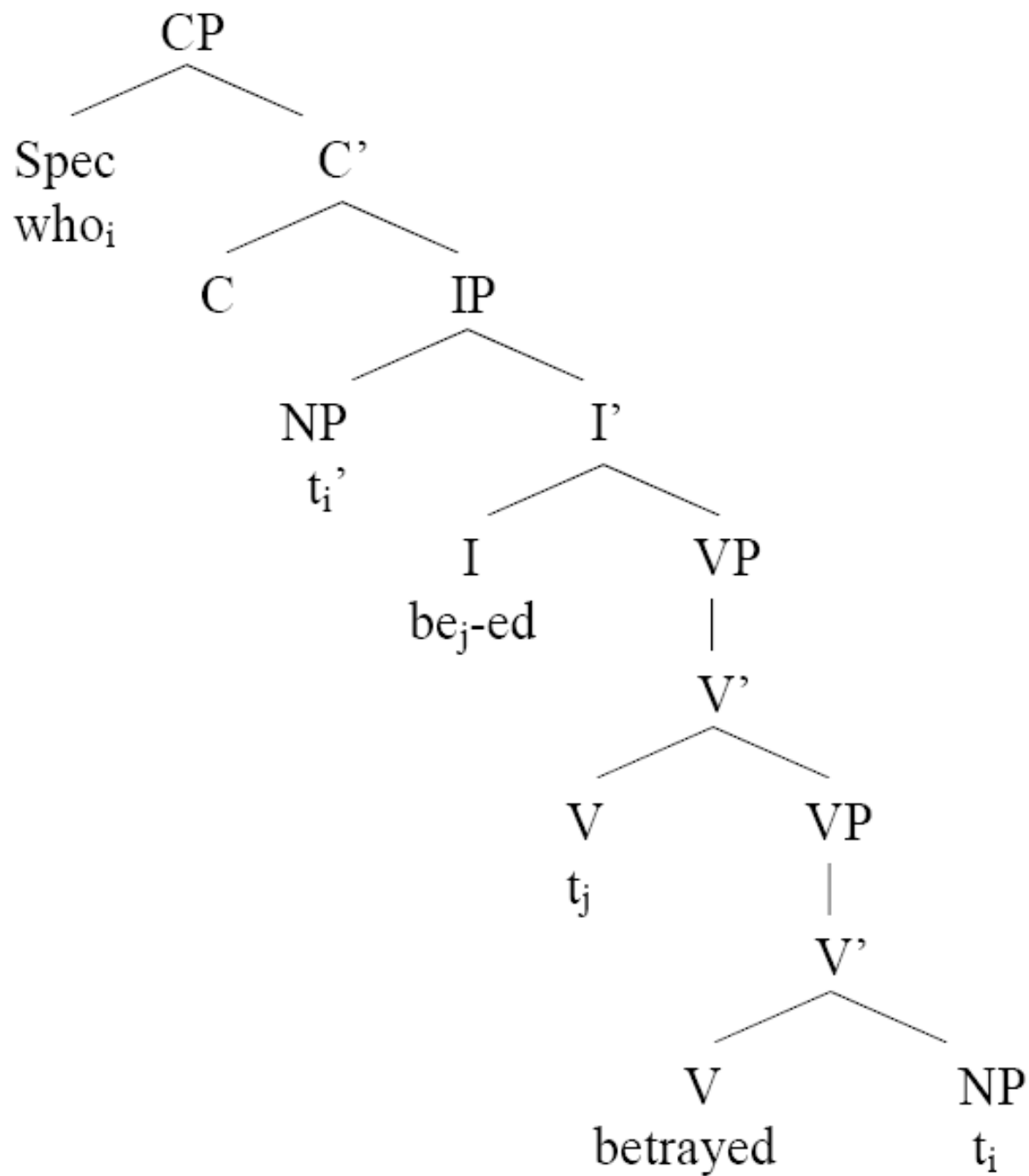


What do you write? - direct *wh*-question

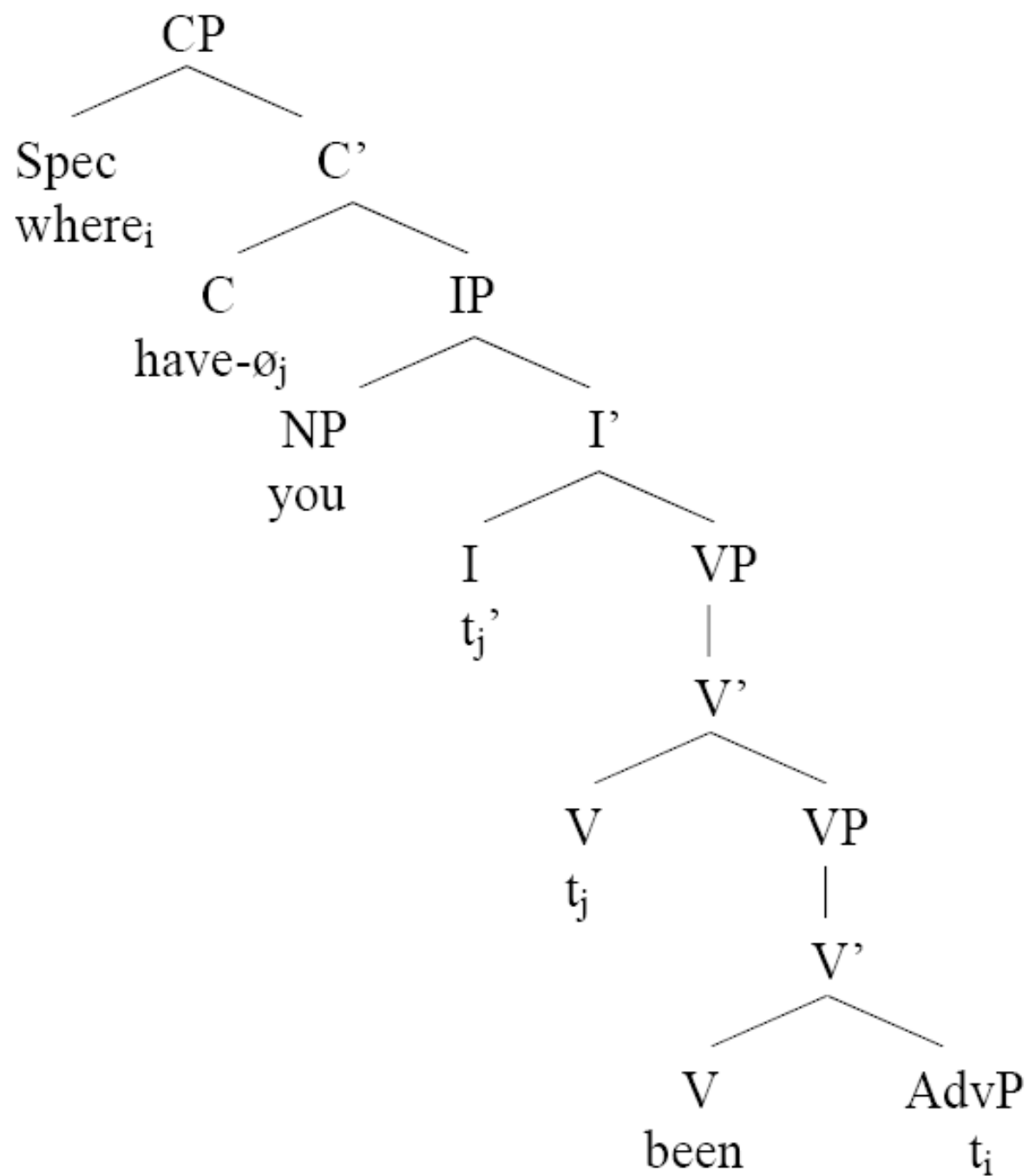
(4)

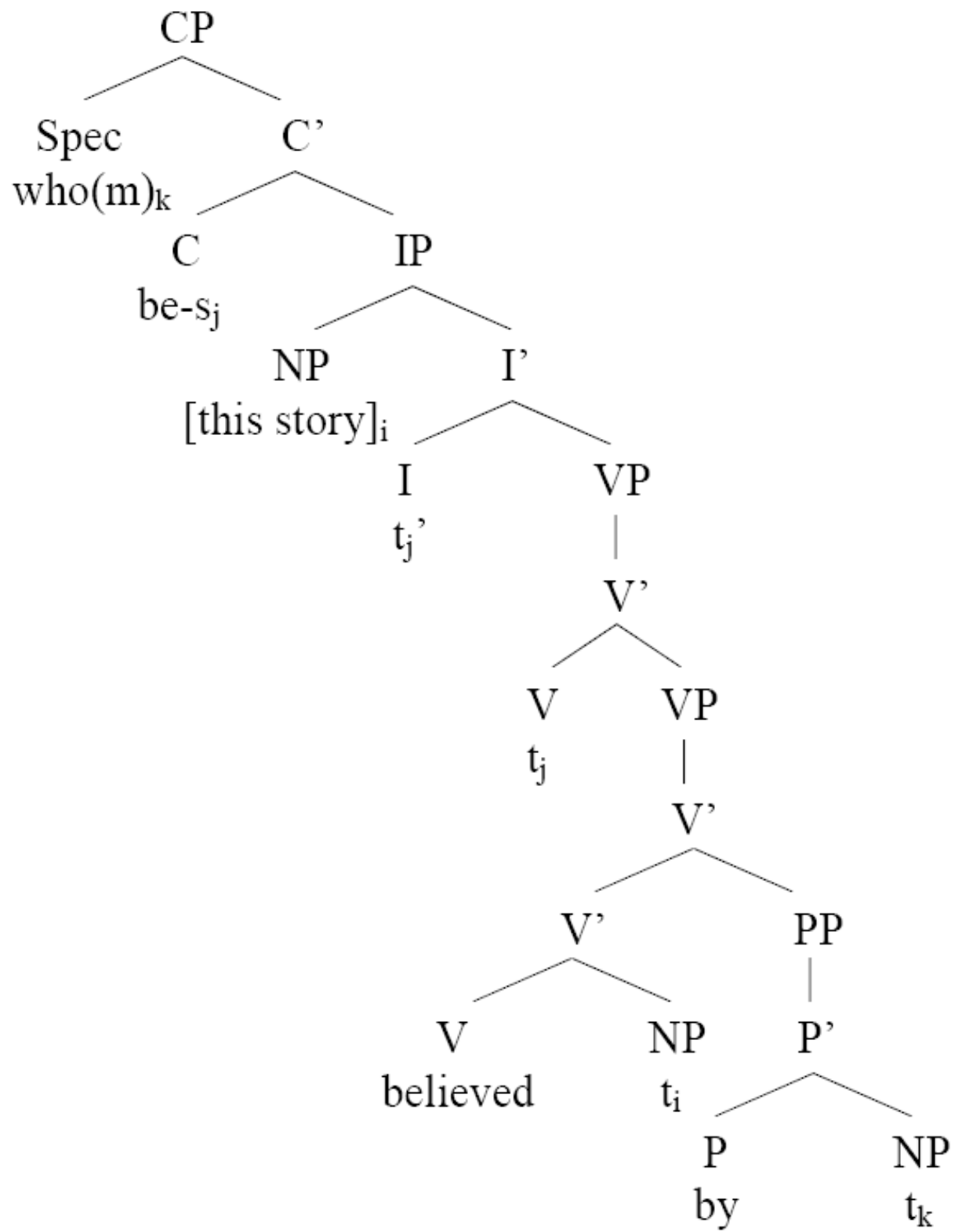


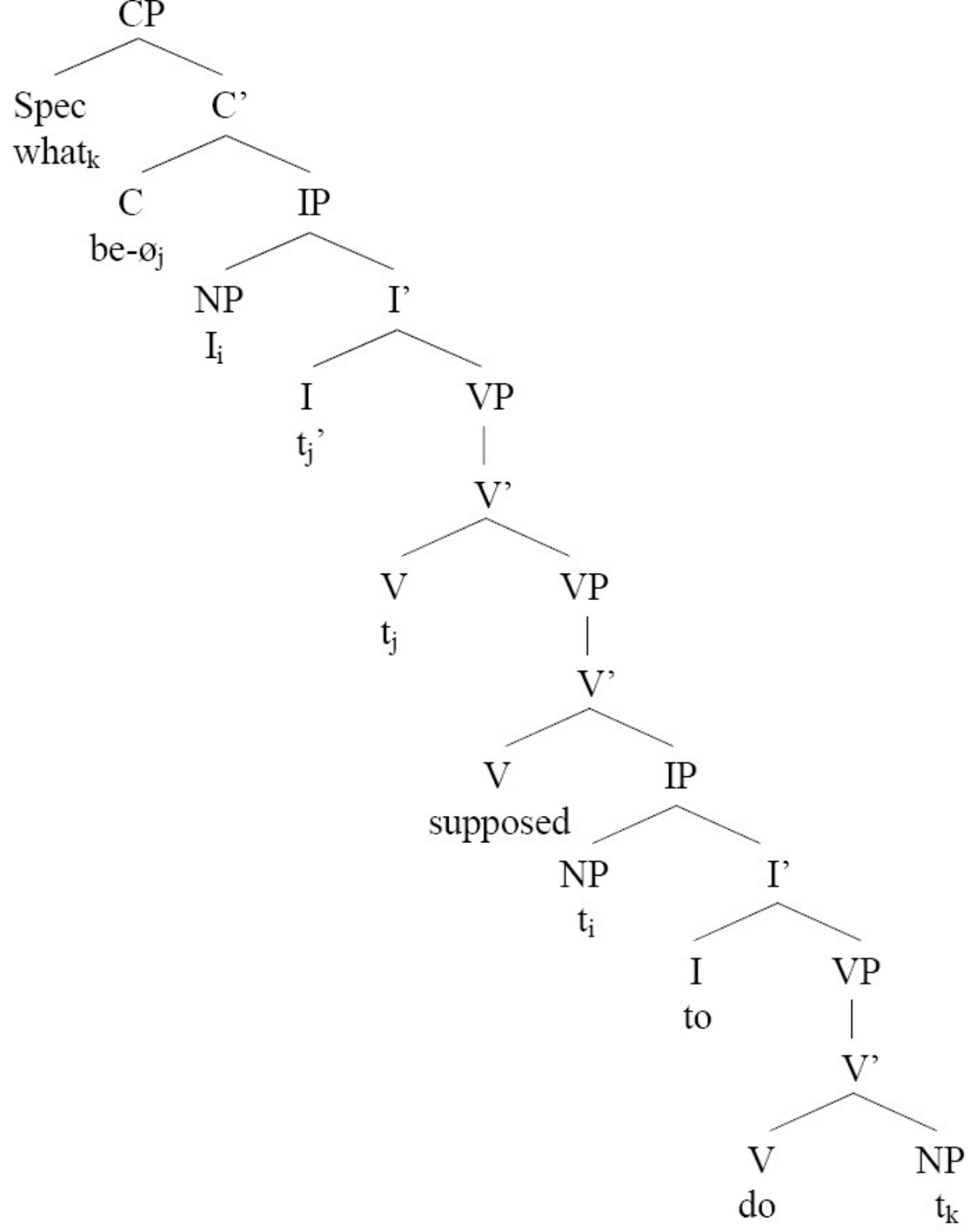
Examples of *wh*-movement combining with other movements



Examples of *wh*-movement combining with other movements







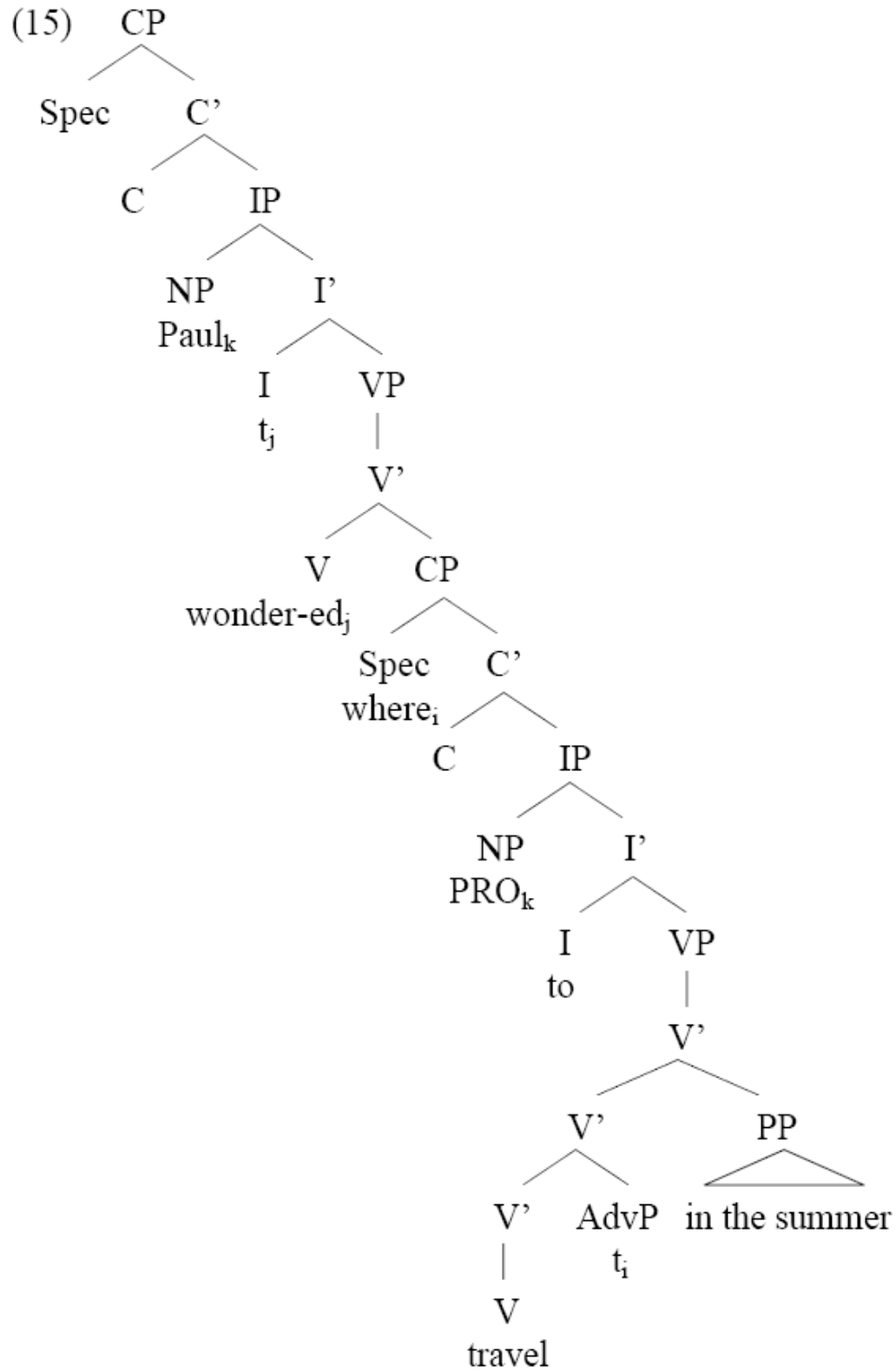
Indirect *wh*-questions

The difference between direct and indirect *wh*-questions lies in the absence of the question word order (i.e., I-to-C mvt) in the latter. (This is one of the features of what is traditionally called **reported speech/questions**.) Cf. the examples repeated from the chart above:

direct <i>wh</i> -question	<i>Who(m) did you meet <u>t</u>?</i>	<i>Where did you meet him <u>t</u>?</i>	<i>Who <u>t</u> met him?</i>
indirect <i>wh</i> -question	<i>I know who(m) you met <u>t</u></i>	<i>I know where you met him <u>t</u></i>	<i>I know who <u>t</u> met him</i>

All else characterizes the two types of *wh*-question in the same way.

In (15), *Paul wondered where to travel in the summer*, the indirect *wh*-question (*where to travel in the summer*) is non-finite and contains a non-overt subject (PRO).



Relative clauses

are post-modifying adjunct subclauses within NPs: they modify the noun which heads the NP

types:

(16) acc. to function:

(a) **restrictive relative clause (RRC):**

the boy who(m) we met

the boy that we met

the boy we met

the dress (that) we bought

(b) **non-restrictive rel. cl. (NRRC):**

my mother, who likes dogs

the dress, which we bought there

cf. *my brother who is a vet* vs. *my brother, who is a vet*

(+ sentential rel. cl.: does not modify a noun but a whole clause: *He wasn't late, which surprised everyone.*)

(17) acc. to form:

(a) *wh*-relative: *the boy who(m) we met*

(b) *that*-relative: *the boy that we met*

(c) zero relative: *the boy we met*

the RRC:

- always involves *wh*-movement (as all relative clauses) (OP: the empty Operator, i.e., the empty *wh*-phrase)
- is an N'-adjunct

Since the structural parallelism between the three forms (*wh*-, *that*-, zero-relative) of the RRC is obvious, we analyse them analogously. That is, they all involve *wh*-mvt, and the only difference is whether the moving *wh*-phrase is overt or non-overt/null:

- in the *wh*-relative, the *wh*-phrase is overtly present; in such cases English does not allow for the simultaneous insertion of a Complementizer in the RRC: **the boy who(m) that we met* (a rather old-fashioned name of the principle which states this is **Doubly-Filled COMP Filter**).
- in the *that*-relative, the Complementizer *that* is inserted but at the same time the *wh*-phrase is non-overt, i.e., the element which undergoes the *wh*-mvt (the "Operator") is empty. Its position in [Spec, CP] is indicated by OP. The movement of the non-overt *wh*-phrase (=OP) is indicated by the co-indexation of OP and its trace(s).
- in the zero relative, the *wh*-phrase is non-overt (=OP) but at the same time *that* is NOT inserted.

Cf.:	[Spec, CP]	C	
<i>the boy</i>	<i>who(m)_i</i>	\emptyset	<i>we met t_i</i>
<i>the boy</i>	<i>OP_i</i>	<i>that</i>	<i>we met t_i</i>
<i>the boy</i>	<i>OP_i</i>	\emptyset	<i>we met t_i</i>

Note: *that* is a Complementizer, not a *wh*-word! It is unable to undergo *wh*-mvt.

