

Telicity-sensitive PPs, VPs with two objects, and VPs with an object followed by a PP complement

Sten Vikner

Dept. of English, Aarhus University, DK-8000 Aarhus C, Denmark - sten.vikner@cc.au.dk
<https://tildeweb.au.dk/au132769/> - <https://pure.au.dk/portal/en/persons/sten.vikner@cc.au.dk>

1.	Introduction: Are the verb, the DO, and the IO sisters?	2
1.1	Double object structures	2
1.2	Problem 1 for V, DO, and IO as sisters: Coordination	3
1.3	Problem 2 for V, DO, and IO as sisters: Idioms	4
2.	The solution: The VP-shell analysis.....	7
3.	Supporting argument: Temporal modification of VP.....	10
3.1	Introduction to temporal modification of VP.....	10
3.2	Telicity and double objects (<i>give somebody something</i>)	11
3.3	Telicity and V-DP-PP (<i>give something to somebody</i>)	14
4.	Conclusion.....	18
	References.....	18

Abstract

Looking at verb phrases (VPs) which contain both an indirect object and a direct object, e.g. *send my son a book* = *sende min søn en bog*, the picture is slightly confusing. Data from coordination indicate that the indirect and the direct object form a constituent which excludes the main verb, whereas data from idiomatic expressions point toward the main verb and the direct object forming a constituent to the exclusion of the indirect object.

A parallel and also somewhat confusing picture results from the consideration of verb phrases (VPs) which contain both a direct object and a following preposition phrase (PP) as complement, e.g. *put something on the table/the web* = *lægge noget på bordet/nettet*. Also here data from coordination indicate that the object and the PP form a constituent which excludes the main verb, whereas data from idiomatic expressions point toward the main verb and the PP forming a constituent to the exclusion of the object.

I hope to show how these contradictory data can be reconciled by means of the analyses in Larson (1988) and Kratzer (1995) (and also a much younger S. Vikner 1989) where the object and the PP are not taken to be on the same level in the syntactic structure. This analysis will then be shown to also account for the fact that such VPs can be modified **both** by PPs which normally modify only atelic VPs (e.g. *for two years* = *i to år*) **and** by PPs which normally modify only telic VPs (e.g. *in two hours* = *på to timer*), as in

- (1) En. Because the club gave Liz the post of treasurer **for two years** **in two minutes** ...
(2) Da. Fordi klubben gav Lis posten som kasserer **i to år** **på to minutter** ...

Following Beck & Johnson (2004), I will also show why the two PPs cannot occur in the opposite order (i.e. telic before atelic, *in two minutes for two years*), and why only the telic PP (e.g. *in two hours* = *på to timer*) can occur before the finite verb (*gave* = *gav*) in (1) and (2).

This hand-out can also be found under
<https://tildeweb.au.dk/au132769/syn-talks-eng-nord-workshop/vikner-ho.pdf>

and there is a link to it from the workshop programme,
<https://tildeweb.au.dk/au132769/syn-talks-eng-nord-workshop/>

1. Introduction: Are the verb, the DO, and the IO sisters?

1.1 Double object structures

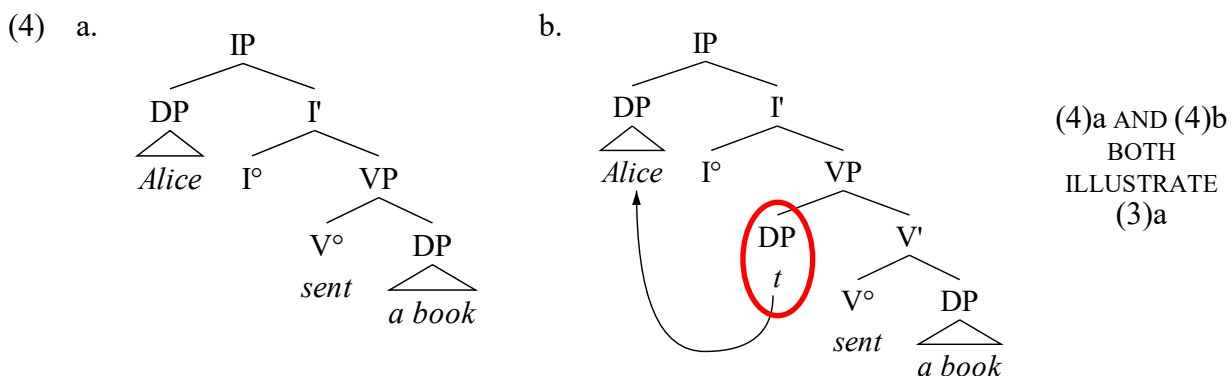
Some verbs in English (and other languages) have one object, and some have two objects: A single object, (3)a, or both a **direct object (DO)** and an **indirect object (IO)**, (3)b,c.

Because of their case in languages such as Faroese, German, Icelandic, Latin, and Old English, the direct object is sometimes called the **accusative object** and the indirect object the **dative object**, even if the single object of German (and Icelandic) verbs like *helfen* 'help', *folgen* 'follow', *gefallen* 'please' and *danken* 'thank' are (direct) objects, **not** indirect objects, in spite of having dative case.

When there are two objects, the direct object is typically associated with the θ -role THEME, whereas the indirect object is typically (not always) associated with the θ -role BENEFICIARY/RECIPIENT. These two θ -roles can be assigned either as a DP and a PP (e.g. *give something to somebody*, (3)b), or as two DPs, the so-called 'double-object construction' (e.g. *give somebody something*, (3)c).

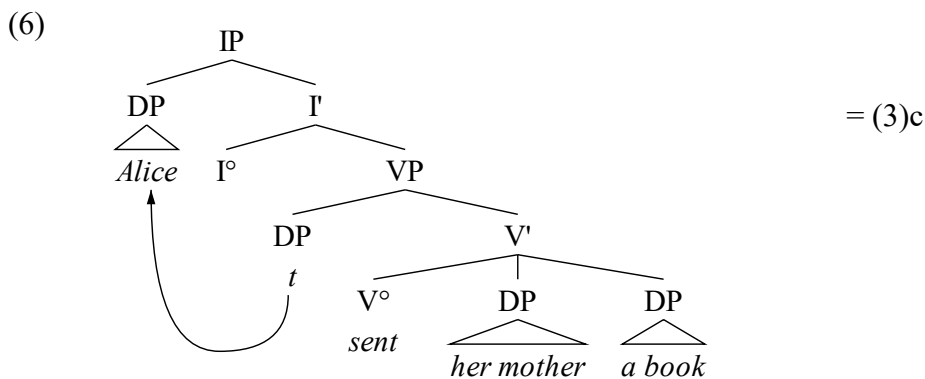
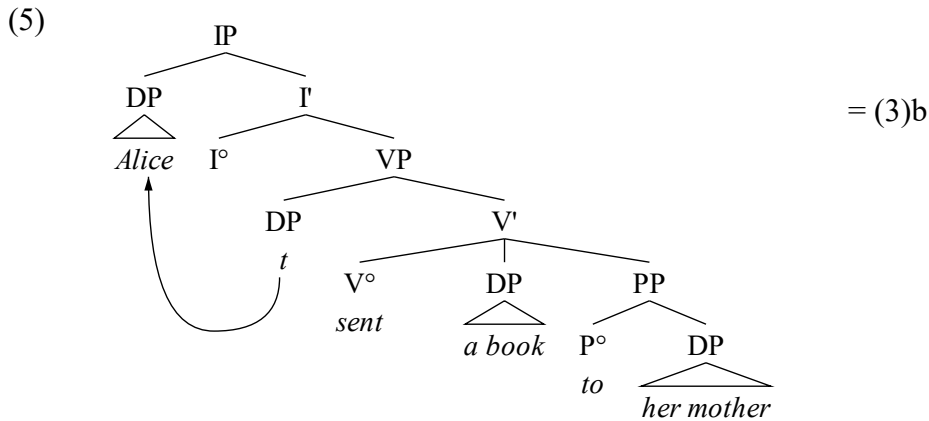
- | | | | | |
|-----|--------|-------------|------------------|---|
| (3) | En. a. | Alice | sent | [DP a book]. |
| | | SUBJ | | OBJ |
| | | AGENT | | THEME |
| | b. | Alice | sent | [DP a book] [PP to her mother]. |
| | | SUBJ | | DIR OBJ \approx INDIR OBJ |
| | | AGENT | | THEME BENEFICIARY |
| | c. | Alice | sent | [DP her mother] [DP a book]. |
| | | SUBJ | INDIR OBJ | DIR OBJ |
| | | AGENT | BENEFICIARY | THEME |

As we shall see, the structure of (3)a is relatively straightforward, whereas (3)b,c turn out to be much less straightforward. However, first I want to introduce a complication to the analysis of all clauses, even (3)a: the so-called VP-internal subject analysis. Instead of taking the subject to be base-generated in IP-spec, as illustrated in (4)a, I will be using the analysis in (4)b that the subject is base-generated in VP-spec, and then it moves to IP-spec (e.g. for reasons of case assignment).



The VP-internal subject hypothesis goes back to Fillmore (1968) and McCawley (1970), but it receives the form it is given below in treatments like Fukui (1986, 55), Sportiche (1988), Koopman and Sportiche (1991), and McCloskey (1997). For two recent discussions based on Danish, see Vikner (2023a; 2023b).

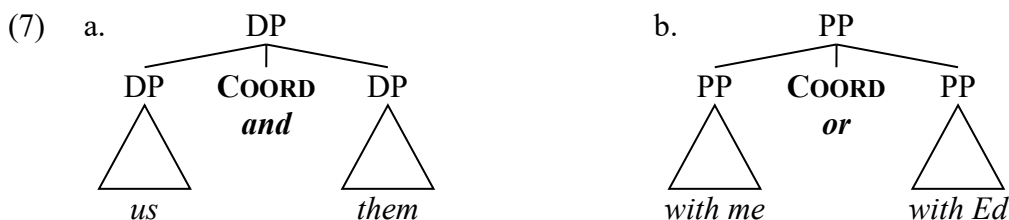
Perhaps the least complicated analysis of (3)b,c would be to give up the restriction to binary branching ("A node has at most two daughters") and allow VP to have three daughters, e.g.



However, (at least) two sets of facts speak **AGAINST** (5) and (6).

1.2 Problem 1 for V, DO, and IO as sisters: Coordination

The first of these two sets of facts has to do with **coordination**, or to be more specific, it builds on the assumption that coordination always coordinates two constituents, cf. the following structures, where coordination is admittedly taken to constitute an exception to both binary branching and to headedness ("Every phrase is a projection of a head"):



The coordination-related problem for the analysis in (5) and (6) is that (8) and (9) are possible:

- (8) En. Alice sent [a book to her mother] and [a bottle of wine to her father].
 (9) En. Alice sent [her mother a book] and [her father a bottle of wine].

Such data provide support for the bracketed constituents, even though these bracketed constituents are **NOT** constituents under the analysis in (5) and (6).

1.3 Problem 2 for V, DO, and IO as sisters: Idioms

Let us now return to the second problem of the analysis of V, DO, and IO as sisters. This second problem has to do with **idiomatic expressions**, where the data indicate that the main verb forms a constituent with the direct object, to the exclusion of the indirect one, even though the latter is closer. (Notice that underlining in this section indicates the idiomatic elements.)

It is commonly assumed that those parts of a clause that form an idiom also form a constituent (from Perlmutter 1970, 109; to e.g. Carnie 2011, 264; Hornstein, Nunes, and Grohmann 2005, 81; Koenenman and Zeijlstra 2017, 160; Larson 2010, 319; Poole 2011, 273; Radford 2009, 242; see also S. Vikner 2018). Thus the IP, (10)-(13), or the VP, (14)-(17), can be an idiom:

- (10) En. a. All hell broke loose.
 b. * The entire inferno broke loose. (≠ a.)
 c. * All hell escaped. (≠ a.)
- (11) En. a. The pot is calling the kettle black.
 b. * The pan is calling the kettle black. (≠ a.)
 c. * The pot says the kettle is black. (≠ a.)
 d. * The pot is calling the pan black. (≠ a.)
 e. * The pot is calling the kettle dirty/dark/.... (≠ a.)
- (12) Da. a. ... fordi rotterne forlader den synkende skude.
 b. # ... fordi **musene** forlader den synkende skude. (≠ a.)
 c. # ... fordi rotterne **stikker af fra** den synkende skude. (≠ a.)
 d. # ... fordi rotterne forlader **det faldefærdige skib**. (≠ a.)
(The rats/mice are leaving/running away from the sinking/dilapidated ship)
- (13) Da. a. ... før fanden fik sko på.
 b. # ... før **troldmanden** fik sko på. (≠ a.)
 c. # ... før fanden **tog** sko på. (≠ a.)
 d. # ... før fanden fik **støvler på**. (≠ a.)
(before the devil/troll got/put shoe/boots on, (a) = extremely early)
- (14) En. a. Someone/John/You is/are skating on thin ice.
 b. * Someone/John/You moving/walking on thin ice. (≠ a.)
 c. * Someone/John/You is/are skating on a brittle surface /on ... (≠ a.)
- (15) En. a. The next day/Soon afterwards, John/we hit the road.
 b. * The next day/Soon afterwards, John/we knocked/bashed the road. (≠ a.)
 c. * The next day/Soon afterwards, John/we hit the street/the railway. (≠ a.)
- (16) Da. a. Horatio har lugtet lunt.
 b. **Fortinbras** har lugtet lunt. (≈ a.)
 c. # Horatio har **bemærket** lunt. (≠ a.)
 d. # Horatio har lugtet **tændsnoren**. (≠ a.)
(Horatio/Fortinbras has smelt the fuse/detonating cord, (a) = Horatio has smelled a rat)
- (17) Da. a. Hortensia har knust hans hjerte.
 b. **Desdemona** har knust hans hjerte. (≈ a.)
 c. # Hortensia har **destrueret** hans hjerte. (≠ a.)
 d. # Hortensia har knust **hans hjerte**. (≠ a.)
(Hortensia/Desdemona has broken/destroyed his heart/brain)

Also an entire VP in a double object clause can be an idiom:

- (18) En. a. Two massive - and, to give the devil his due, rather beautiful - bridges ...
 b. # Two massive - and, to **hand** the devil his due, rather beautiful - bridges ... (≠ a.)
 c. # Two massive - and, to give **the evil one** his due, rather beautiful - bridges ... (≠ a.)
 d. # Two massive - and, to give the devil his **reward**, rather beautiful - bridges ... (≠ a.)
 ... have been completed linking the island of Shikoku with the rest of Japan. (COCA)

- (19) Da. a. Mette rakte fanden en lillefinger.
 b. **Lars** rakte fanden en lillefinger. (≈ a.)
 c. # Mette **gav** fanden en lillefinger. (≠ a.)
 d. # Mette rakte **de onde** en lillefinger. (≠ a.)
 e. # Mette rakte fanden **en rebstige**. (≠ a.)
 (Mette/Lars handed/gave the devil a small finger/rope ladder, (a) = M gave the devil an inch ...)

However, and this is crucial, in double object constructions (the *give somebody something* examples) the verb cannot form an idiomatic expression with just the **indirect** object (according to O'Grady 1998, 304; and Hudson 1992, 262), although the two are next to each other. Just as surprising is the fact that such a verb can form an idiomatic expression with just the **direct** objects, even though the verb and the direct object are not even adjacent to each other on the surface:

- (20) En. a. John/We gave Jill/them the cold shoulder.
 b. * John/We donated/transferred/sent Jill/them the cold shoulder. (≠ a.)
 c. * John/We gave Jill/them the cold elbow/ frozen shoulder. (≠ a.)

- (21) En. a. John/We taught Jill/them a lesson.
 b. * John/We lectured/instructed/tutored/educated Jill/them a lesson. (≠ a.)
 c. * John/We taught Jill/them a class/a lot ... (≠ a.)

- (22) Da. a. Inger stak Jakob en plade.
 b. **Mette** stak Jakob en plade. (≈ a.)
 c. # Inger **rakte** Jakob en plade. (≠ a.)
 d. Inger stak **Lars** en plade. (≈ a.)
 e. # Inger stak Jakob **en CD**. (≠ a.)
 (Inger/Donald pitched/handed Jakob/Lars a record/CD, (a) = Inger told Jakob a lie)

- (23) Da. a. Lars gav Pernille den kolde skulder.
 b. **Mette** gav Pernille den kolde skulder. (≈ a.)
 c. # Lars **forærede** Pernille den kolde skulder. (≠ a.)
 d. Lars gav **Rasmus** den kolde skulder. (≈ a.)
 e. # Lars gav Pernille **den kolde ankel**. (≠ a.)
 (Lars/Mette gave/handed Pernille/Rasmus the cold shoulder/ankle)

A completely parallel problem is found with data like (3)b, *Alice sent a book to her mother*, i.e. the *give something to somebody* examples. In such idioms, the verb would also seem to form an idiom (and therefore a constituent) together with the PP, but **NOT** including the direct object in between the two. In the following examples there is no putting or selling going on, and nothing ends up on a stove (i.e. the verbs and the PPs are part of the idioms), whereas *Leeds* has its normal reference:

- (24) En. a. The film put Leeds on the map.
 b. The mayor sold Leeds down the river.
 c. The government put Leeds on the back burner.

The situation the same in Danish examples, where the idiomatic reading only involves the verb and the PP, as seen in (25)c,e and (26)c,e:

- (25) Da. a. Mette kastede Frank for løverne.
 b. **Lars** kastede Frank for løverne. (≈ a.)
 c. # Mette **puffede** Frank for løverne. (≠ a.)
 d. Mette kastede **Lars** for løverne. (≈ a.)
 e. # Mette kastede Frank for **tigre**ne. (≠ a.)
 (Mette/Lars threw Frank before the lions/tigers, (a) = Mette threw Frank to the wolves))
- (26) Da. a. Horatio lagde lingvistikken på hylden.
 b. **Fortinbras** lagde lingvistikken på hylden. (≈ a.)
 c. # Horatio **anbragte** lingvistikken på hylden. (≠ a.)
 d. Horatio lagde **fysikken** på hylden. (≈ a.)
 e. # Horatio lagde lingvistikken **på reolen**. (≠ a.)
 (H./F. put/placed linguistics/physics on the shelf, (a) = H. stopped doing linguistics)

Summing up the problems discussed in this and the previous subsection (§ 1.2 and § 1.3):

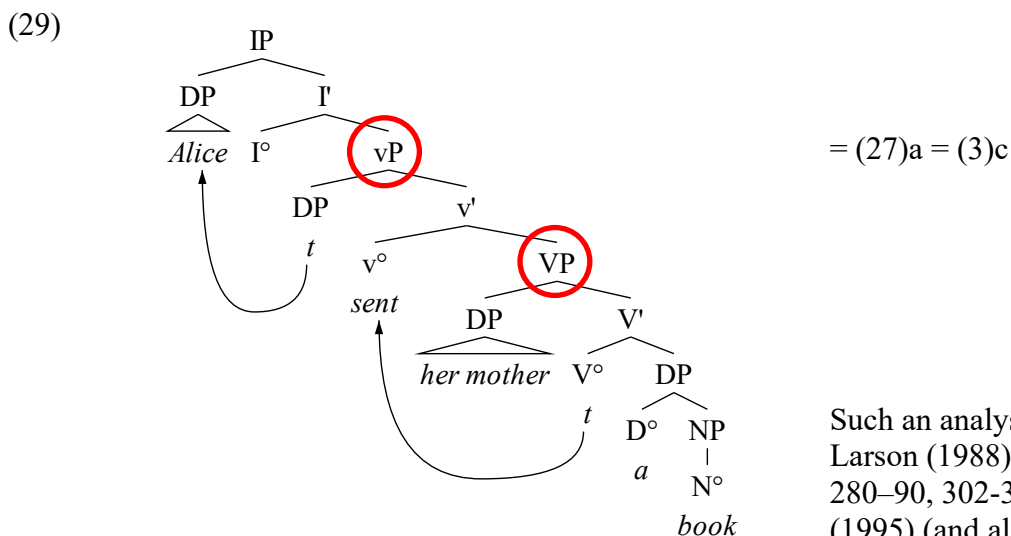
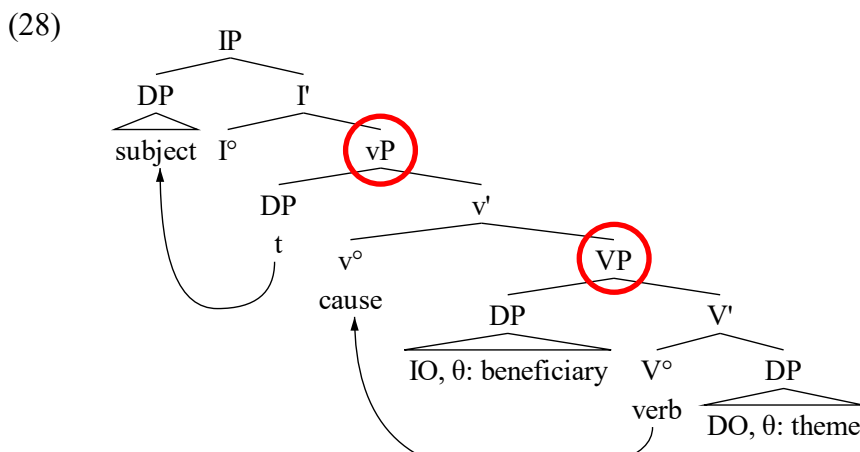
- In the sequences V-DP-DP and V-DP-PP, it can be shown that the underlined parts of **V-DP-DP** and **V-DP-PP** form a constituent, cf. the coordination data in (8) and (9) above.
- In the sequences V-DP-DP and V-DP-PP, it can be shown that the underlined parts of **V-DP-DP** and that **V-DP-PP** form a constituent, cf. the data from idiomatic constructions in (20)-(26) above.
- Finally, we also have at least some indication that in the sequences V-DP-DP and V-DP-PP, it is not the case that **V-DP-DP** and **V-DP-PP** form a constituent.

2. The solution: The VP-shell analysis

In the analysis to be suggested of (3)c, i.e. (29) below, the verb *send* is taken to be a complex predicate meaning something like "cause to have" or "cause to receive". In (27)a, *her mother* is the indirect object, the BENEFICIARY, while *a book* is the direct object, the THEME. The action described in (27)a causes the event in (27)b or the state in (27)c, where *a book* is still the direct object, the THEME, while *her mother* is now the subject.

(27)	En. a.	Alice	sent	her mother	a book.	ACTION / CAUSE
		AGENT		BENEFICIARY	THEME	
	b.	Her mother	received		a book.	RESULT
		BENEFICIARY			THEME	
	c.	Her mother	has		a book.	RESULT
		POSSESSOR			THEME	

The parallels between (27)a,b are captured in the structure in (28), where there are two VPs instead of one, the lower one called **VP** and the higher one **vP** (sometimes, these are referred to as VP-shells, where the intuition is that they are different versions of the same VP, as they have the same verb at the centre). In the lower VP, the complement of V° is the direct object, the THEME, and the specifier (VP-spec) is the indirect object, the BENEFICIARY. The ditransitive verb then always has to move from the lower V° to the upper v° (the causative v°) where it precedes both objects: *give somebody something*.

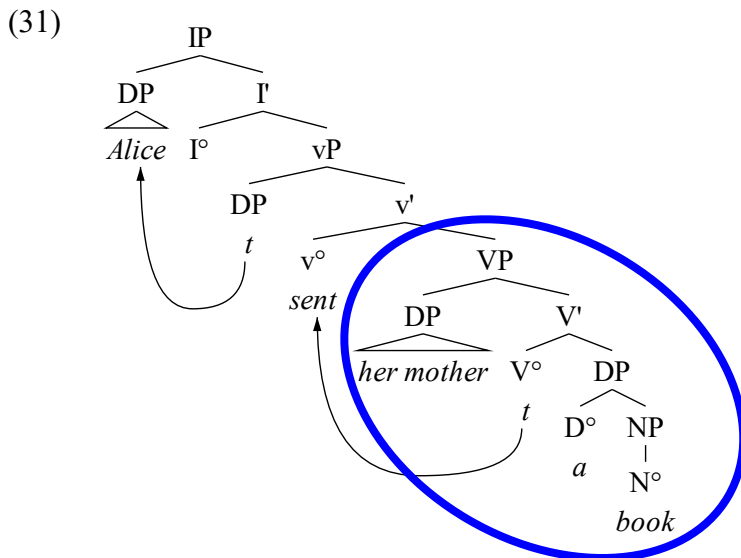


Such an analysis goes back to Larson (1988), Chomsky (1995, 280–90, 302–307) and Kratzer (1995) (and also S. Vikner 1989).

(Provided we take v° to be closely related to V° and very different from I° and C° , this analysis does not affect the generalisation that English main verbs always occur in V° ($= v^\circ/V^\circ$) and never leave the VP ($= vP/VP$), i.e. English main verbs never move to I° or C° .)

Now the data in (9), which were problematic for the analysis in (6) above, are not problematic anymore. The coordinated constituent in (9) = (30) corresponds to the (lower) VP in (28)/(29), which is a vP -VP analysis (= a VP-shell analysis) of *give somebody something*:

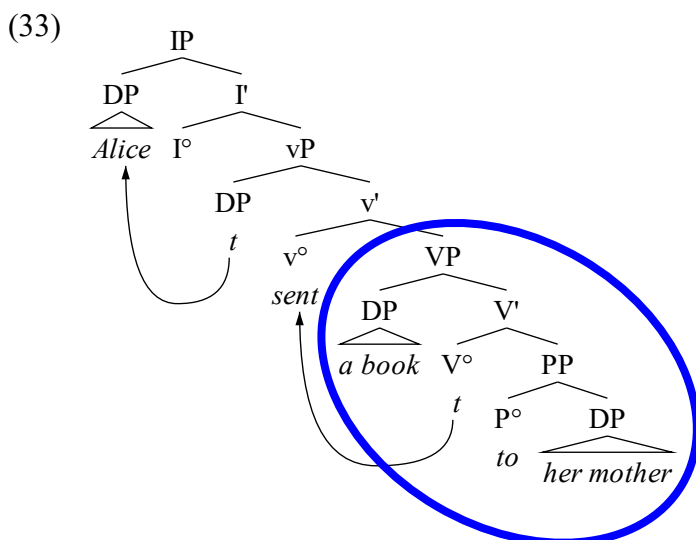
(30) En. Alice sent [_{VP} **her mother a book**] and [_{VP} her father a bottle of wine]. (=9)



Now [*her mother a book*] is a constituent, namely the VP, after *sent* has moved from V° to v° .

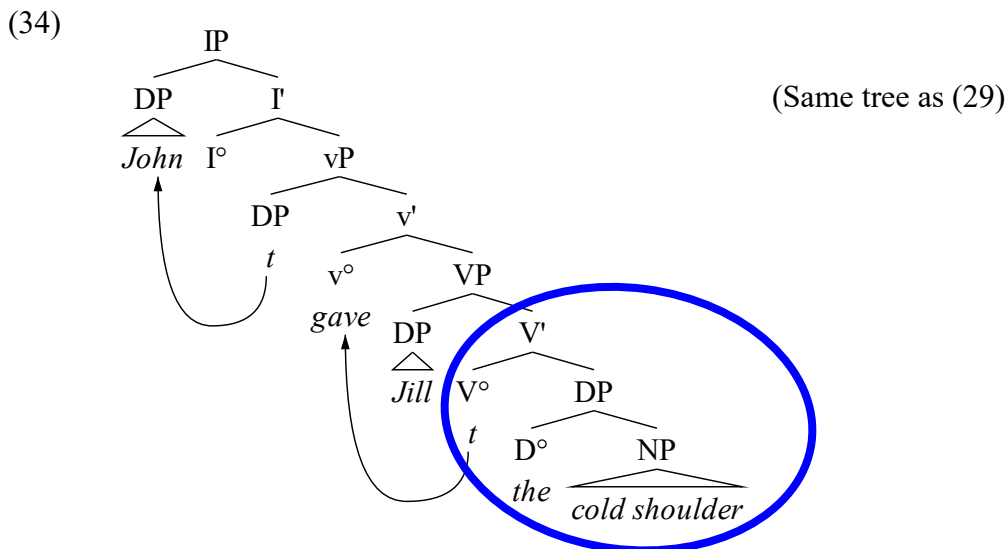
Similarly, the data in (8), which were problematic for the analysis in (5) above, are not problematic anymore. The coordinated constituent in (8) = (32) again corresponds to the (lower) VP in (28)/(29), which is a vP -VP analysis (= a VP-shell analysis) of *give something to somebody*:

(32) En. Alice sent [_{VP} **a book to her mother**] and [_{VP} a bottle of wine to her father]. (=8)



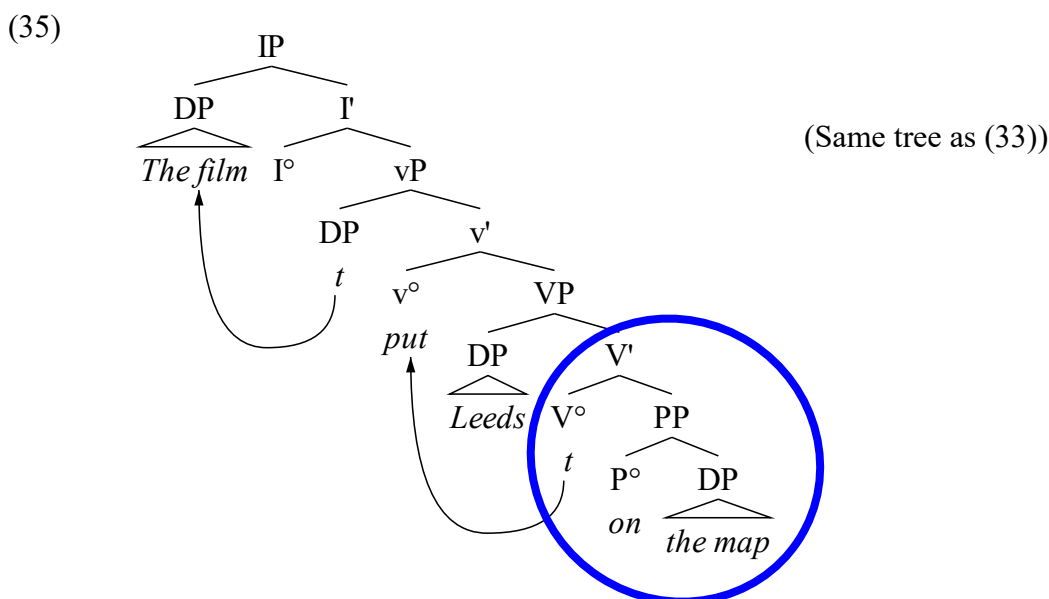
Now [*a book to her mother*] is a constituent, namely the VP, after *sent* has moved from V° to v° .

Let us now return to the data from idiomatic constructions of the V-DP-DP type, where the problem was that the verb seemed to form a constituent together with the direct object, excluding the indirect object which occurred in between the two. Here is an analysis of (20)a (and by extension of (21)a-(23)a) along the lines of (28)/(29), i.e. a vP-VP analysis (= a VP-shell analysis):



Here *give* does form a constituent together with *the cold shoulder* at a particular point, namely the V', before the movement of *put* from V° to v°. Given that the verb (trace) forms a constituent with only the direct object (the V'), but that it never forms a constituent with only the indirect object, the asymmetric distribution of idiomatic expressions is accounted for (i.e. that an idiom may consist of the verb and the direct object and exclude the indirect object, but no idiom consists of the verb and the indirect object excluding the direct object).

If we now return to idiomatic constructions of the V-DP-PP type, where the problem was that the verb seemed to form a constituent together with the PP, excluding the direct object which occurred in between the two. Here is an analysis of (and by extension of (25)-(26)) along the lines of (28)/(29), i.e. a vP-VP analysis (= a VP-shell analysis):



Now [*put on the map*] does form a constituent at a particular point, namely the V', before the movement of *put* from V° to v°.

3. Supporting argument: Temporal modification of VP

3.1 Introduction to temporal modification of VP

Following Vikner (2021) and Vikner and Heycock (2024), there is a further argument in support of VP-shells as in (28)/(29), and it has to do with temporal modification by means of a PP. As in Vikner and Vikner (1997, 270) (and in discussions referred to there), I assume (at least) the following aspectual verb classes (*Aktionsarten*): events, processes, and states.

Processes and **states** have in common that they are unbounded (= atelic), see (36)a,b, because we abstract away from their beginning and end. They are different in that states are completely static, involving no change at all, whereas processes are dynamic, in that they admit gaps and internal changes. In other words, in a process, every subpart is slightly different from the preceding subpart, whereas in a state every subpart is exactly like the preceding subpart. (In Vendler 1967, 104, processes are called “activities”).

ASPECTUAL VERB CLASSES (AKTIONSPORTER):				(see also e.g. Aarts 2011, 273)
(36) a.	Sue <u>hates</u> cheese.	STATE		
b.	Sue <u>danced</u> at the party.	PROCESS	(= ACTIVITY)	
c.	Sue <u>painting</u> her house.	COMPLEX EVENT	(= ACCOMPLISHMENT)	
d.	Sue <u>recognised</u> her old friend.	PUNCTUAL EVENT	(= ACHIEVEMENT)	

In contrast, **events**, both **complex** and **punctual** ones, are bounded (= telic), see (36)c,d, as they finish with a completion, i.e. they have a built-in endpoint. (In Vendler 1967, 102–3, complex and punctual events are called “accomplishments” and “achievements”).

We can test for telicity in a number of ways, e.g. the following (cf. Dowty 1979, 57): If someone were asked halfway through *X-ing* whether they had *X-ed*, the answer would be *yes* for atelic Aktionsarten (e.g. *Have you looked for the book?*, (38), (39)), but *no* for telic Aktionsarten (e.g. *Have you found the key?*, (41), (42)). All Aktionsarten are thus either telic or atelic:

- (37) a. **atelic** (is not temporally bounded: processes and states)
 b. **telic** (has an endpoint: complex events and punctual events)

Depending on whether the Aktionsart of an example is one or the other, different types of temporal modification are allowed, as described for English, French and Danish in C. Vikner (1994, 148–49) (and in many other places, incl. Vendler 1967, 101; Fillmore 1975, 36; Dowty 1979, 56, 60; Dahl 1981, 79, 84; Krifka 1989, 166–70; Smith 1991, 157–59; Krifka 1992, 32).

states

(**atelic**, En. *for*/Da. *i*)

- (38) En. a. ... because she missed licorice **for** three years.
 b. * ... because she missed licorice **in** three years.
 Da. c. ... fordi hun savnede lakrids **i** tre år.
 d. * ... fordi hun savnede lakrids **på** tre år.

processes

(**atelic**, En. *for*/Da. *i*)

- (39) En. a. ... because he looked for the book **for** half an hour.
 b. * ... because he looked for the book **in** half an hour.
 Da. c. ... fordi han ledte efter bogen **i** en halv time.
 d. * ... fordi han ledte efter bogen **på** en halv time.

- (40) En. a. ... because they biked to work **for** three years.
 b. * ... because they biked to work in three years.
 Da. c. ... fordi de cyklede på arbejde **i** tre år.
 d. * ... fordi de cyklede på arbejde på tre år.

complex events

(telic, En. *in*/Da. *på*)

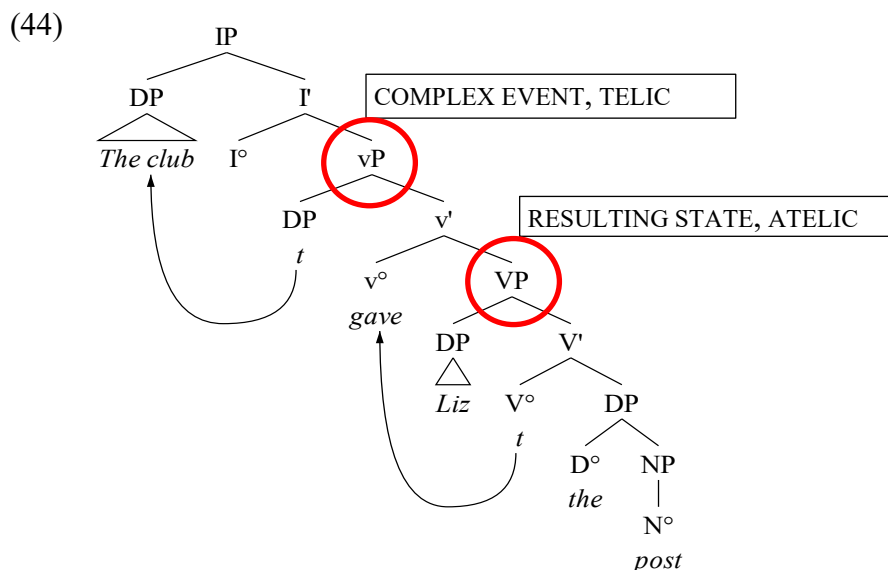
- (41) En. a. * ... because he found the book for half an hour.
 b. ... because he found the book **in** half an hour.
 Da. c. * ... fordi han fandt bogen i en halv time.
 d. ... fordi han fandt bogen **på** en halv time.
- (42) En. a. * ... because they wrote the essay for three hours.
 b. ... because they wrote the essay **in** three hours.
 Da. c. * ... fordi de skrev opgaven i tre timer.
 d. ... fordi de skrev opgaven **på** tre timer.

3.2 Telicity and double objects (*give somebody something*)

An interesting thing about clauses with double objects is that they allow **both** types of temporal modification (although these unsurprisingly have two rather different interpretations):

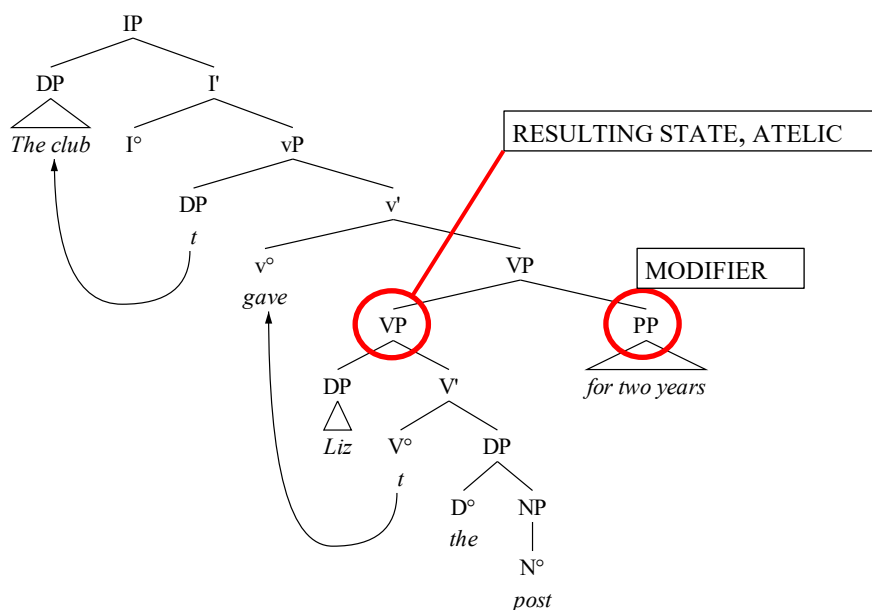
- (43) En. a. ... because the club gave Liz the post as treasurer **for** two years
 b. ... because the club gave Liz the post as treasurer **in** two minutes.
 Da. c. ... fordi klubben gav Lis posten som kasserer **i** to år.
 d. ... fordi klubben gav Lis posten som kasserer **på** to minutter.

This can be accounted for within the analysis in (28)/(29) above, as illustrated in (44) below. VP is a resulting **state** (atelic, temporal modification with *for/i*), whereas the entire vP is a **complex event** (telic, temporal modification with *in/på*):



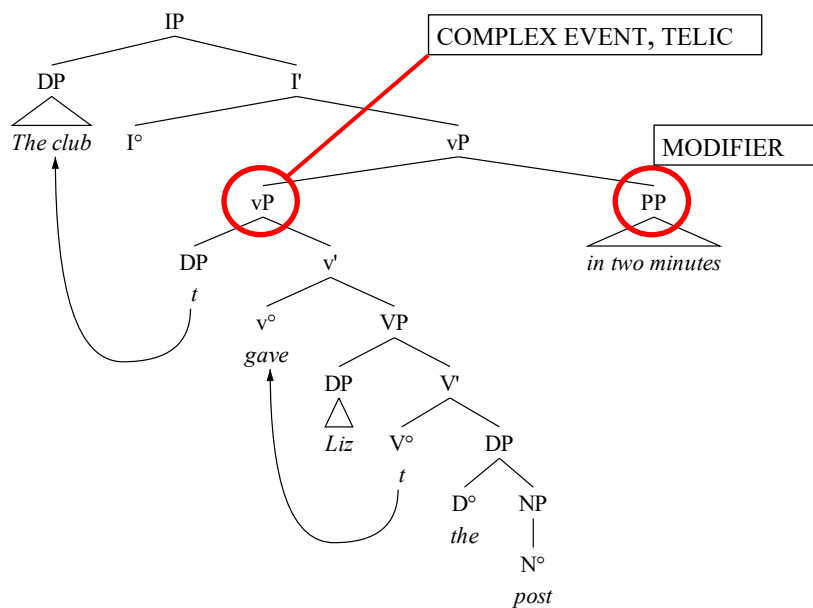
The final PP *for two years* in (43)a,c can be interpreted as right-adjoined to VP, i.e. modifying the atelic resulting state, so that the resulting state (i.e. Liz having the post) lasted for two years:

(45)



The final PP *in two minutes* in (43)b,d, can be interpreted as right-adjoined to vP, i.e. modifying the whole complex event, so that the complex event (i.e. the club giving Liz the post) took two minutes:

(46)



This analysis not only accounts for the data in (43), it also makes two further predictions. The first is that both types of PP may be present at the end of the clause only in one of the two logically possible orders. Because the VP is inside vP, the *for/i*-PP that modifies the atelic VP must precede the *in/på*-PP which modifies the telic vP:

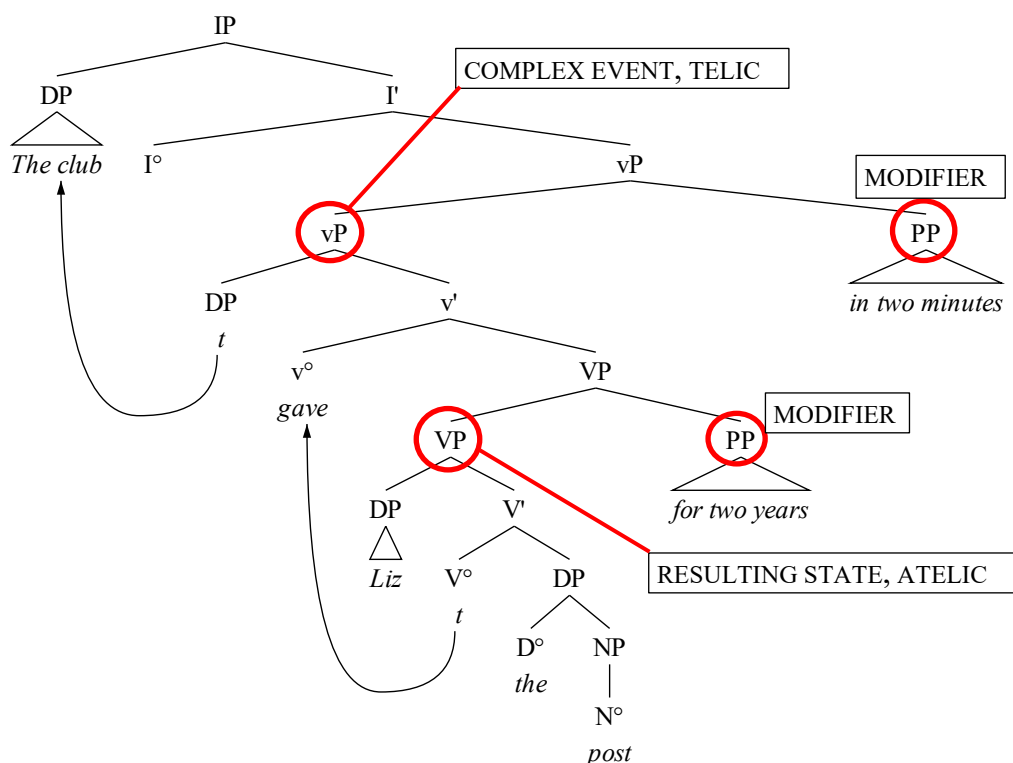
(47) En. a. ... because the club gave Liz the post as treasurer **for** two years **in** two minutes.

b. * ... because the club gave Liz the post as treasurer **in** two minutes **for** two years.

Da. c. ... fordi klubben gav Lis posten som kasserer **i** to år **på** to minutter.

d. * ... fordi klubben gav Lis posten som kasserer **på** to minutter **i** to år.

(48)



Admittedly, a potential alternative account for the difference in grammaticality between (47)a,c and (47)b,d could be that in (47)a,c, it is the the direct object DP which is modified by the *for/i*-PP, i.e. that in (47)a,c, there is a DP [*the post of treasurer for two years*]/[*posten som kasserer i to år*]. This is not a viable analysis, however, as this constituent does not seem particularly well-formed e.g. in cleftings, whereas cleftings of the DP without the *for/i*-PP as modifier are perfectly fine:

- (49) En. a. ?? It was the post of treasurer for two years that I heard that the club gave Liz ____.
 b. It was the post of treasurer that I heard that the club gave Liz ____ for two years.
 Da. c. ?? Det var posten som kasserer i to år som jeg hørte at klubben gav Lis ____.
 d. Det var posten som kasserer som jeg hørte at klubben gav Lis ____ i to år.

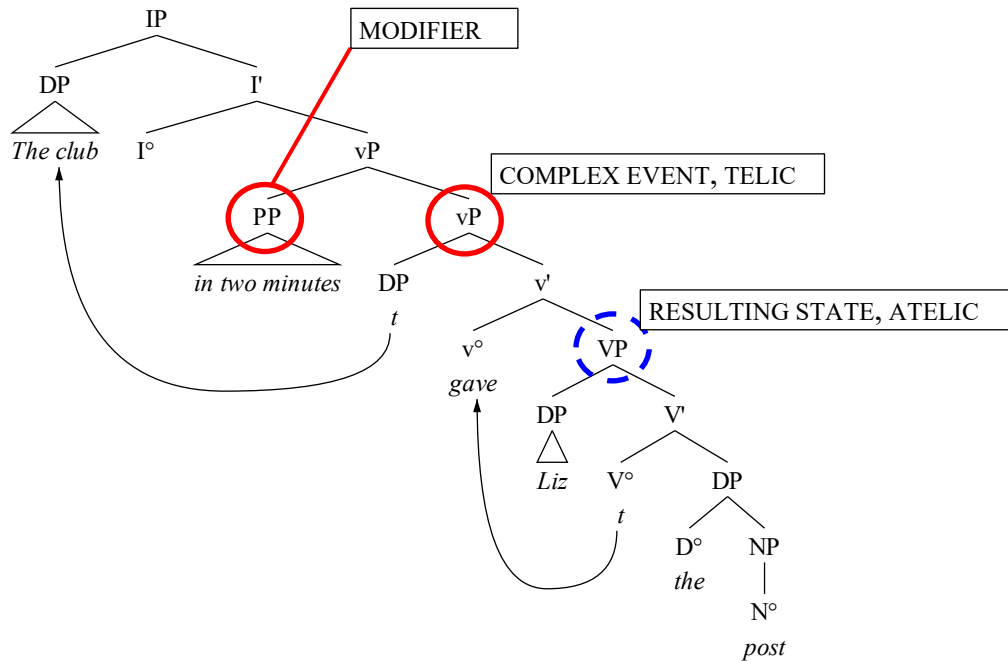
Given that (47)a,c are also perfectly fine, it would seem justified to take them to be related to (49)b,d rather than to (49)a,c, even though it must be admitted that examples with the structure of (49)a,c do exist, e.g. *They gave her [the post of president for life]*.

A further consideration against the reanalysis of (47)a,c along the lines of (49)a,c is that such a reanalysis is not at all possible in the otherwise parallel case of (56)a,c below.

The second prediction is that an *in/på*-PP is possible in the clause medial adverbial position preceding the finite main verb (i.e. an adverbial left-adjoined to vP), but not a *for/i*-PP:

- (50) En. a. * ... because the club **for** two years gave Liz the post as treasurer
 b. ... because the club **in** two minutes. gave Liz the post as treasurer
 Da. c. * ... fordi klubben **i** to år gav Lis posten som kasserer
 d. ... fordi klubben **på** to minutter gav Lis posten som kasserer

(51)



The reason why only the PPs that modify telic events are possible here is that the position of the PP in (50) precedes the finite main verb, the position of which is inside the vP but outside the VP, as seen in (51) above. Thus a PP preceding the finite main verb can be interpreted as adjoined to (and modifying) the telic vP (i.e. the club giving Liz the post) but not as adjoined to (and modifying) the atelic VP (i.e. Liz having the post).

3.3 Telicity and V-DP-PP (*give something to somebody*)

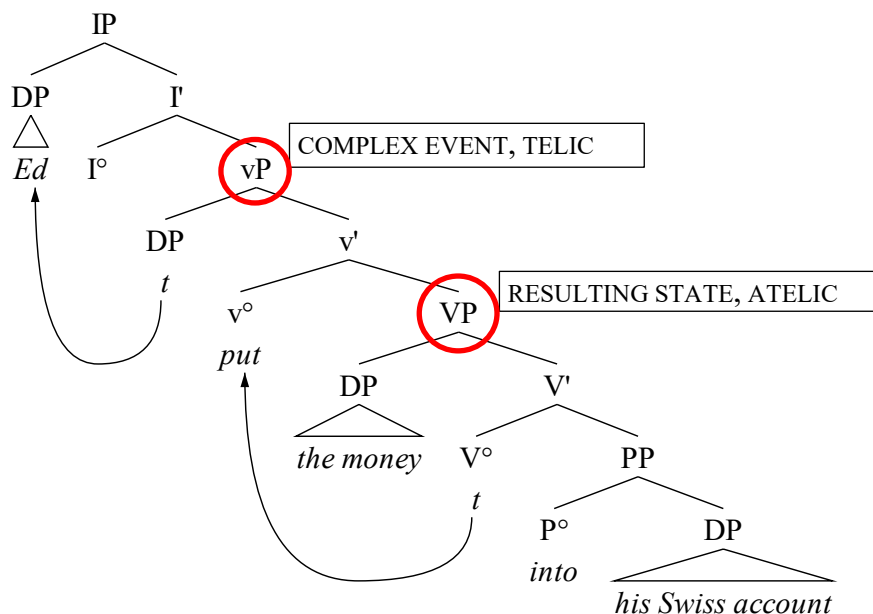
A parallel analysis in terms of vP and VP, as in (28)/(29)/(33), can also account for data like those in (52), which show that also clauses with an object and a following PP-complement (i.e. examples of the type *give something to somebody*) can have both a telic and an atelic interpretation, just as we have already seen in the double object examples (i.e. *give somebody something*) as modification is possible **both** with an *in/på*-PP and with a *for/i*-PP:

- (52) En. a. ... because Ed put the money into his Swiss account **for** two years
 b. ... because Ed put the money into his Swiss account **in** two minutes.
 Da. c. ... fordi Ib placerede pengene på sin schweiziske konto **i** to år.
 d. ... fordi Ib placerede pengene på sin schweiziske konto **på** to minutter.

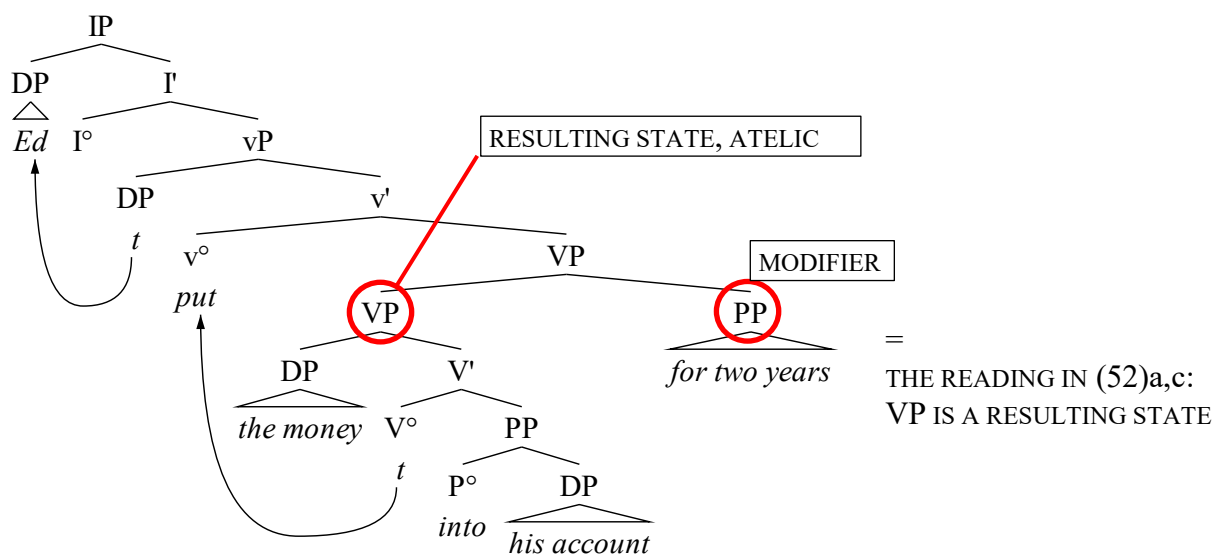
(The relevant reading of (52)a,c is the one in which there is a single event of depositing the money, which remains in the account for two years. There is an additional reading—irrelevant for our purposes—where *put the money into his Swiss bank account* is interpreted as a repeated/habitual event. On this reading, *for two years* would be modifying the vP.)

This is nicely compatible with the analysis in (28)/(29)/(33)/(44), because again VP is a resulting **state** (atelic, temporal modification with *for/i*), whereas the entire vP is a **complex event** (telic, temporal modification with *in/på*):

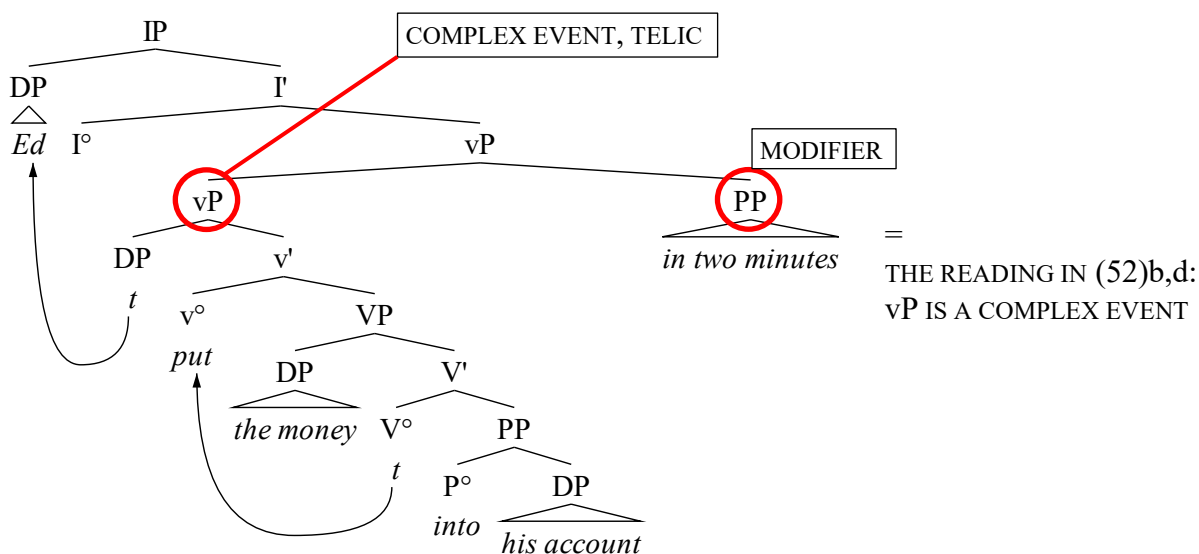
(53)



(54)



(55)

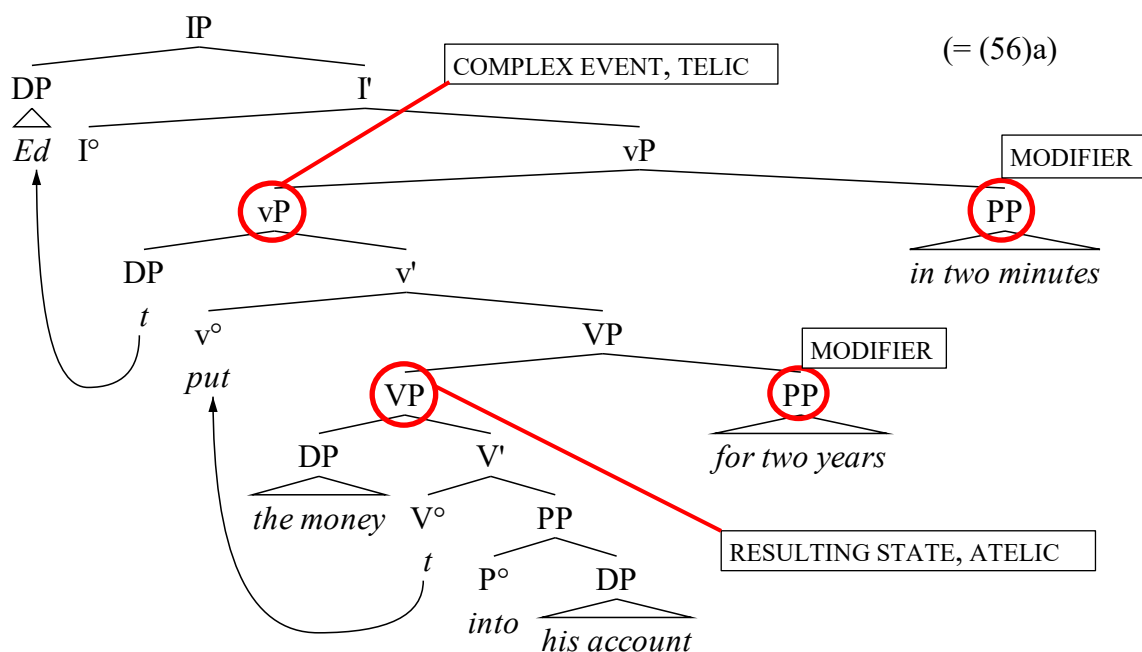


Again, this analysis not only accounts for the data in (52), it also makes to further predictions.

The first is about the sequence of the PPs when both are present and final. The *for/i*-PP (which modifies VP) must precede the *in/på*-PP (which modifies vP), i.e. that (56)a,c are much better than (56)b,d:

- (56) En. a. ... because Ed put the money into his Swiss account for two years in two minutes.
 b. * ... because Ed put the money into his Swiss account in two minutes for two years.
 Da. c. ... fordi Ib placerede pengene på sin schweiziske konto i to år på to minutter.
 d. * ... fordi Ib placerede pengene på sin schweiziske konto på to minutter i to år.

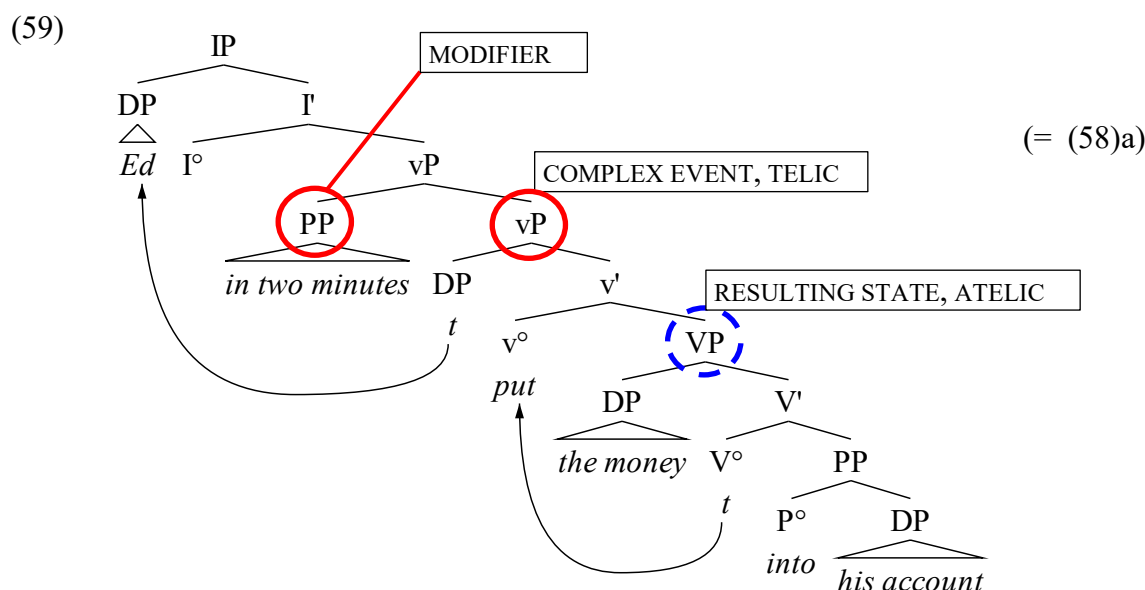
(57)



The other prediction is about medial adverbials, and it is that an *in/på*-PP is possible in the medial position (i.e. an adverbial left-adjoined to vP), but a *for/i*-PP is not, as the medial position precedes the verb, which means that a such medial PP may be a sister of vP (which is a complex event and thus telic), but it cannot be interpreted as a sister of VP (which is a state and thus atelic). It is therefore predicted that (58)b,d are much better than (58)a,c:

- (58) En. a. * ... because Ed for two years put the money into his Swiss account.
 b. ... because Ed in two minutes put the money into his Swiss account.
 Da. c. * ... fordi Ib i to år placerede pengene på sin schweiziske konto.
 d. ... fordi Ib på to minutter placerede pengene på sin schweiziske konto.

(As expected, (58)a,c are acceptable to the extent that it is possible to give them the (irrelevant) reading where the vP has a repeated/habitual reading and can thus be modified by *for two years*.)



An analysis in terms of vP and VP can thus account for (52), which shows that some clauses with an object and a following PP-complement (i.e. examples of the type *give something to somebody*) can have both a telic and an atelic interpretation, as modification is possible both with an *in/på*-PP and with a *for/i*-PP. It can also account for some possible and impossible orders of an *in/på*-PP and a *for/i*-PP in (56)a,b and concerning the interpretation of a temporal PP in medial position i (58)a,b.

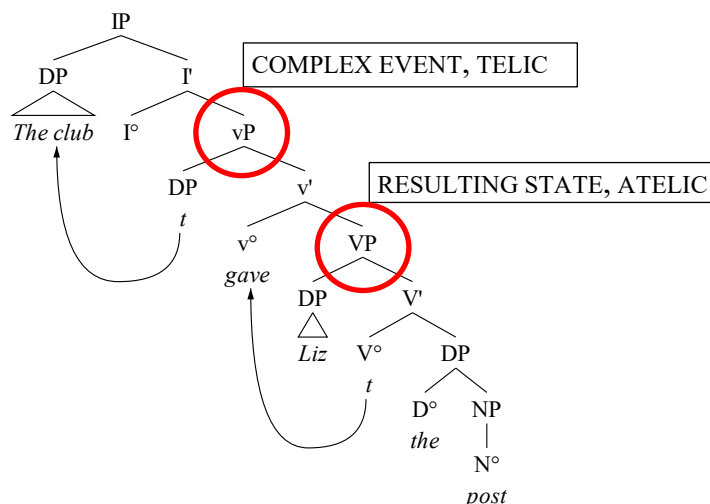
The analysis in terms of vP/VP (VP-shells) thus makes the desired predictions concerning the various possibilities of modification by different types of temporal PPs sensitive to telicity.

4. Conclusion

In § 1, we saw that earlier analyses of double object examples were not satisfactory, and also that simple fixes did not yield satisfactory analyses either, as the problems concerning coordination (§ 1.2) and idiomatic expressions (§ 1.3) were not solved.

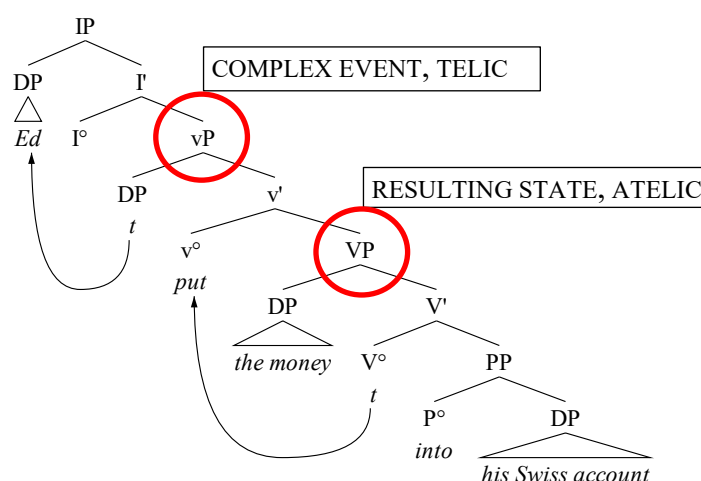
§ 2 then introduced the rather complex VP-shell analysis, where both a VP and a vP is built up around the same main verb, e.g. *give* or *send*, and where this main verb always moves from V° to v° (irrespective of whether it is finite or not, and regardless of it being a main verb). It was also shown how this analysis not only covers double object clauses ((29)≈(44)=(60)), *give somebody something* but also V-DP-PP clauses ((33)≈(53)=(61)), *give something to somebody*.

(60)



In § 3, it was shown that temporal modification by means of a PP was rather different depending on whether the clause was atelic (like states and processes, which do not have an endpoint) or telic (like events which do have an endpoint). Armed with tests derived from such data and with a VP-shell analysis, it was possible to account for the facts that on one hand, both double object clauses ((44)=(60)), *give somebody something* and V-DP-PP clauses ((53)=(61)), *give something to somebody* allowed for both types of modification in the same clause, and on the other hand, that such modification was not possible under all circumstances and in just any order.

(61)



References

- Aarts, Bas. 2011. *Oxford Modern English Grammar*. Oxford: Oxford University Press.
- Beck, Sigrid, and Kyle Johnson. 2004. "Double Objects Again." *Linguistic Inquiry* 35 (1): 97–123.
<https://doi.org/10.1162/002438904322793356>.
- Carnie, Andrew. 2011. *Modern Syntax: A Coursebook*. Cambridge: Cambridge University Press.
<https://doi.org/10.1017/CBO9780511780738>.
- Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, MA: MIT Press.
- Dahl, Östen. 1981. "On the Definition of the Telic-Atelic (Bounded-Unbounded) Distinction." In *Tense and Aspect*, edited by Philip J. Tedeschi and Annie Zaenen, 14:79–90. Syntax and Semantics. New York: Academic Press.

- Dowty, David. 1979. *Word Meaning and Montague Grammar: The Semantics of Verbs and Times in Generative Semantics and in Montague's PTQ*. Dordrecht: Reidel.
- Fillmore, Charles. 1968. "The Case for Case." In *Universals in Linguistic Theory*, edited by Emmon W. Bach and Robert T. Harms, 1–88. New York: Holt, Rinehart and Winston.
- . 1975. *Santa Cruz Lectures on Deixis, 1971*. Bloomington: Indiana University Linguistics Club.
- Fukui, Naoki. 1986. "A Theory of Category Projection and Its Applications." PhD dissertation, Massachusetts Institute of Technology. <https://dspace.mit.edu/handle/1721.1/15105>.
- Hornstein, Norbert, Jairo Nunes, and Kleanthes K. Grohmann. 2005. *Understanding Minimalism*. Cambridge Textbooks in Linguistics. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511840678>.
- Hudson, Richard. 1992. "So-Called 'Double Objects' and Grammatical Relations." *Language* 68 (2): 251–76. <https://doi.org/10.2307/416941>.
- Koenenman, Olaf, and Hedde Zeijlstra. 2017. *Introducing Syntax*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/9781316156391>.
- Koopman, Hilda, and Dominique Sportiche. 1991. "The Position of Subjects." *Lingua* 85 (2): 211–58. [https://doi.org/10.1016/0024-3841\(91\)90022-W](https://doi.org/10.1016/0024-3841(91)90022-W).
- Kratzer, Angelika. 1995. "Severing the External Argument from Its Verb." In *Phrase Structure and the Lexicon*, edited by Johan Rooryck and Laurie Zaring, 109–37. Studies in Natural Language and Linguistic Theory. Dordrecht: Kluwer. <https://www.springer.com/gp/book/9780792337454>.
- Krifka, Manfred. 1989. *Nominalreferenz und Zeitkonstitution: zur Semantik von Massentermen, Pluraltermen und Aspektklassen*. München: W. Fink.
- . 1992. "Thematic Relations as Links between Nominal Reference and Temporal Constitution." In *Lexical Matters*, edited by Ivan A. Sag and Anna Szabolcsi, 29–53. Stanford CA: CSLI Publications.
- Larson, Richard K. 1988. "On the Double Object Construction." *Linguistic Inquiry* 19 (3): 335–91. <http://www.jstor.org/stable/25164901>.
- . 2010. *Grammar as Science*. Cambridge, Mass: MIT Press.
- McCawley, James D. 1970. "English as a VSO Language." *Language* 46 (2): 286–99. <https://doi.org/10.2307/412279>.
- McCloskey, Jim. 1997. "Subjecthood and Subject Positions." In *Elements of Grammar: Handbook in Generative Syntax*, edited by Liliane Haegeman, 197–235. Dordrecht: Springer. https://doi.org/10.1007/978-94-011-5420-8_5.
- O'Grady, William. 1998. "The Syntax of Idioms." *Natural Language & Linguistic Theory* 16 (2): 279–312. <https://www.jstor.org/stable/4047952>.
- Perlmutter, David. 1970. "The two verbs 'begin.'" In *Readings in English transformational grammar*, edited by Roderick A. Jacobs and Peter S. Rosenbaum, 107–19. Waltham, Mass.: Ginn & Co.
- Poole, Geoffrey. 2011. *Syntactic Theory*. 2nd ed. Basingstoke: Palgrave Macmillan.
- Radford, Andrew. 2009. *Analysing English Sentences: A Minimalist Approach*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511801617>.
- Smith, Carlota S. 1991. *The Parameter of Aspect*. Dordrecht: Reidel.
- Sportiche, Dominique. 1988. "A Theory of Floating Quantifiers and Its Corollaries for Constituent Structure." *Linguistic Inquiry* 19 (3): 425–49. <https://www.jstor.org/stable/25164903>.
- Vendler, Zeno. 1967. *Linguistics in philosophy*. Ithaca, NY: Cornell University Press.
- Vikner, Carl. 1994. "Change in Homogeneity in Verbal and Nominal Reference." In *Tense, Aspect and Action: Empirical and Theoretical Contributions to Language Typology*, edited by Carl Bache, Hans Basbøll, and Carl-Erik Lindberg, 139–64. Berlin: Mouton De Gruyter. <https://doi.org/10.1515/9783110883077.139>.
- Vikner, Carl, and Sten Vikner. 1997. "The Aspectual Complexity of the Simple Past in English - A Comparison with French and Danish." In *Sounds, Structures and Senses - Essays Presented to Niels Davidsen-Nielsen on the Occasion of His Sixtieth Birthday*, edited by Carl Bache and Alex Klinge, 267–84. Odense: Syddansk Universitetsforlag. <https://tildeweb.au.dk/au132769/papers/vikn97d.pdf>.
- Vikner, Sten. 1989. "Object Shift and Double Objects in Danish." *Working Papers in Scandinavian Syntax* 44:141–55. <https://tildeweb.au.dk/au132769/papers/vikn89a.pdf>.
- . 2018. "Sætningsstruktur og idiomatiske vendinger." In *Fraseologi - genveje og omveje : Festskrift til Torben Arboe i anledning af hans 70-årsdag den 8. september 2018*, edited by Kirsten Lyshøj,

- Viggo Sørensen, and Inger Schoonderbeek Hansen, 193–98. Aarhus: Peter Skautrup Centret for Jysk Dialektforskning. <https://tildeweb.au.dk/au132769/papers/vikn18b.pdf>.
- . 2021. “Den Strukturelle Asymmetri Mellem et Objekt Og et Efterfølgende PP-Komplement i Dansk.” *Ny Forskning i Grammatik* 28:157–74. <https://doi.org/10.7146/nfg.vi28.128789>.
- . 2023a. “Hvor kommer subjektet fra? VP-intern oprindelse kan belyse både idiomatiske udtryk og flytninger ud af koordinationer.” *Ny Forskning i Grammatik* 30:233–50. <https://doi.org/10.7146/nfg.vi30.137964>.
- . 2023b. “Hvor Kommer Subjektet Fra? VP-Intern Oprindelse Som Grund Til Skopus-Tvetydighed.” *MUDS - Møderne Om Udforskningen Af Dansk Sprog* 19:371–87. <https://tildeweb.au.dk/au132769/papers/vikn15a.pdf>.
- Vikner, Sten, and Caroline Heycock. 2024. “Telicity-Sensitive PPs and Double Objects.” In *Strict Cycling: A Festschrift for Gereon Müller*, edited by Silke Fischer, Doreen Georgi, Fabian Heck, Johannes Hein, Anke Himmelreich, Andrew Murphy, and Philipp Weisser, 97:467–76. Linguistische Arbeitsberichte (LAB). Leipzig: Universität Leipzig. https://www.philol.uni-leipzig.de/fileadmin/Fakult%C3%A4t_Philol/Linguistik/Forschung/LAB/LAB_97/LAB97_26_vikner_heycock.pdf.

Structures for SVG Syntax Tree Generator

(<https://tildeweb.au.dk/au132769/syntree/> = <https://tildeweb.au.dk/au572/syntree/> = <https://syntree.abitcreative.co/>):

- (4)a = [IP [^DP Alice][I' [I° []][VP [V° sent][^DP a book]]]
- (4)b = [IP [^DP_j Alice][I' [I° []][VP [DP t<j>][V' [V° sent][^DP a book]]]]]
- (5) = [IP [^DP_j Alice][I' [I° []][VP [DP t<j>][V' [V° sent][^DP a book][PP [P° to][^DP her mother]]]]]]]
- (6) = [IP [^DP_j Alice][I' [I° []][VP [DP t<j>][V' [V° sent][^DP her mother][^DP a book]]]]]
- (28) = [IP [^DP_j subject][I' [I° []][vP [DP t<j>][v' [v°_k [cause]][VP [^DP IO, θ: beneficiary][V' [V° verb<k>][^DP DO, θ: theme]]]]]]]
- (29) = (31) = [IP [^DP_j Alice][I' [I° []][vP [DP t<j>][v' [v°_k sent][VP [^DP her mother][V' [V° t<k>][^DP [D° a][NP [N° book]]]]]]]]]
- (33) = [IP [^DP_j Alice][I' [I° []][vP [DP t<j>][v' [v°_k sent][VP [^DP a book][V' [V° t<k>][PP [P° to][^DP her mother]]]]]]]]]
- (34) = [IP [^DP_j John][I' [I° []][vP [DP t<j>][v' [v°_k gave][VP [^DP Jill][V' [V° t<k>][DP [D° the][^NP cold shoulder]]]]]]]]]
- (35) = [IP [^DP_j The film][I' [I° []][vP [DP t<j>][v' [v°_k put][VP [^DP Leeds][V' [V° t<k>][PP [P° on][^DP the map]]]]]]]]]
- (44) = [IP [^DP_j The club][I' [I° []][vP [DP t<j>][v' [v°_k gave][VP [^DP Liz][V' [V° t<k>][^DP [D° the][NP [N° post]]]]]]]]]
- (45) = [IP [^DP_j The club][I' [I° []][vP [DP t<j>][v' [v°_k gave][VP [VP [^DP Liz][V' [V° t<k>][^DP [D° the][NP [N° post]]]]]] [^PP for two years]]]]]
- (46) = [IP [^DP_j The club][I' [I° []][vP [vP [DP t<j>][v' [v°_k gave][VP [^DP Liz][V' [V° t<k>][^DP [D° the][NP [N° post]]]]]]] [^PP in two minutes]]]
- (48) = [IP [^DP_j The club][I' [I° []][vP [vP [DP t<j>][v' [v°_k gave][VP [VP [^DP Liz][V' [V° t<k>][^DP [D° the][NP [N° post]]]]]]] [^PP for two years]]]] [^PP in two minutes]]]
- (51) = [IP [^DP_j The club][I' [I° []][vP [^PP in two minutes] [vP [DP t<j>][v' [v°_k gave][VP [^DP Liz][V' [V° t<k>][^DP [D° the][NP [N° post]]]]]]]]]]]
- (53) = [IP [^DP_j Ed][I' [I° []][vP [DP t<j>][v' [v°_k put][VP [^DP the money][V' [V° t<k>][PP [P° into][^DP his Swiss account]]]]]]]]]
- (54) = [IP [^DP_j Ed][I' [I° []][vP [DP t<j>][v' [v°_k put][VP [VP [^DP the money][V' [V° t<k>][^PP [P° into][^DP his account]]]]] [^PP for two years]]]]]
- (55) = [IP [^DP_j Ed][I' [I° []][vP [vP [DP t<j>][v' [v°_k put][VP [^DP the money][V' [V° t<k>][PP [P° into][^DP his account]]]]]]] [^PP in two minutes]]]
- (57) = [IP [^DP_j Ed][I' [I° []][vP [vP [DP t<j>][v' [v°_k put][VP [VP [^DP the money][V' [V° t<k>][PP [P° into][^DP his account]]]]] [^PP for two years]]]] [^PP in two minutes]]]
- (59) = [IP [^DP_j Ed][I' [I° []][vP [^PP in two minutes] [vP [DP t<j>][v' [v°_k put][VP [^DP the money][V' [V° t<k>][PP [P° into][^DP his account]]]]]]]]]