Telicity-sensitive PPs and double objects

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This paper will discuss the double object construction, and based on data concerning PPs sensitive to telicity, it will present support for an analysis in terms of VP-shells as suggested in slightly different versions in Larson (1988), Chomsky (1995: 280–290, 302–307), Kratzer (1996), Beck & Johnson (2004) (and also S. Vikner 1989), and to some extent also in Müller (1995: 188–200).

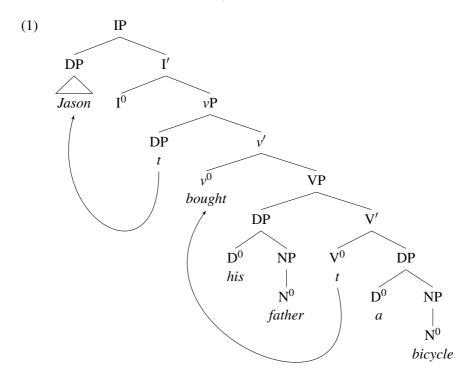
In (1), the verb *bought* is taken to be a complex predicate meaning something like "cause to have". In (1), *Jason* is the subject, the AGENT, *his father* is the indirect object, the BENEFICIARY, and *a bicycle* is the direct object, the THEME. The **vP** thus corresponds to the entire complex event, *Jason* causing *his father* to have *the bicycle*, whereas the **VP** corresponds to the resulting state, where *his father* has *the bicycle*.

Our argumentation will be very similar to the one in Beck & Johnson (2004), except where they discuss different meanings of modification of vP or VP by *again* (viz. repetitive vs. restitutive), we will consider modification of vP or VP by temporal PPs. As in Vikner & Vikner (1997: 270), and in discussions referred to there, we assume (at least) the following aspectual verb classes (*Aktionsarten*): events, processes, and states.

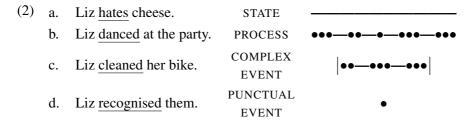
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Processes and states have in common that they are unbounded (*atelic*), see (2a,b), because we abstract away from their beginning and end. They are different in that states are completely static, involving no change at all, whereas processes (called activities in Vendler 1967: 100) are dynamic, in that they admit gaps and internal changes.



In contrast, events, both complex and punctual ones, are bounded (*telic*), see (2c,d), as they finish with a completion, i.e. they have an endpoint. (In Vendler

1967: 100, complex and punctual events are called accomplishments and achievements.)

Testing for telicity can be done in a number of ways, including the following: If you were asked halfway through X-ing whether you had X-ed, the answer would be yes for atelic Aktionsarten (e.g. Have you looked for the key? in (5) below), but no for telic Aktionsarten (e.g. Have you found the key? in (7) below). All Aktionsarten are thus either telic or atelic:

(3) atelic = 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, Danish and French in C. Vikner 1994: 148–149 (and in many other places, incl. Vendler 1967: 101; Fillmore 1975: 36; Dowty 1979: 50, 60; Dahl 1981: 79, 84; Krifka 1989: 166–170; Smith 1991: 157–159; Krifka 1992: 32):

(4) states (atelic, En. for/Da. i)

a. ... because she missed licorice **for** three years. En.

b. *... because she missed licorice in three years.

Da. ... fordi hun savnede lakrids i tre år.

d. * ... fordi hun savnede lakrids på tre år.

(atelic, En. for/Da. i) (5) processes

a. ... because he looked for the key **for** half an hour. En.

b. *... because he looked for the key in half an hour.

Da. ... fordi han ledte efter nøglen i en halv time.

d. * ... fordi han ledte efter nøglen på en halv time.

(6) a. ... because they biked in Leipzig for three years. En.

b. *...because they biked in Leipzig in three years.

c. ... fordi de cyklede i Leipzig i tre år. Da.

d. * ... fordi de cyklede i Leipzig på tre år.

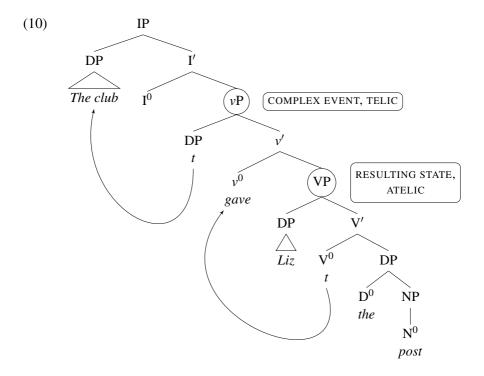
(7) **complex events**

- (**telic**, En. for/Da. i)
- En. a. *... because he found the key for half an hour.
 - b. ... because he found the key in half an hour.
- Da. c. *... fordi han fandt nøglen i en halv time.
 - d. ...fordi han fandt nøglen på en halv time.
- (8) En. a. *... because they assembled the bike for three hours.
 - b. ... because he assembled the bike **in** three hours.
 - Da. c. *... fordi de samlede cyklen i tre timer.
 - d. ... fordi de samlede cyklen på tre timer.

The interesting thing about clauses with double objects is that they allow **both** types of temporal modification:

- (9) En. a... because the club gave Liz the post of treasurer **for** two years.
 - b. ... because the club gave Liz the post of treasurer **in** two minutes.
 - Da. c... fordi klubben gav Lis posten som kasserer i to år.
 - d. . . . fordi klubben gav Lis posten som kasserer $\mathbf{p}\mathbf{\mathring{a}}$ to minutter.

This can be accounted for within the analysis in (1) above, as illustrated in (10) below. VP is a resulting **state** (atelic, temporal modification with for/i), whereas the entire vP is a **complex event** (telic, temporal modification with $in/p\mathring{a}$), and so the final PPs in (9a,c) can be interpreted as right-adjoined to VP, i.e. modifying the atelic resulting state, whereas the final PPs in (9b,d), can be interpreted as right-adjoined to vP, i.e. modifying the whole complex event.



This analysis 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:

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

Admittedly, a potential alternative account for the difference in grammaticality between (11a,c) and (11b,d) could be that in (11a,c), it is the the direct object DP which is modfied by the *for/i*-PP, i.e. that in (11a,c), we have a DP [*the post of treasurer for two years*]/[*posten som kasserer i to år*]. We do not find this a viable analysis, 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:

(12) 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 (11a,c) are also perfectly fine, we think it is justified to take them to be related to (12b,d) rather than to $(12a,c)^1$ even though we readily admit that examples with the structure of (12a,c) do exist, e.g. *They gave her* [the post of president for life].

The second prediction is that an $in/p\mathring{a}$ -PP is possible in the clause medial adverbial position preceding the finite main verb, but not a for/i-PP:

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

The reason why only the PPs that modify telic events are possible here is that the position of the PP in (13) precedes the finite main verb, the position of which is inside the vP but outside the VP, as seen in (10) above. Thus a PP preceding the finite main verb can be interpreted as adjoined to (and modifying) the telic vP but not as adjoined to (and modifying) the atelic VP.

Furthermore, a parallel analysis in terms of vP and VP can also account

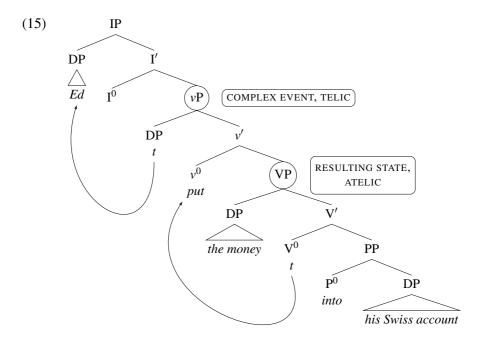
¹A further consideration against the reanalysis of (11a,c) along the lines of (12a,c) is that such a reanalysis is not possible in the case of the otherwise parallel (16a,c) below.

for data like those in (14), which shows 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:²

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

This can be accounted for within the analysis in (1) above, as illustrated in (15) below. VP is a resulting **state** (the money is in the account, atelic, temporal modification with for/i), whereas the entire vP is a complex event (the putting of the money into the account, telic, temporal modification with in/på), and so the final PPs in (14a,c) can be interpreted as right-adjoined to VP, i.e. modifying the atelic resulting state, whereas the final PPs in (14b,d), can be interpreted as right-adjoined to vP, i.e. modifying the whole complex event.

²The relevant reading of (14a) is the one in which there is a single event of depositing the money, which remains in the account for two months. There is an additional readingirrelevant for our purposes-where put the money into his Swiss bank account is interpreted as a repeated/habitual event. On this reading, for two months would be modifying the vP.



Once more, there are two further predictions. The first is that both types of PP may be present clause finally but 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:

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

The second prediction is that an $in/p\mathring{a}$ -PP is possible in the clause medial adverbial position preceding the finite main verb, but not a for/i-PP:³

³As expected, (17a) is acceptable to the extent that it is possible to give it the (irrelevant)

- (17)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.
 - c. *... fordi Ib i to år placerede pengene på sin schweiziske Da. konto.
 - d. ... fordi Ib på to minutter placerede pengene på sin schweiziske konto.

The reason why only the PPs that modify telic events are possible here is that the position of the PP in (17) precedes the finite main verb, the position of which is inside the vP but outside the VP, as seen in (15) above. Thus a PP preceding the finite main verb can be interpreted as adjoined to (and modifying) the telic vP but not as adjoined to (and modifying) the atelic VP.

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.

By using an approach very similar to the one in Beck and Johnson (2004), we have tried to show that PPs that are only compatible with atelicity (e.g. En. for two years, Da. i to år) gives us a way of spotting (or a way of arguing for the existence of) atelic resulting states both inside double object examples, e.g. give somebody something, and inside DP-PP examples like give something to somebody. This is then a small but hopefully significant step in the direction of bringing the syntax and the semantics of these types of examples into closer alignment.

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reading mentioned in the previous footnote, where the vP has a habitual reading and can therefore be modified by for two months.

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