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Stripping and topless complements

In this squib I show that the combination of a certain view of ellipsis and a particular approach to the structure of embedded root clauses makes a prediction about the presence of complementizers in elliptical structures—specifically in stripping contexts—which surprisingly is correct.

1. A restriction on stripping

Stripping refers to constructions such as (1) in which an entire clause except the subject is elided. Following Merchant 2003), who provides several arguments against a structure involving movement of the remnant from a conjoined subject, I will assume that stripping involves a structure with clausal conjunction (to be specified below) and clausal ellipsis.

(1) a. *Abby speaks passable Dutch, and BEN, too.* [Merchant 2003: (1)]
b. *Abby speaks passable Dutch, AND Ben.* [Merchant 2003: (2)]
c. *Abby can speak passable Dutch, and Ben, too.*

As discussed by Merchant, stripping is only possible in contexts of conjunctions and is excluded in embedded contexts such as (2a-d). Corresponding VP-ellipsis constructions, on the other hand, are possible (cf. (2e,f).

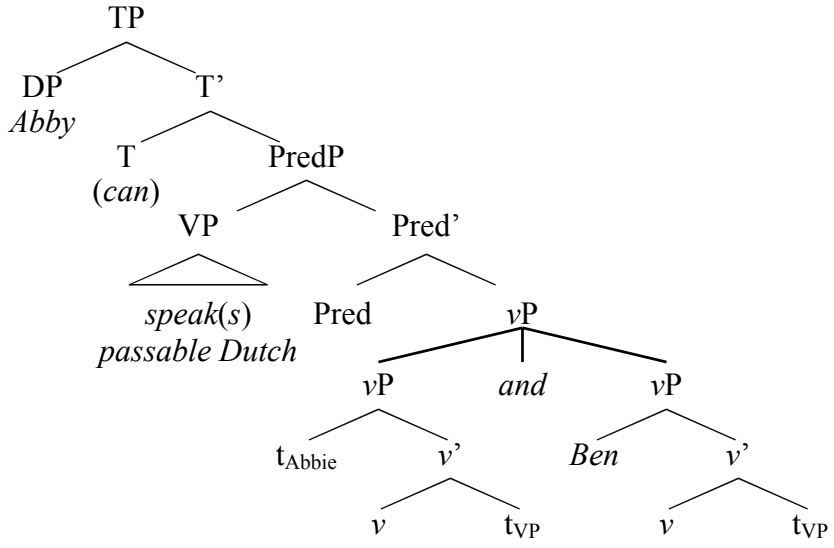
(2) *Abby wanted to take Dutch,* [Merchant 2003: (20)]
a. **because Ben.*
b. **only while Ben too.*
c. **after not Ben*.
d. **Abby claimed Ben would ask her out, but she didn't think that Bill (too).*
[Merchant 2003: (21)]

e. *Abby wanted to take Dutch because Ben does.*

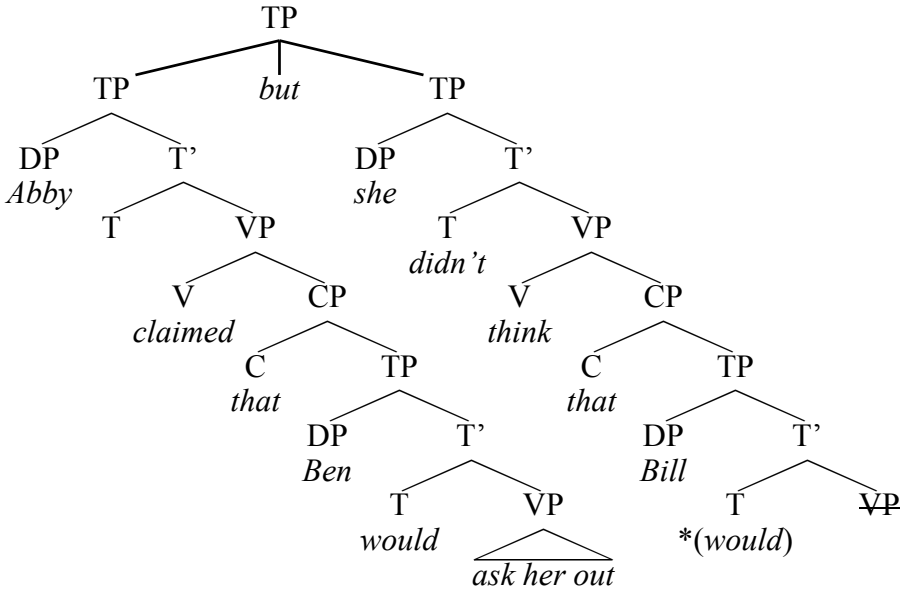
f. *Abby claimed Ben would ask her out, but she didn't think that Bill would.*

There are two current proposals for how this restriction can be accounted for. Following Johnson (2009), who discusses a similar restriction in gapping, stripping could involve *v*P coordination as in (3a), with the shared VP undergoing ellipsis or across-the-board movement. Since conjunction is one clause up in (3b) (=(2d)), a low *v*P coordination structure is not possible, and therefore, the modal *would* and the lowest VP cannot be shared by the two conjuncts (i.e., across-the-board movement of the VP above the conjunction is not possible). Only a VP-ellipsis configuration in which the embedded modal is present in the second conjunct can be derived.

(3) a. =(1b,c)

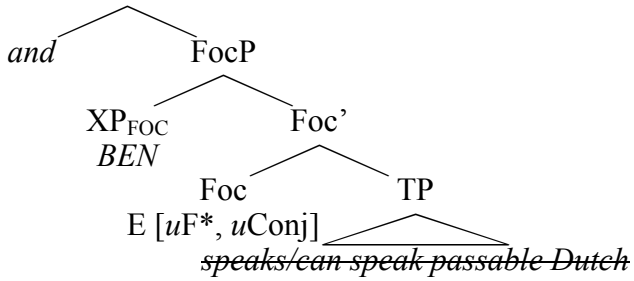


b. =(2d,f)



A different approach would be, following Merchant (2003), to encode the stripping restriction as part of the lexical properties of the feature licensing ellipsis as in (4). Merchant suggests that the head selecting the TP in a stripping context is equipped with an ellipsis feature ($E_{stripping}$) which licenses its complement to be elided. $E_{stripping}$ involves a strong focus feature which attracts a focus element to its specifier. Furthermore, $E_{stripping}$ involves an uninterpretable feature *u*Conj which needs to be checked by a higher conjunction. The restriction that stripping is only possible in conjunctions thus comes from the feature licensing ellipsis.

(4) =(1b,c)



While these two approaches capture the basic stripping data in (1) and (2), I show below

that they make the wrong prediction for certain embedding structures. Before doing so, I introduce another approach to ellipsis, which, together with a particular view of phasehood, also derives the contrasts in (1) and (2). My proposal will basically follow Merchant's structure, but the licensing of ellipsis will be assumed to be different.

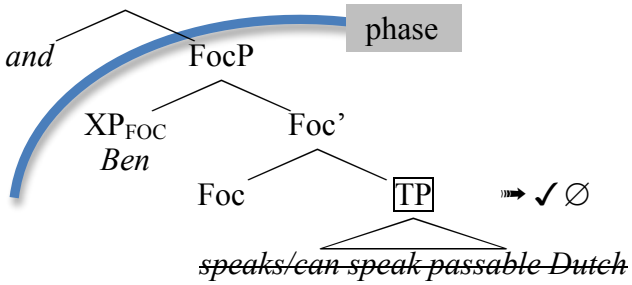
2. Ellipsis as zero spell-out

Recently, several works have proposed that ellipsis is a form of spell-out: phase heads trigger spell-out of their complements, and ellipsis is the option of not realizing a spell-out domain at PF (see Gengel 2006, 2009, Gallego 2009, van Craenenbroeck 2010, Rouveret 2012, Bošković To appear). Thus, elided constituents are unpronounced spell-out domains. I will refer to this approach as the *zero spell-out* approach.

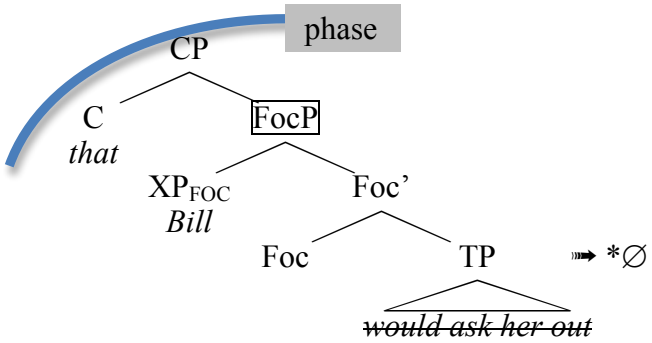
Under a zero spell-out approach to ellipsis, stripping and the embedding restriction can be derived from a structural difference between (1) and (2), as illustrated in (5). The crucial assumption followed here is that phasehood is determined contextually—the top projection of a cyclic domain, whatever it's category or size, functions as a phase (see Bobaljik and Wurmbrand In press, Bošković To appear, Wurmbrand To appear-a for details and arguments for such a dynamic phasehood view). In a regular stripping context such as (5a), the top projection of the stripping clause is the focus phrase (following Merchant's basic structure), hence the TP is a spell-out domain and leaving that spell-out domain unpronounced is predicted to be possible. In the embedded context in (5b), on the other hand, the top projection of the embedded clause is the CP, making the FocP the spell-out domain. Since the TP is not a spell-out domain, stripping is correctly predicted to

be impossible.

(5) a. =(1b,c)



b. * =(2d)



This approach predicts that the complement of a phase head C should be elidable, which is the case in standard sluicing constructions (see Merchant 2001, van Craenenbroeck 2010, among many others). While being a spell-out domain is a necessary condition on ellipsis it is, of course, not a sufficient condition. In addition to involving the appropriate structural configuration, ellipsis is also subject to a parallelism/identity requirement between the elided and antecedent constituent (see, among many others, Sag 1976, Fiengo and May 1994, Johnson 2001, Merchant 2001, 2008, 2009/11). In the present context, this will exclude ellipsis of FocP (which would be a spell-out domain) in cases such as (5b) (cf. **Abby speaks passable Dutch, because* ~~*Ben speaks passable Dutch*~~).[1]

[1] Following Merchant (2007), I assume that two conjuncts with parallel traces, which are bound by different antecedents outside the conjuncts qualify as identical for the purpose of ellipsis. That is, the TP [$_{TP}$ t$_{Abby}$

Lastly, parallelism/identity is at play and responsible for the contrast in (6).

(6) a. **Abby speaks passable Dutch,* (*al*)*though Ben too.* [Merchant 2003: (38a)]
b. *Abby speaks passable Dutch,* (*al*)*though not Ben.* [Merchant 2003: (38c)]
c. *Abby speaks passable Dutch,* (*but*) *not Ben*. [Merchant 2003: (1c)]

I assume that in the contexts above, *but* and *although* are coordinators which require different polarity in the two conjuncts (cf. (7)). This is possible in VP-ellipsis contexts (cf. (8)a), since the TP in the second conjunct is overt (only the VP is elided) and can thus be different from the TP in the first conjunct. In stripping contexts, however, parallelism requires that the two TPs be identical. Since, as shown in (8b), the elided TP (the highlighted part) cannot simultaneously involve the same polarity value (as required by parallelism) and a different polarity value (polarity reversal triggered by *but, although*), stripping in (6a) is impossible. The only context which allows both requirements to be met is when the TP matches in polarity, but the remnant of ellipsis involves polarity reversal. This is the case in (6b), illustrated in (8c), where the focused phrase involves constituent negation.[2]

(7) a. *Abby speaks passable Dutch, but Ben doesn't/*does.*
b. *Abby doesn't speak Dutch, but Ben does/*doesn't.*
(8) a. $[_{TP\ [-Neg]}$ *Abby speaks Dutch*] *but* $[_{TP\ [+Neg]}$ *Ben doesn't* $[_{vP}\ t_{Ben}$ ~~VP~~]] ✓VPE

speaks passable Dutch] in (1b) is an appropriate (identical) antecedent for the elided TP $[_{TP}\ t_{Ben}$ *speaks passable Dutch*].

[2] Merchant (2003) leaves open whether examples such as (6b) involve constituent negation or a NegP projected above the focus phrase. Unless NegP constitutes a phase by itself, the zero spell-out approach is only compatible with the former (i.e., (6b) has the structure in (5a) with *not* being part of the focus XP).

b. [$_{FocP}$ *Abby* [**TP [-Neg]** t_{Abby} ***speaks*** *passable Dutch*]] *but* =(6a)

*[$_{FocP}$ *Ben* [**TP [-Neg]** t_{Ben} ***speaks*** *passable Dutch*]] *polarity

*[$_{FocP}$ *Ben* [**TP [+Neg]** t_{Ben} ***doesn't speak*** *passable Dutch*]] *parallelism

c. [$_{FocP}$ *Abby* [**TP [-Neg]** t_{Abby} ***speaks*** *passable Dutch*]] *but* =(6b)

[$_{FocP}$ *not Ben* [**TP [-Neg]** t_{Ben} ***speaks*** *passable Dutch*]] ✓ polarity, ✓ parallelsim

3. Stripping and embedded root clauses

Although the three accounts discussed above make the same prediction regarding the examples in (1) and (2), there is one context in which they differ. Both Johnson's low coordination account and Merchant's $E_{Stripping}$ feature account prohibit stripping in contexts where the elided XP is embedded in a clause, even if that higher clause is part of a conjunction. The zero spell-out account, on the other hand, predicts stripping to be possible in embedded clauses, as long as there is no CP. Recall that the crucial difference between (5a) and (5b) is the presence of the CP. If there is no CP, the TP is a spell-out domain and can thus be elided. In contrast, if a CP is present, TP is not a spell-out domain, and hence cannot be elided. Are there cases of embedded clauses where CP is missing? This is a controversial issue. There are certainly cases in which there is no complementizer in the embedded clause (cf. *Abby claimed* (*that*) *Ben would ask her out*.). But whether such clauses involve a CP-less structure or an embedded CP with an empty complementizer is still under debate (see, among others, Pesetsky and Torrego 2001, 2004, 2007, Bošković and Lasnik 2003 for the empty complementizer view; and Hegarty 1991, Webelhuth 1992, Doherty 1993, 1997, 2000, Bošković 1997, Svenonius 1994, Franks 2005, Wurmbrand To appear-b for a CP-less approach). While I will not be able to solve this debate, I believe

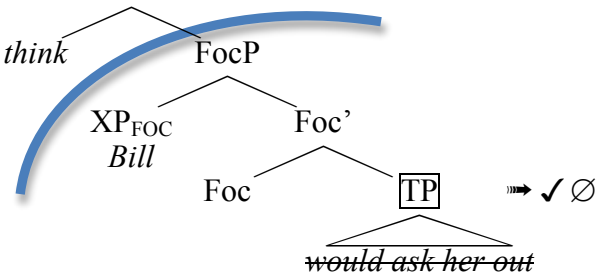
the properties of stripping may shed some interesting new light on this issue. As shown in (9), there is a sharp contrast between Merchant's embedding example repeated in (9a), in which the complementizer is present, and the corresponding example in (9b) where the complementizer is omitted.

(9) a. **Abby claimed* (*that*) *Ben would ask her out, but she didn't think <u>that</u> Bill (too).*
b. *Abby claimed* (*that*) *Ben would ask her out, but she didn't think Bill (too).*

It is hard to see how the difference between (9a) and (9b) can be accounted in Johnson's or Merchant's approaches.[3] As in (3b) (=(9a)), conjunction one clause up from the clause with the stripped material in (9b) would prohibit low *v*P coordination and sharing of the embedded VP and IP. The presence or absence of a complementizer would not make any difference here. Similarly in Merchant's approach, the $E_{Stripping}$ feature would need to be licensed by conjunction, which is too far away in (9a), and it would presumably also be too far away in (9b).

The account proposed in the previous section, however, predicts exactly this distribution, however, only if embedded *that*-less clauses are simple TPs as suggested by the authors above. This is shown in (10): *think* combines with a CP-less embedded clause, which makes the focus phrase the top projection and hence a phase, which in turn makes the embedded TP a spell-out domain. Zero spell-out of the TP is thus correctly predicted to be possible in (9b) in contrast to (9a).

[3] Note that (9b) cannot assumed to involve a parenthetical higher clause, since **Abby claimed Ben would ask her out, but Bill (too)* is impossible—the negation has to be part of the basic $XP_{[-Neg]}$ *but* $XP_{[+Neg]}$ conjunction.

(10) 

=(9b)

4. Extensions and conclusion

The restrictions noted for stripping are very similar to restrictions known for gapping. Since the distribution of gapping is considerably more complex, I can only provide a preliminary suggestion for how to extend the current account of stripping to similar facts found with gapping. Like stripping, gapping appears to be restricted to conjunctions and be impossible in embedded contexts (see, among others, Koutsoudas 1971, Sag 1976, Hankamer 1979, Wilder 1994, Williams 1997, Johnson 2001, 2009). This is illustrated in (11).[4] If gapping can be analyzed as involving movement of multiple XPs to a TP-external focus projection, the difference between (11a) and (11b-e) can be derived in the same way as suggested for analogous examples with stripping. This would then lead us to expect that omission of a complementizer as in (11f) should also show an ameliorating effect in gapping. While most speakers consulted find a contrast between (11e) and (11f), judgments for gapping are in general significantly less clear and stable, and further empirical studies are needed to see whether a unification of stripping and gapping is possible.

[4] All examples in (11) become grammatical with pseudogapping, which, in the current approach would involve focus movement to a focus projection above *v*P; the FocP closes off the extended *v*P phase, making the *v*P a spell-out domain and hence elidable (see Merchant 2007, 2008, Bošković To appear).

(11) a. *Some have served mussels to Sue and others ~~have served~~ swordfish.*

[Johnson 2009: (1)]

b. **Some had eaten mussels because others ~~had eaten~~ shrimp.*

[Johnson 2009: (13)]

c. **Some will eat mussels because others ~~will eat~~ shrimp.*

d. **Some had eaten mussels and she claims that others ~~had eaten~~ shrimp.*

[Johnson 2009: (15)]

e. **Some will eat mussels and she claims that others ~~will eat~~ shrimp.*

f. %*Some will eat mussels and she claims others ~~will eat~~ shrimp.*

To conclude, I have proposed that a zero spell-out approach to ellipsis, together with a dynamic phasehood view, provides a straightforward account of the distribution of stripping in English. Following Merchant's proposal that stripping involves focus movement outside the TP, followed by TP-ellipsis, the zero spell-out approach correctly predicts that stripping is possible only in cases in which there is no CP projection on top of the focus projection. Furthermore, stripping has been shown to be possible in embedded contexts, however, again only if no complementizer is present. These facts, while puzzling for other ellipsis approaches, follow from a zero spell-out approach combined with the view that embedded root clauses are CP-less. The ellipsis approach proposed here also extends to sluicing (CP phase, TP spell-out domain), NP-ellipsis (DP phase, NP spell-out domain), pseudogapping (FocP phase, *v*P spell-out domain; see fn. 4), and basic VP-ellipsis (*v*P phase, VP spell-out domain). However, the distribution of the latter is more complex, and a detailed account of the structural and phasal properties of complex VPs (VPs with auxiliaries and modals) has to wait for another time.

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