Parenthesis: syntactic integration or orphanage?

(A rejoinder to Ott 2016)

James Griffiths & Mark de Vries

University of Konstanz & University of Groningen

(postprint version, 2017, to appear in *Linguistic Inquiry*)

1. Introduction

A question that fuels sustained debate in the generative literature on parenthesis is whether or not parentheticals are syntactically connected to their host clauses. All three conceivable stances on this matter, which are that (i) all parentheticals are syntactically *integrated*, (ii) all parentheticals are syntactic *orphans*, and (iii) some parentheticals are integrated but others are orphans, have been defended.[1] One class of parentheticals that has received much recent attention with regards to this issue is *appositive relative clauses* (ARCs).

In support of a more general integrational view, Griffiths & De Vries (2013, henceforth G&dV) offer an additional specific argument in favour of treating ARCs as syntactically integrated into their hosts. This argument revolves arounds the distribution of ARCs in clausal ellipsis environments. In a recent reply to G&dV, Ott (2016) counters this specific argument, discards the more general integration analysis adopted by G&dV on conceptual grounds, and contends that an orphanage analysis of ARCs provides a more parsimonious explanation for the data that G&dV introduce.

In this more elaborate rejoinder to Ott's (2016) reply, we demonstrate that, while Ott presents some relevant data and provides welcome discussion, his specific counterargument to G&dV does not withstand scrutiny. More importantly, we also defend the integration approach to ARCs (and to parenthesis more generally) on conceptual and empirical grounds. In particular we wish to stress that, if one given implementation of the integration analysis exhibits shortcomings, this does not logically imply that parentheticals must be orphans. Indeed, we will demonstrate that recent research on the 'syntacticisation' of speech acts engenders an integration analysis that does not exhibit the conceptual deficiency that Ott attributes to G&dV's analysis. Lastly, we examine the orphanage analysis of ARCs and argue that such an approach has conceptual and empirical inadequacies that no integration approach exhibits.

2. The narrow issue

This section addresses the narrow issue at hand. We demonstrate that Ott's counterarguments to G&dV's analysis of ARCs are not warranted. We first outline the analysis briefly in §2.1, before addressing Ott's critique in §2.2 and 2.3. We return to

[1] In the recent generative literature, among others, De Vries (2012) and Griffiths (2015) argue that all parentheticals are integrated, Haegeman (2009), Döring (2014), and Ott (2016) argue that all parentheticals are orphans, and Arnold (2007), Cinque (2008), and Del Gobbo (2017) argue for a mixed approach. See De Vries (2006), Dehé & Kavalova (2007), and Dehé (2017) for more references and literature reviews.

the broader issue concerning the conceptual and empirical viability of integration and orphanage analyses of parenthesis more generally in §3.

2.1. *The original argument*

The relevant data with which G&dV (and consequently, Ott) are concerned involve dialogues as in (1), where a/b/c are alternative answers to A's question by B. For previous discussion of comparable data, see also Arnold & Borsley (2008).

(1) A: Who stole Mary's car?

a. B: John, who's a notorious thief. (who = John)
b. B: John, which is awful. (which = John stole Mary's car)
c. B: * John, which is blue. (which = Mary's car)

G&dV claim that, when analysed from an integrationist perspective, the pattern of acceptability observed in (1) provides additional evidence for the idea that ARCs are syntactically connected to their hosts. For current purposes the details of their integration analysis are irrelevant and it therefore suffices to state that G&dV assume that, all things being equal, ARCs are MERGED in some way within their anchors' maximal projection (2).[2] (We return to discuss the mechanics of the analysis in §3.2.)

(2) … [$_{XP}$ anchor [$_{ARC}$ …]] …

According to Merchant (2004), who claims that ellipsis is non-pronunciation of syntactic material, fragment answers are A′-moved remnants of constituent deletion. Adopting this proposal, G&dV claim that utterances such as (1a-b) are acceptable because constituent deletion successfully applies (3a-b) and that utterances such as (1c) are unacceptable because it does not (3c); that is, the string to be deleted (in strikethrough) does not match the actually licensed ellipsis site (indicated between chevrons).

(3) a. [[$_{DP}$ John$_i$ [$_{ARC}$ who$_i$'s a notorious thief]]$_1$ <~~[t_1 stole Mary's car]~~>].
b. [$_{CP}$ [John$_1$ <~~[t_1 stole Mary's car]~~>]$_i$ [$_{ARC}$ which$_i$ is awful]]
c. * [John$_1$ <~~[t_1 stole [$_{DP}$ [Mary's car]~~]$_i$ [$_{ARC}$ which$_i$ is blue]]]>].

Because their explanation for (1c)'s unacceptability is straightforward and can only be formulated within an integration framework, G&dV conclude that the pattern of acceptability observed in (1) supports the integration approach to ARCs.

2.2. *ARCs, ellipsis, and extraposition*

Ott's first argument against G&dV's analysis revolves around extraposition. He argues that the analysis is flawed because the ARC in (1c) could occupy an extraposed position above the ellipsis site (4).[3] If (4) is a possible representation of (1c) then G&dV's analysis incorrectly predicts that (1c) should be acceptable, as no non-

[2] An *anchor*, in much of the literature on ARCs, is the host clause constituent with which an appositive relative pronoun/operator co-refers.

[3] For concreteness, we treat extraposed elements as first-MERGED to the right, linearly following the intervening material. Nothing hinges on this analysis of extraposition, however.

constituent deletion occurs in (4).

(4) [John$_2$ [<~~[t_2 stole [Mary's car]$_i$]~~> [$_{ARC}$ which$_i$ is blue]]]. (~ Ott's analysis)

Because ARCs are indeed attested in extraposed positions in non-elliptical environments,[4] Ott's reasoning seems initially compelling. However, we show that it is not on closer inspection.

For Ott's counterargument to go through, it must be demonstrated that the ARC is not only extraposed, but extraposed to a position outside of a possible ellipsis site. In examples such as (5), this is evidently not the case. Here, ellipsis targets everything below the CP level (including the auxiliaries), and the string to be deleted is not a constituent; therefore, the structure cannot be derived.

(5) A: Who might have stolen Mary's car yesterday?
B: * John, which is blue.
[$_{CP}$ John$_1$ <~~[$_{TP}$ might have [$_{vP}$ [t_1 stole Mary's car$_i$ yesterday]~~] [$_{ARC}$ which$_i$ is blue]]]>]

However, there are also cases that require a bit more discussion. We argue that even in a worst case scenario (involving verb phrase deletion, see below), a potentially extraposed ARC cannot be outside an ellipsis site that contains its anchor. In doing so, we must rely on independent knowledge about ellipsis and extraposition, since we cannot directly see what is going on below the surface in the relevant examples.

Importantly, appositive and restrictive relative clauses (RRCs) in English and other languages show the same limitations on their linear distribution (cf. Arnold 2007, among others).[5] In both cases, the relative clause must occupy a position either linearly adjacent to the anchor / head noun or at the right periphery of the clause that immediately contains the anchor / head noun. In other words, both appositive and restrictive relative clauses appear able to occupy extraposed positions, provided that the *Right Roof Constraint* (Ross 1967:185) is satisfied (compare 6 and 7).

(6) *Appositive relative clauses*
a. [That Jo met Adam$_i$ yesterday], [who$_i$'s a dissident], is scandalous.
b. * [That Jo met Adam$_i$ yesterday] is scandalous, [who$_i$'s a dissident].
c. * [That Jo met Adam$_i$ yesterday] is, [who$_i$'s a dissident], scandalous.

(7) *Restrictive relative clauses*
a. [That Jo met someone$_i$ yesterday] [who$_i$'s a dissident] is scandalous.
b. * [That Jo met someone$_i$ yesterday] is scandalous [who$_i$'s a dissident].
c. * [That Jo met someone$_i$ yesterday] is [who$_i$'s a dissident] scandalous.

---

[4] Some random examples are (i) and (ii):

(i) [Bill Wyman]$_i$ was phoning me, who$_i$ I'd known in the 1970s.

(ii) Did you talk to Bill$_i$ yesterday, who$_i$ knows Hillary Clinton?

[5] We set aside some exceptional cases. Under well-defined conditions that are irrelevant for our current purposes, ARCs can precede or interpolate within a clausal anchor; see (i) and (ii), from Griffiths (2015:151).

(i) Their apparently similar, sharply segmented body plan either arose more than once or, which$_i$ is also more than possible, [it is very primitive]$_i$ (Lee-Goldman 2012:578)

(ii) ? [Ben has – which$_i$ has started to annoy his wife – developed a tendency to whistle in the shower.]$_i$

Given such distributional similarities, let's see if *restrictive* relatives can occupy extraposed positions outside of ellipsis sites. Baltin (2006:241) demonstrates that this is not the case. In (8a) we represent the unabbreviated example (which is acceptable) for ease of comparison. Small caps represent pitch accents. In (8b), the combination of verb phrase ellipsis – indicated by strike-through – and RRC extraposition is blocked.

(8) a. JOHN kissed [a girl]$_i$ YESTERDAY who$_i$ I LOVE, and BILL kissed [a girl]$_k$ TODAY who$_k$ I HATE.
b. * JOHN kissed [a girl]$_i$ YESTERDAY who$_i$ I LOVE, and BILL did ~~kiss [a girl]~~$_k$ TODAY who$_k$ I HATE. (RRC)

Taking the correspondence between restrictive and appositive relatives seriously,[6] we are not surprised that the ARC counterpart to (8b) in (9a) is also unacceptable, as is the question-answer sequence in (9b), where the answer displays verb phrase ellipsis.

(9) a. * JOHN kissed Mary YESTERDAY, who I LOVE, and BILL did ~~kiss Mary~~ TODAY, who he actually HATES. (ARC)
b. A: Who stole Mary's car?
B: * John did, which is blue.

In our analysis, this is because an illicit instance of non-constituent deletion occurs. This is evident if the ARC resides in its regular position directly attached to the anchor (10a), but even extraposition to the *v*P-level (10b) does not solve the problem: the ARC is still within the licensed ellipsis site (the structural complement of *did*).

(10) a. * [John did <~~[~~$_{vP}$ ~~[steal [[Mary's car]~~$_i$ [$_{ARC}$ which is blue]]]]>].
b. * [John did <~~[~~$_{vP}$ ~~[steal [Mary's car]~~$_i$~~]~~ [$_{ARC}$ which$_i$ is blue]]>].

Regarding (10b), notice that extraposed modifiers of *objects* attach within the verbal domain, as is well-known (see e.g. Baltin 1981, Büring & Hartmann 1995, De Vries 2002).[7] By contrast, extraposed modifiers of *subjects* may attach within the tense domain (Culicover & Rochemont 1990), as is evidenced, among other things, by their ability to escape verb phrase ellipsis; see (11), for instance:

(11) Although not [many people]$_i$ would ride with Ad who$_i$ knew just him, some$_k$ would <~~ride with Ad~~> who$_k$ knew his brother. (Baltin 2006:241)

Furthermore, a comparison of the examples in (12) demonstrates that the attachment site of extraposed subject relative clauses is contained within the site of clausal ellipsis (i.e. within the tense domain). The response in (12b), when uttered with *pair-*

[6] Note that the restrictive interpretation obtained for the relative clauses in (8a/b) is conveyed by their prosodic integration and intersective semantics. Resultantly, the use of the relative pronoun *who* in each relative clause is purely coincidental. The same restrictive interpretation is obtained if the relative pronoun is substituted for the complementiser *that* in each case.

[7] Binding effects (using quantifiers, for instance) show that subjects scope over extraposed object-related phrases, etc. If there is multiple extraposition, a nested pattern is obligatory (mirror effects); cf. De Vries (2002:Ch7) and references there.

list intonation, shows that a 'multiple fragment' response to (12A) is available.[8] The response in (12c) demonstrates that, although a multiple-fragment response is potentially available, unacceptability arises because the subject relative clause does not extrapose to a position above the ellipsis site. This means that such relative clauses must be caught within the clausal ellipse. (Note that the relative clause is necessarily interpreted as restrictive in this fragment answer context.)

(12) A: Who will ride with whom?

a. B: Someone$_i$ will ride with Ad who$_i$ knows his brother.

b. B: [Someone$_i$ who$_i$ knows Ad's brother]$_1$, [Ad]$_2$ <~~[~~t_1 ~~will ride with~~ t_2~~]~~>.

c. B: * [[Someone$_i$]$_1$, [Ad]$_2$ <~~[[~~t_1 ~~will ride with~~ t_2~~]~~ [who$_i$ knows his brother]]>].

Again taking the correspondence between restrictive and appositive relatives seriously, the unacceptability of (12c) supports the conclusion that (1c), which is repeated in (13B) below, is unacceptable because an illicit instance of non-constituent deletion occurs (i.e., where what is to be deleted does not match the licensed ellipsis domain), regardless of whether the ARC is extraposed (14a) or not (14b).

(13) A: Who stole Mary's car?
B: * John, which is blue.

(14) a. * [John$_1$ <~~[~~$_{TP}$ ~~[~~$_{TP}$ t_1 ~~stole [~~$_{DP}$ ~~Mary's car]]~~ [$_{ARC}$ which is blue]]>].

b. * [John$_1$ <~~[~~$_{TP}$ t_1 ~~stole [~~$_{DP}$ ~~Mary's car~~ [$_{ARC}$ which is blue]]]>].

To summarise, there are strong reasons to reject Ott's counterargument. Reasonably assuming that appositive and restrictive relatives extrapose to the same positions in the same contexts, one may conclude from the observation that extraposed restrictive relatives do not escape ellipsis that ARCs do not escape ellipsis either. This is supported by independent work on ellipsis and extraposition. Roughly, verb phrase ellipsis targets *v*P (cf. Merchant 2013:80), while clausal ellipsis targets TP (Merchant 2001) or perhaps higher (Thoms 2011). When we combine this with the generalisation that an extraposed element attaches to the lowest node that contains its regular surface position (next to the anchor) and the intervening material (cf. footnote 7 and the references cited in the main text), it follows that ARCs do not occupy a position above the ellipsis site.[9] Consequently, the possibility of extraposition does not straightforwardly invalidate G&dV's explanation of the pattern in (1), contrary to Ott's suggestion.

---

[8] We provisionally adopt a 'stacking' analysis of multiple fragments (Merchant 2004:711), as the conclusion reached in the main text (namely, that non-*wh* constituents cannot escape ellipsis via extraposition) militates against a theory of multiple fragments that treats one remnant as leftward-moved and the other as rightward-moved. (Lasnik 2014:14, who outlines such a theory for multiple sluicing, concedes that his analysis cannot be extended to multiple fragment answer constructions: a concession that Ott (2016:583) appears unaware of.)

[9] An anonymous reviewer wonders whether a deeper explanation is available for why extraposed phrases cannot escape ellipsis sites. Because this phenomenon is a locality effect, we suggest that phase theory (Chomsky 2001) may offer fruitful insights. For instance, the data discussed in §2.2 appear to indicate that extraposition is phase-bound. If ellipsis targets entire phases, as Fox & Pesetsky (2005) and Aelbrecht (2012), claim, then a deeper explanation is obtained. Investigating the tenability of such an explanation requires an in-depth discussion of the syntactic nature of ellipsis, however, which cannot be undertaken here.

2.3. *The prominence of the anchor*

In the dialogue in (1), which is repeated in (15), one observes that (i) the nominal anchor for *who* in (15a) is fully pronounced, (ii) the clausal anchor for *which* in (15b) is partially pronounced, and (iii) the nominal anchor for *which* in (15c) is entirely unpronounced. In the early stages of their analysis, G&dV form the generalisation in (16) from this observation.

(15) A: Who stole Mary's car?
  a. B: John, who's a notorious thief.
  b. B: John, which is awful.
  c. B: * John, which is blue.

(16) An ARC can only surface next to an anchor that is at least partially overt.

Ott argues that the generalisation in (16) can be subsumed under the generalisation in (17). He claims that, once (16) is thus subsumed, G&dV's appeal to non-constituent deletion to capture the unacceptability of utterances such as (15c) is unnecessary.

(17) Appositive relative pronouns anaphorically resume the most prominent featurally compatible antecedent in the preceding discourse.
(modified from Ott 2016:584 – *to be rejected*)

Here, *preceding discourse* refers to all linguistic material that precedes the ARC, including that portion of the host clause that precedes the ARC. By *prominence*, Ott means information-structural prominence: the anchor of an ARC must be relatively new/focussed/non-topical. In what follows we show that this is simply incorrect.

When an ARC does not occupy an extraposed position, it turns out that the actual antecedent is always the *linearly closest* one, in fact the adjacent phrase.[10] Manipulating the information-structural configuration of the host utterance does not override this preference. Even when a linearly more distant potential antecedent β displays contrastive (18) or presentational (19) focus while the closest antecedent α does not, α is still the actual antecedent.

(18) A: I heard that the vizier presented a suitor to the princess.
  B: No, [the SULTAN]$_i$ presented [a suitor]$_k$, who$_{k/*i}$ I'm told is an old man, to her.

(19) A: Who presented a suitor to the princess?
  B: [The SULTAN]$_i$ presented [a suitor]$_k$, who$_{k/*i}$ I'm told is an old man, to her.

[10] Example (i) shows that no unrelated phrase may intervene between an ARC in a non-extraposed position and its anchor:

(i) John (*probably), who has a lot of money, bought a new car.

Example (ii) shows that even if the phi-features of the adjacent DP do not match with the requirements of the ARC, it is not the case that the linearly more distant, compatible DP can be interpreted as the anchor:

(ii) * The teacher$_{[SG]}$ provided the students$_{[PL]}$, who$_{[SG]}$ knows$_{[SG]}$ a lot, with advice.

Manipulating the information-structural configuration of the host utterance may influence the choice of antecedent only if an ARC occupies an extraposed position. In (20B) *who* can be associated with *the sultan*, a relatively distant but contrastively focussed antecedent. In (21B) *who* may also, but not exclusively, be associated with *the sultan*, which is presentionally focussed.[11] In both cases, *a suitor*, which is discourse-old, remains a possible antecedent.[12]

(20) A: I heard that the vizier presented a suitor to the princess.
B: No, [the SULTAN]$_i$ presented [a suitor]$_k$ to her, who$_{i/k}$ I'm told is an old man.

(21) A: Who presented a suitor to the princess?
B: [The SULTAN]$_i$ presented [a suitor]$_k$ to her, who$_{i/k}$ I'm told is an old man.

However, if both candidate anchors are contrastively focussed, then *who* can only be interpreted as co-indexed with the linearly closest anchor.

(22) A: I heard that the vizier presented a merchant to the princess.
B: No, [the SULTAN]$_i$ presented [a SUITOR]$_k$ to her, who$_{k/*i}$ I'm told is an old man.

An interesting case is the following. In (23), the appositive relative pronoun *which* can be interpreted as co-indexed with the immediately preceding clause or with the noun phrase *Bill's autobiography* (in which case the ARC is extraposed).

(23) A: That Bob's autobiography was stolen is worrying.
B: No, [that [BILL'S autobiography]$_k$ was stolen]$_i$, which$_{i/k}$ is awful (by the way), is worrying.

Based on the observations in (18) to (23) and footnotes 10 and 12, it we conclude that the information-structural status of the host clause constituents is irrelevant for determining the antecedent of an ARC. On almost all occasions the decisive factor is linear proximity. The only partial exception is utterances in which the ARC is

---

[11] The possibility to interpret presentationally focussed distant candidate anchors as co-referring with appositive relative pronouns in extraposed ARCs varies somewhat in English, as a comparison of (20) and (i)-(ii) below demonstrate (note that, for the second author, the Dutch equivalent of (i) is perfectly acceptable). An explanation for why this variation observed – which is potentially related to the *elaborative* or *continuative* nature of the discourse relation between the host clause and ARC (cf. Loock 2007) – is beyond the scope of this paper. We thank an anonymous reviewer for drawing our attention to the fact that variation is observed in this domain.

A: Who stole Mary's car?
(i) B: ? JOHN$_i$ stole Mary's car, who$_i$'s a notorious thief.
(ii) B: ? JOHN$_i$ did, who$_i$'s a notorious thief.

[12] Let us back this up with a Dutch minimal pair of examples, which shows a very clear contrast. In (i), where the ARC is sentence-medial, only the adjacent *minister* can figure as the anchor. In (ii), where the ARC is extraposed across the final participle, there is ambiguity: both the closest and the focussed DP are possible anchors.

(i) De corrupte PRESIDENT$_k$ heeft de minister$_i$, die$_{i/*k}$ gefraudeerd had, ontslagen.
the corrupt president has the minister who committed.fraud had fired

(ii) De corrupte PRESIDENT$_k$ heeft de minister$_i$ ontslagen, die$_{i/k}$ gefraudeerd had.
the corrupt president has the minister fired who committed.fraud had
'The corrupt president fired the minister, who committed fraud.'

extraposed *and* the host clause contains contrastive or presentational foci *and* the linearly closest phrase is less prominent. In such utterances, the antecedent is either still the linearly closest one or the closest possible antecedent that bears focus.

Returning to the main discussion, one sees that (16) cannot be subsumed under (24), which necessarily replaces the empirically incorrect generalisation in (17):

(24) In non-extraposed ARCs, appositive relative pronouns anaphorically resume the linearly adjacent (necessarily compatible) anchor in the preceding discourse.

Clearly, the two generalisations are incompatible: (16) is concerned with whether the anchor is pronounced, while (24) is concerned with the anchor's linear position. For extraposed ARCs, the situation is slightly more complicated, but, as we have seen, even in those cases linear proximity plays a role, so the conclusion still stands (in fact, the particulars related to extraposition can be ignored for the current purposes because extraposed ARCs never escape ellipsis, as was demonstrated in §2.2).[13]

Thus, we have shown that information-structure plays a negligible role in determining which compatible antecedents ARCs take as their anchors. Consequently, Ott's suggestion that ARCs must take 'anti-topical' antecedents (so non-prominent anchors, including unpronounced ones, are excluded) does not withstand scrutiny.[14]

A weaker position might still be defended, however. One may argue that G&dV's analysis is superfluous because the generalisation in (16) is actually an irreducible rule of grammar or discourse-structure that has no deeper explanation. This is unattractive from a minimalist point of view. But what is more, the generalisation in (16) appears to be empirically inadequate, as G&dV make clear. (Indeed, its inadequacy was the impetus for G&dV's more syntactic analysis.)

---

[13] In the example in (i), the relative pronoun refers to two anchors simultaneously. An anonymous reviewer remarks that one of these anchors is (obviously) not linearly adjacent to the relative pronoun.

(i) Kim bought Sandy a book$_i$, and Sam bought her a pen$_k$, [which$_{i+k}$ they gave her for Christmas].

(Arnold 2004)

Importantly, however, such 'split antecedent' interpretations of appositive relative pronouns are only available if the ARC occupies an extraposed position, as (ii) and (iii) demonstrate. So constructions like those in (i) are not counterexamples to the generalisation in (24).

(ii) * John$_i$ gave Mary$_k$, who$_{i+k}$ are my siblings, a gift.

(iii) * Kim heeft voor Sandy een boek$_i$ (gekocht) en Sam heeft voor haar een pen$_k$,
Kim has for Sandy a book bought and Sam has for her a pen

die$_{i+k}$ ze haar met de Kerst willen geven, gekocht.
DEM they her with the Christmas want.to give bought

'Kim bought Sandy a book, and Sam bought her a pen, which they intend to give her for Christmas.'

[14] Ott suggests that relative pronouns behave like *d*-pronouns in German, which are said to be anti-topical (cf. Bosch & Umbach 2007), and similarly for Dutch (cf. Van Kampen 2010), we could add. However, an example like (i) shows that the parallel breaks down. Here the *d*-pronoun and the personal pronoun in the second sentence preferably take complementary referents (under a regular intonation pattern). Unlike the demonstrative, the relative pronoun (also a *d*-form) can – and must – refer to *deze boef* 'this villain'. More generally, relative clauses can easily be attached to subjects, but demonstrative *d*-pronouns usually do not refer to a subject, unless it is focussed or contrasted.

(i) Jan$_j$ hoorde dat deze boef$_b$, die$_{*j/b/*v}$ een zwarte pet droeg, zijn vriend$_v$ had beroofd.
Jan heard that this villain who a black cap wore his friend had robbed

Hij$_{j/b/?v}$/die$_{*j/*b/v}$ was boos.
he/DEM was angry

'Jan heard that this villain, who wore a black cap, had robbed his friend. He/that man was angry.'

Specifically, it fails to capture the observation that (25B) is unacceptable even though part of the anchor *a book about Henry V* is overt.

(25) A: A book about WHICH English king did you read?
B: * Henry V, which was published in hardback.

Ott claims that sentences such as (25) are unacceptable because the appositive relative pronoun in (25B) cannot co-refer with a partially overt anchor (i.e. *a book about Henry V*) when a fully overt anchor is also available (i.e. *Henry V*), semantic plausibility aside. This explanation is untenable, however, because it leads to wrong predictions. In (26B) a fully overt compatible anchor (i.e. *a shark*) is available. Still, the utterance is ambiguous, as there is also an elliptical clausal antecedent for *which*. Ott's suggestion predicts that the appositive relative pronoun cannot co-refer with this partially overt clausal anchor *a shark bit John*, contrary to observation.

(26) A: What bit John?
B: $[\text{A shark}]_i$, $\text{which}_{i/k}$ was terrifying. (where k = *a shark bit John*)

To summarise: Ott offers two arguments that specifically target G&dV's analysis of the data in (1). The first is that the analysis fails to account for the possibility that ARCs may occupy extraposed positions (a possibility that purportedly invalidates their analysis), while the second is that the analysis is superfluous, as a simpler explanation is readily available. We have shown that neither of these criticisms is valid. We demonstrated in §2.2 that extraposition has no bearing on G&dV's analysis, and we showed in §2.3 that no simpler explanation of the relevant data is available.

3. The broader issue

The current debate about how best to capture the distribution of ARCs in elliptical environments touches on the broader issue of how parenthesis should be analysed more generally: are parentheticals syntactically integrated into their hosts, or are they orphans? In this section we address this broader issue, returning to additional comments provided by Ott (2016) when relevant.

3.1. *Integration versus orphanage within the Minimalist framework*

In order to place this section's discussion on clear conceptual foundations, we begin by explicating precisely what 'integration' and 'orphanage' mean within the Minimalist framework of grammar (Chomsky 1995 et seq.). We do this because no previous theory of orphanage – each of which varies dramatically from the next (for instance, compare Espinal 1991, Haegeman 1991, Burton-Roberts 1999, 2006, and Peterson 1999; see also footnote 1 for references) – is couched in Minimalist terms, and also because Ott (2016) neither aligns himself with an outstanding theory of orphanage nor outlines his own. Thus, the task of providing an explicit backdrop for a contemporary 'integration versus orphanage' debate falls to us.

For Chomsky, linguistic expressions are pairs of instructions (i.e. algorithms) that can be executed by the articulatory-perceptual (AP) and conceptual-intentional (CI) performance systems. These algorithms are the products of two factors: (i) interactions that occur between the ordered computational operations that constitute

the ‘Y-model’ of grammar, i.e. *grammatical operations*, and (ii) executability constraints imposed by the interface between the derivational procedure described by the Y-model and the AP/CP systems, i.e. *grammatical constraints*.

The products of executing linguistic expressions are *utterances*. Minimalism stipulates that linguistic expressions cannot contain subroutines that make reference to the products of executing other linguistic expressions. In other words, the *grammaticality* of an utterance expressed at any particular point in conversational time cannot be contingent upon the properties displayed by an utterance expressed at a preceding point in conversational time. As such, additional cognitive algorithms that may pertain to language production and/or comprehension that make reference to (subroutines of) two or more linguistic expressions must be treated as extraneous to the Y-model of grammar and its interface with the AP/CP systems. For brevity, we will refer to these extraneous algorithms as *discursive instructions* and the cognitive operations whose interaction creates these algorithms as *discursive operations*.

To provide a concrete illustration of this division of labour across classes of algorithms, consider the second sentence in (27). Here, the phonological string /luːsiː blʌʃd/ and its rough interpretation *blushed′*(*Lucy′*) arise from executing a linguistic expression, while the successful conveyance (or comprehension) of this utterance as referring to the consequence of Bill kissing Susie arises from executing discourse instructions, which take conversational context and world-knowledge as their input.

(27) Bill kissed Susie. Lucy blushed.

The ‘integration versus orphanage’ debate is therefore a disagreement about how many linguistic expressions must be executed to generate the entire utterance in (28).

(28) Steve, who is my neighbour, is now my boss.

Orphanage claims that two linguistic expressions must be executed to generate (28): one linguistic expression generates the host clause *Steve is now my boss*, while another generates *who is my neighbour*. On this approach, the interpolation of the ARC into the host clause is achieved by executing a discourse instruction. Conversely, integration analyses maintain that only one linguistic expression needs to be executed to generate the entire utterance in (28). On this approach, the linear position of the ARC is determined by grammatical operations (i.e. the Y-model operations MERGE and LINEARISATION).

3.2. *Accounting for opacity effects: orphanage vs. integration*

Opacity effects provide the principal empirical motivation for adopting an orphanage analysis of ARCs. As is well-documented (e.g. Jackendoff 1977:176, Safir 1986, McCawley 1998, Potts 2005, De Vries 2007), non-local c-command dependencies cannot be established across the boundary between an ARC and its host clause, which causes ARCs to appear ‘opaque’:

(29) a. * What$_1$ is Abe, who is t_1, now my boss? (*A′-movement*)
b. * [Every applicant]$_i$, who$_i$ is now calling his$_i$ wife, got the job. (*quantifier binding*)

c. * Tom hasn't called the bank, who's given him a red cent. (*NPI-licensing*)
d. Abby thinks that Luke, who's a fool, was fired. (*plugging*)
(*Illicit interpretation for (29d)*: Abby thinks Luke is a fool and was fired)

The orphanage explanation of opacity effects runs as follows. Syntactic dependencies rely on c-command, which arises from (repeated applications of) syntactic MERGE. As a grammatical operation but not a discourse operation, MERGE is instrumental in the formation of linguistic expressions, but plays no role in forming discourse instructions. Put another way, MERGE recursively concatenates atoms of utterances (i.e. lexical items and collocations thereof) but not atoms of discourse (i.e. utterances). Because the host clause and the ARC in (28) are distinct utterances (as they are generated from distinct linguistic expressions), no element of the host clause and the ARC has merged. Therefore no element of the host clause c-commands (any element of) the ARC. This precludes non-local dependencies, and thus creates the opacity effects observed in (29).

Because it introduces no new theoretical machinery, orphanage explains why opacity effects arise in a more parsimonious manner than (almost) all previous integration analyses, including the integration analysis adopted by G&dV. G&dV's analysis invokes '*par*-MERGE', a syntactic concatenation operation whose output does not 'dominate' its input (in a technical sense) and which is triggered only when one of its inputs is the functional head *Par* (De Vries 2012); in effect this creates a new c-command domain, since c-command is defined over dominance relations created by regular MERGE. The semantic effect of Par can be compared to Potts' (2005) 'comma operator'. In G&dV, *Par* is used transitively: its complement is an ARC and its specifier is the ARC's anchor, as illustrated in (30).

(30) $[_{\text{ParP}}$ Steve $[_{\text{Par}'}$ Par $[_{\text{ARC}}$ who is my neighbour]]]

Because Par and the ARC in (30) are concatenated by *par*-MERGE, neither the antecedent nor any other constituent in the host clause can c-command into the ARC. This generates the required opacity effects.

As Ott (2016) correctly points out, G&dV's analysis is less parsimonious than the orphanage approach, at least with respect to opacity effects.[15] We show in §3.3 and previous sections that orphanage has serious empirical and theoretical disadvantages in other respects, so the question remains if we can really do without a stipulated concept such as *par*-MERGE. Notably, it constitutes a *possible* integrational solution to the opacity problem, but not necessarily the only or best solution. Let us see what may be a conceptually viable alternative.

Recent developments in the study of the syntax/pragmatics interface engender a contemporary integration analysis that captures the opacity effects exhibited by ARCs (and other parentheticals) in a promising way. To be specific yet succinct, we will now adumbrate these developments ([Ds]) in a declarative manner.

[15] For additional critique of *par*-MERGE, see Griffiths (2015:219–222). Still, we would not characterise it as a "construction-specific… operation" (Ott 2016:588): *par*-MERGE turns *anything* into a parenthetical with respect to the syntactic context, and we know that there is a plethora of different kinds of parentheticals (cf. www.let.rug.nl/paracrawler).

[**D1**] The ascription and determination of illocutionary force is encoded in linguistic expressions (e.g. Speas & Tenny 2003, Haegeman 2014). Assertoricity (for instance) is encoded in the syntactic head ASSERT (Krifka 2014), to which are relativised all the operators and variables that constitute the propositional denotation that ASSERT takes as an argument (31) (Koev 2013).

(31) $[_{\text{ForceP}}\ \text{ASSERT}_p\ [_{\text{TP}}\ \text{Steve}_p\ \text{is now}_p\ \text{my boss}_p]]$

[**D2**] Operator-variable chains with links that are relativised to distinct illocutionary operators are treated as ill-formed (ibid.). In other words, binding variables across distinct speech acts is impossible.[16]

[**D3**] A predicate that selects a speech act α must exhibit the same relativisation index as α. Put differently, embedded speech acts and the matrix clauses that embed them are indistinct with respect to their illocutionary contribution (32) (Krifka 2001).

(32) $[_{\text{ForceP}}\ \text{ASSERT}_p\ [_{\text{TP}}\ \text{I}_p\ \text{think}_p\ [_{\text{ForceP}}\ \text{ASSERT}_p\ [[\text{to Holland}_p]_1\ [_{\text{TP}}\ \text{Violet}_p\ \text{went}_p\ t_1]]]]]$

[**D4**] ARCs and their hosts are distinct speech acts. This means that ARCs are headed by ASSERT (i.e. they are assertoric; see Kempson 2003, Arnold 2004, Cinque 2008, Koev 2013, Griffiths 2015, among others):[17]

(33) $[_{\text{ForceP}}\ \text{ASSERT}_q\ [_{\text{TP}}\ \text{who}_q\ \text{is my neighbour}_q]]$

In themselves, the developments in [D1-4] do not entail an integration analysis of ARCs, as each of these developments could be independently adopted by an advocate of orphanage. If we do integrate, the result for e.g. (28) is represented in (34).

(34) $[_{\text{ForceP}}\ \text{ASSERT}_p\ [_{\text{TP}}\ [_{\text{DP}}\ \text{Steve}_p,\ [_{\text{ForceP}}\ \text{ASSERT}_q\ [_{\text{TP}}\ \text{who}_q\ \text{is my neighbour}_q]]],\ \text{is now}_p\ \text{my boss}_p]]$

The merger of the antecedent and the ARC makes it possible to (indirectly) determine the required precedence relations. In addition, the analysis accounts for the prosodic isolation of ARCs, as Force phrases are always mapped to intonational phrases (cf. Güneş 2015, Truckenbrodt 2015, and references therein).

The integration analysis now also accounts for the opacity effects straightforwardly: in unacceptable utterances such as those in (35) (in which irrelevant details are omitted), the links that constitute the long-distance dependency chains are relativised to different illocutionary operators, a process which is independently banned (see [D2]).

[16] This derives from Koev's (2013:205) NO FREE VARIABLES condition, which states that 'all variables in a ForceP are bound within that ForceP'.

[17] Aside from [D4], it should be emphasised that the developments listed in the main text are supported by observations unrelated to ARCs. For example, the existence of a syntactic reflex of illocutionary force is supported by research on embedded assertions and questions (de Cuba 2007, Krifka 2001, 2014), while the relativisation of semantic content to illocutionary acts provides a straightforward account of deixis- and perspective-shifting phenomena (Koev 2013, 2015).

(35) a. * [QUEST$_p$ [what$_{p1}$ is John, [ASSERT$_q$ [who is t_{q1}]], now my boss]]?
(* <*what*$_{p1}$, t_{q1}>)

b. * [ASSERT$_p$ [[every climber]$_p$, [ASSERT$_q$ [who$_q$ is now sipping cocoa in the lodge]], reached the summit]] (* $\forall x_p . x_q$)

In short, orphanage and integration analyses may capture opacity effects with equal efficacy, depending on background assumptions.

Importantly for the current debate, we have demonstrated that a possible conceptual disadvantage of one particular integration analysis of ARCs does not logically invalidate integration altogether, contrary to what Ott (2016) seems to suggest.

3.3. *Integration versus orphanage*

Aside from their approach to opacity effects, the orphanage and integration analyses make different predictions. Integration accounts predict that utterances that contain ARCs may display products of grammatical operations that fit the template in (36), since grammatical operations (but not discourse instructions) contribute to the formation of linguistic expressions. Conversely, orphanage predicts that utterances that contain ARCs display no such products.

(36) input α, β ⇨ output γ
(where α refers to the ARC (or a constituent thereof) and β refers to the host clause (or a constituent thereof))

Evidence that the merger of ARCs fits the schema in (36) can be obtained from Right Node Raising constructions such as (37a/b), where again small caps represent pitch accents.[18] Here, the phrase *a little animal* is structurally shared between two clauses (cf. Barros & Vincente 2011, among others).

(37) a. I hate Sam, who WOUNDED, and you hate Sue, who even KILLED, a little animal.

b. I hate Sam, who WOUNDED, and you hate a girl that even KILLED, a little animal.

According to the general ideas underlying Distributed Morphology, morpho-phonological processes are also grammatical operations: they apply on the PF-branch of the Y-model of grammar (Embick & Noyer 2001:566). Assuming that this is true, the integration approach predicts that products of morpho-phonological grammatical operations that fit the template in (36) may be observed in utterances that contain ARCs. This prediction is borne out by the examples in (38), which show that Saxon genitives and contracted auxiliaries cliticise to ARCs. Note also that ARCs cannot be bypassed when cliticising Saxon genitives and contracted auxiliaries, as (39) shows.

[18] Note that [D2] above prohibits scope-related dependencies across parenthetical boundaries but not other grammatical operations, including MERGE itself. This important distinction cannot be captured under any orphanage approach.

(38) a. King Alphonso, who ruined the party,'s mother left early. (Arnold 2007:284)
b. Jack, who I can't stand,'s been given a promotion. (McCawley 1998:486)

(39) a. * King Alphonso's, who ruined the party, mother left early.
b. * Jack's, who I can't stand, been given a promotion.

If one maintains that syntactic MERGE and morpho-phonological operations such as cliticisation are grammatical operations, the utterances in (38) are incorrectly predicted to be unacceptable on the orphanage analysis. The only plausible means by which orphanage may account for these data is to claim that MERGE and cliticisation contribute not only to the formation of linguistic expressions, but also to the formation of discourse instructions. Problematically for this scenario, MERGE appears not be utilised in the formation of discursive instructions more generally. If it were, sisterhood relations would pertain across sentences. They do not. For instance, *Moby Dick* cannot be interpreted as the direct object (i.e. the syntactic sister) of *read* in (40).

(40) John read. And Mary bought Moby Dick.

Cliticisation appears not be utilised in the formation of discursive instructions more generally, either. If it were, cliticisation would occur across sentences. It does not. For instance, cliticisation is prohibited in so-called *split utterances*, as (41) shows.

(41) Speaker A: They
Speaker B: will be here at two.
Speaker B′: * 'll be here at two.

That MERGE and cliticisation are not utilised in the formation of discourse instructions more generally (and hence are not discourse operations) greatly diminishes the possibility that the multi-dominant sisterhood relation observed in (37) and the cliticisation observed in (38) are the products of discourse operations. This in turn provides opposition to orphanage analyses of ARCs, and thus provides indirect support for the integration analysis.

Alongside these empirical problems, orphanage has conceptual disadvantages. In Minimalism it is implicitly assumed that precedence effects can be established by two means: (i) grammatical operations (i.e. MERGE and LINEARISATION),[19] and (ii) the passage of time (which is not specific to language, of course):[20]

(42) Harry's an artist. His work's good.
an > *artist* = established by grammatical operations in PF
artist > *his* = established by the passage of time

Because it claims that ARCs and their hosts constitute distinct linguistic expressions, orphanage cannot appeal to the passage of time or a grammatical operation such as

[19] We abstract away from particular proposals about linearisation.

[20] That is, utterances are necessarily processed sequentially and hence positioned after each other in discursive time.

LINEARISATION to account for the observation that *Steve* immediately precedes *who* in (43) (repeated from above), where the ARC is interpolated.[21]

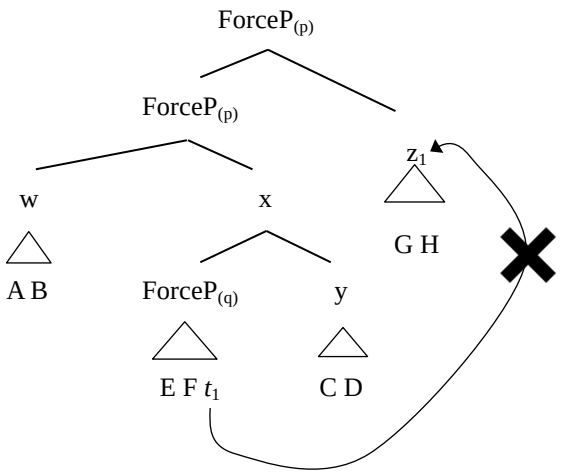
(43) Steve, who is my neighbour, is now my boss.

Instead, orphanage must stipulate that an additional operation – a discourse operation – establishes this precedence relation.[22] Moreover, the function of this discourse operation must be well-specified, as it must prohibit utterances from being linearly interlaced in more complex ways:

(44) * Oliver – who's – is a good man – my boss.
(*intended*: Oliver, who's my boss, is a good man.)

On the other hand, such stipulations are unnecessary on integration analyses, which adhere to the orthodox conjecture that all precedence relations (aside from those created by time's passage) are established by grammatical operations. Moreover, the interlacing observed in (44), which could only be derived by movement on integration analyses, is straightforwardly excluded (e.g. by [D2], which precludes the establishment of long-distance dependencies across distinct ForcePs, as already discussed in §3.2):

(45)



Another disadvantage of orphanage is its inability to capture in a conceptually attractive manner the restrictions on which linear positions ARCs may occupy within their hosts. (Recall from §2 that ARCs either occupy a position linearly adjacent to their anchors, or occupy an extraposed position.) Because integration analyses maintain that ARCs and host clauses are contained within one linguistic expression, it is possible to appeal to grammatical operations and constraints to explain the linear distribution of ARCs. For instance, one may claim that, while ARCs are normally

[21] If it would appeal simply to the passage of time, the two utterances would be placed after each other, resulting in an extraposed position for the ARC.

[22] Ott (2016:588) dismisses this familiar point of critique against orphanage (citing De Vries 2007), namely that, given the Y-model of grammar, it is unclear how a parenthesis can be pronounced [in particular: in interpolated positions, we should add] if it were to be added beyond the LF interface, and he calls it a "misunderstanding of the orphanage approach". As we make explicit in the main text, the earlier critique is entirely valid (but can be made more precise), and hence the misunderstanding must be on Ott's part.

first-MERGED with their anchors, they may be extraposed, provided that the *Right Roof Constraint* (Ross 1967) is respected. This explanation aligns ARCs with restrictive relative clauses, whose positional freedom is restricted in exactly the same manner as ARCs (see §2.2).

Because orphanage claims that ARCs and their host clauses are generated as distinct linguistic expressions, advocates of orphanage cannot appeal to syntactic notions such as coordination, adjunction, extraposition, clausehood, or constituency to explain the linear distribution of ARCs. Instead, orphanage must appeal to "prosodic and pragmatic factors governing the organisation of the discourse" (Ott 2016:588). In particular, Ott suggests that the emergence and disappearance of *potential questions* (Onea 2016) during the flow of conversation plays a crucial role in restraining the otherwise complete positional freedom that ARCs possess. However, we remain sceptical that an adequate pragmatic explanation of the distribution of ARCs that appeals to potential questions can be fashioned. Consider, for example, the examples in (47) and (48), assuming the slightly simplified pragmatic constraint in (46).

(46) An assertion α can respond to a potential question β only if the propositional explicature that triggered β is still being, or has only just been, articulated.

(47) a. [That John – and he's a good friend of mine – has been fired] is upsetting.
b. [That John has – and he's a good friend of mine – been fired] is upsetting.
c. [That John's been fired] – and he's a good friend of mine – is upsetting.
d. * [That John's been fired] is upsetting – and he's a good friend mine.

(48) a. [That John – who's a good friend of mine – has been fired] is upsetting.
b. * [That John has – who's a good friend of mine – been fired] is upsetting.
c. [That John's been fired] – who's a good friend of mine – is upsetting.
d. * [That John's been fired] is upsetting – who's a good friend of mine.

In the examples in (47), the parenthetical assertion '*and he's a good friend of mine*' answers the implicit potential question '*who is John?*', which is raised when *John* is articulated. The examples in (47a-b) obey the pragmatic condition in (46) because the parenthetical assertion is uttered somewhere within the propositional explicature that contains *John*, i.e. the bracketed unit in (47). (While the exact position of the parenthetical assertion within this proposition is pragmatically irrelevant, potential positions may be disfavoured for prosodic reasons, cf. Ross 1984). The example in (47c) obeys the pragmatic condition in (46) because the parenthetical assertion is uttered immediately after the proposition that contains *John* is articulated. The example in (47d) is thus unacceptable because it violates the condition in (46): the parenthetical assertion is neither uttered within nor immediately after the proposition that contains *John* is articulated.

On the assumption that the condition in (46) provides a reasonable approximation of how the flow of conversation might potentially restrict the interpolational freedom of alleged orphans, it appears that one must appeal to an additional constraint to explain why (48b) is unacceptable. In other words, the difference in acceptability between (47b) and (48b) is unexpected on an analysis that utilises only pragmatic and prosodic conditions to constrain the linear interpolation of orphans. This is because the ARCs in (48) and the parenthetical assertions in (47) are

alike from both a pragmatic perspective (as both are assertoric responses to the potential question raised by *John*) and a prosodic one (as both are intonational phrases that are inserted into the same prosodic 'niches').

Consequently, when coupled with the observation that orphanage analyses must appeal to distinct classes of operations to explain the linear restrictions on appositive and restrictive relative clauses (*discursive* versus *grammatical* operations, respectively) despite the fact that their linear distributions are identical, the observation that pragmatic constraints alone appear unable to capture to linear distribution of ARCs casts further doubt on orphanage's conceptual plausibility. In contrast, integration analyses can capture the linear distribution of ARCs in a straightforward and familiar manner, by appealing to well-known syntactic constraints (in addition to other factors that may play a role).[23]

To summarise: We have shown that, from a broader perspective, the integration approach to ARCs is conceptually and empirically superior to the orphanage approach, contrary to Ott's claim.

4. Conclusion

Griffiths & De Vries (G&dV, 2013) appeal to the impossibility of non-constituent deletion to explain the behaviour of appositive relative clauses (ARCs) in elliptical environments. Ott (2016) presents a four-pronged critique of G&dV. Three of these criticisms target the specifics of G&dV's analysis. These are that (i) G&dV ignore the import of extraposition, (ii) a simpler analysis of the data that appeals to 'prominence' is available, and (iii) G&dV's mechanism for capturing the opacity effects that ARCs display is conceptually unattractive. We demonstrated in §2 that (i) and (ii) are invalid: extraposition has no bearing on G&dV's analysis and no simpler explanation of the relevant data is available. We showed in §3.2 that (iii), while valid, is not generally true for integration accounts, and we sketched an alternative solution. Ott's final criticism is that the approach that G&dV adopt, which is the *integration* approach to parenthesis, is conceptually and empirically inferior to the *orphanage* approach to parenthesis. We demonstrated §3.3 that, in reality, the converse situation obtains, and that the orphanage approach exhibits a number of conceptual and empirical shortcomings that no integration approach exhibits.

[23] Another (indirect) argument for integration emerges from work by Del Gobbo (2003: §3.6.2), who shows that the parallelism between independent sentences and appositives breaks down when a variety of quantified antecedents is taken into consideration:

(i) * [Most/many students]$_k$, who$_k$ were late, came to the party with their parents.
(ii) [Most/many students]$_k$ came to the party with their parents. They$_k$ were late.

Thanks to a reviewer for reminding us of this.

References

Aelbrecht, L. 2012. What ellipsis can do for phases and what it can't, but not how. Paper presented at the *Ellipsis conference*, Vigo University

Arnold, D. 2007. Non-Restrictive relatives are not orphans. *Journal of Linguistics* 43: 272-309.

Arnold, D. 2004. Non-Restrictive Relative Clauses in Construction Based HPSG. In S. Muller (ed.), *Proceedings of the HPSG04 Conference*. Stanford: CSLI Publications, 27-47.

Arnold D. & R. Borsley. 2008. Non-restrictive relative clauses, ellipsis and anaphora. In S. Müller (ed.), *Proceedings of the HPSG08 Conference*. Stanford: CSLI Publications, 5-25.

Baltin, M. 2006. Extraposition. In H. van Riemsdijk & M. Everaert (eds.), *The Blackwell companion to syntax, volume I*. Hobokon: Wiley-Blackwell, 237-271.

Baltin, M. 1981. Strict bounding. In C. L. Baker & J. McCarthy (eds.), *The logical problem of language acquisition*. Cambridge: MIT Press, 257-295.

Barros, M. & L. Vicente. 2011. Right Node Raising Requires both Ellipsis and Multidomination. U*niversity of Pennsylvania Working Papers in Linguistics* 17/2.

Bosch, P. & C. Umbach (2007). Reference determination for demonstrative pronouns. *ZAS papers in Linguistics* 48: 39-51.

Burton-Roberts, N. 1999. Language, linear precedence and parentheticals. In P. Collins & D. Lee (eds.), *The Clause in English: In honour of Rodney Huddleston*. Amsterdam: John Benjamins, 33-52.

Burton-Roberts, N. 2006. Parentheticals. In K. Brown (ed.-in-chief), *Encyclopaedia of Language and Linguistics*. Amsterdam: Elsevier, 2nd edition, 179-182.

Büring, D. & K. Hartmann. 1997. Doing the right thing. *Linguistic Review* 14:1-42.

Chomsky, N. 1995. T*he Minimalist Program*. Cambridge: MIT Press.

Chomsky, N. 2001. Derivation by Phase. In M. Kenstowicz (ed.) *Ken Hale: A Life in Language*. Cambridge: MIT Press, 1–52.

Cinque, G. 2008. Two Types of Nonrestrictive Relatives. In O. Bonami & P. Cabredo Hofherr (eds.), *Empirical Issues in Syntax and Semantics 7*. Paris: University of Paris 7, 99–137. [cssp.cnrs.fr/eiss7/cinque-eiss7.pdf, accessed 09/14]

Cuba, C. de. 2007. *On (non)factivity, clausal complementation and the CP-Field*. Doctoral dissertation, Stony Brook University.

Culicover, P. & M. Rochemont. 1990. Extraposition and the Complement Principle. *Linguistic Inquiry* 21: 23-47.

Dehé, N. 2017. *Parentheticals in Spoken English: The Syntax-Prosody Relation*. Cambridge: Cambridge University Press.

Dehé, N. & Y. Kavalova (eds.). 2007. *Parentheticals*. Amsterdam: John Benjamins.

Del Gobbo, F. 2003. *Appositives at the Interface*. Doctoral dissertation, UC Irvine.

Del Gobbo, F. 2017. More appositives in heaven and earth than are dreamt of in your Linguistics. *Glossa: a journal of general linguistics* 2: 49, 1-38.

Döring, S. 2014. Parentheticals are - presumably - CPs. In M. Kluck, D. Ott & M. de Vries (eds.), *Parenthesis and Ellipsis. Cross-linguistic and Theoretical Perspectives*. Berlin: Mouton de Gruyter, 109-145.

Embick, D. & R. Noyer. 2001. Movement Operations after Syntax. *Linguistic Inquiry* 32: 555-595.

Espinal, M. T. 1991. The representation of disjunct constituents. *Language* 67: 726-762.
Fox, D. & D. Pesetsky. 2005. Cyclic Linearization of syntactic structure. *Theoretical Linguistics* 31:1-146.
Griffiths, J. 2015. *On appositives*. Doctoral dissertation, University of Groningen. Utrecht: LOT dissertation series, no. 389.
Griffiths, J. & M. de Vries. 2013. The syntactic integration of appositives: evidence from fragments and ellipsis. *Linguistic Inquiry* 44: 332–344.
Güneş, G. 2015. *Deriving prosodic structures*. Doctoral dissertation, University of Groningen. Utrecht: LOT dissertation series, no. 396.
Haegeman, L. 1991. Parenthetical Adverbials: The Radical Orphanage Approach. In S. Chiba, A. Ogawa, Y. Fuiwara, N. Yamada, O. Koma & T. Yagi (eds.), *Aspects of Modern English Linguistics*. Tokyo: Kaitakusha, 232-254.
Haegeman, L. 2014. West Flemish verb-based discourse markers and the articulation of the Speech Act layer. *Studia Linguistica* 68: 116-139
Jackendoff, R. S. 1977. *X-bar syntax: a study of phrase structure.* Cambridge: MIT Press.
Kampen, N.J. van. 2010. Anaforische middelen voor topic-verschuiving. *Nederlandse Taalkunde* 15, 189-210.
Kempson, R. 2003. Nonrestrictive Relatives and Growth of Logical Form. In G. Garding & M. Tsujimura (eds.), Proceedings of WCCFL 22. Somerville: Cascadilla Press.
Koev, T. 2015. *Appositive projection and its exceptions*. Ms., University of Düsseldorf.
Koev, T. 2013. *Apposition and the Structure of Discourse*. Doctoral dissertation, Rutgers University.
Krifka, M. 2014. Embedding speech acts. In T. Roeper and P. Speas (eds.), *Recursion: Complexity in Cognition*. *Studies in Theoretical Pyscholinguistics* 43. Dordrecht: Springer, 59-87.
Krifka, M. 2001. Quantifying into question acts. *Natural Language Semantics* 9: 1-40.
Lasnik, H. 2014. Multiple sluicing in English? *Syntax* 17:1-20.
Lee-Goldman, R. 2012. Supplemental relative clauses: Internal and external syntax. *Journal of Linguistics* 48: 573-608.
Loock, R. 2007. Appositive relative clauses and their functions in discourse. *Journal of pragmatics* 39(2): 336-362.
McCawley, J. 1998. *The Syntactic Phenomena of English*. Chicago: University of Chicago Press, 2nd edition.
Merchant, J. 2004. Fragments and ellipsis. *Linguistics and Philosophy* 27: 661-738.
Merchant, J. 2013. Voice and ellipsis. *Linguistic Inquiry* 44: 77-108.
Onea, E. 2016. *Potential Questions at the semantics-pragmatics interface*. Leiden: Brill.
Ott. D. 2016. Fragment anchors do not support the syntactic integration of appositive relatives: Reply to Griffiths & de Vries 2013. *Linguistic Inquiry* 47: 580-590.
Peterson, P. 1999. On the boundaries of syntax: Non-syntagmatic relations. In P. Collins & D. Lee (eds.), *The Clause in English: In honour of Rodney Huddleston*. Amsterdam: John Benjamins, 229-250.

Potts, C. 2005. *The Logic of Conventional Implicatures*. Oxford: Oxford University Press.
Ross, J. R. 1984. Inner Islands. In C. Brugman & M. Macaulay (eds.), *Proceedings of the Tenth Annual Meeting of the Berkeley Linguistics Society*. Berkeley: Berkeley Linguistics Society, University of California, 258-265.
Ross, J. R. 1967. *Constraints on variables in syntax*. Doctoral dissertation, Massachusetts Institute of Technology.
Safir, K. 1986. Relative clauses in a theory of binding and levels. *Linguistic Inquiry* 17: 663-689.
Speas, P. & C. Tenny. 2003. Configurational Properties of Point of View Roles. In A. DiSciullo (ed.), *Asymmetry in Grammar*. Amsterdam: John Benjamins, 315-343.
Thoms, G. 2010. Verb-floating VP-ellipsis: towards a movement account of ellipsis licensing. *Linguistic Variation Yearbook* 10: 255-300.
Truckenbrodt, H. 2015. Intonation phrases and speech acts. In M. Kluck, D. Ott and M. de Vries (eds.), *Parenthesis and ellipsis: cross-linguistic and theoretical perspectives*. Berlin: Mouton de Gruyter.
Vries, M. de. 2012. Parenthetical main clauses – or not? In L. Aelbrecht, L. Haegeman & R. Nye (eds.), *On appositives and quasi-relatives. Main Clause Phenomena: New Horizons*. Amsterdam: John Benjamins, 177-201.
Vries, M. de. 2007. Invisible Constituents? Parentheses as B-Merged Adverbial Phrases. In N. Dehé & Y. Kavalova (eds.), *Parentheticals*. Amsterdam: John Benjamins, 203-234.
Vries, M. de. 2006. The syntax of appositive relativization. On specifying coordination, false free relatives and promotion. *Linguistic Inquiry* 37: 229-270.
Vries, M. de. 2002. *The syntax of Relativization*. Doctoral dissertation, University of Amsterdam.