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THE SYNTACTIC INTEGRATION OF APPOSITIVES: EVIDENCE FROM FRAGMENTS AND ELLIPSIS James Griffiths University of Groningen Mark de Vries University of Groningen The goal of this squib is to explain an intriguing data set involving appositives and fragment answers, thereby providing support for the idea that appositives, and by extension parentheses more generally, are related to the host clause *in syntax*, via parenthetical coordination.

1 Introduction: To Integrate or Not

Appositives include appositions and appositive relative clauses (ARCs), such as those illustrated in (1a) and (1b), respectively. In both examples, the anchor is *John*.

- (1) a. John, my neighbor, is a good guy.
 - b. John, who is my neighbor, is a good guy.

Various approaches to these construction types abound in the literature (see De Vries 2006, Dehé and Kavalova 2007, Heringa 2011:122–139, and Kluck 2012 for overviews). We split these lines of thought asunder. What is of special interest is the question of whether and how an appositive is related to its anchor. *Orphanage* approaches maintain that appositives are syntactically isolated from their anchor; *integration* approaches do assume a structural relationship, albeit possibly of a special kind. For instance, Haegeman (1991) claims that parentheticals are derived separately from their host clause, as syntactic "orphans"; they are only interpreted as related to their host when "contextualized" post-LF. Espinal (1991) argues that parentheticals and the host clause lie on different planes in a three-dimensional space. Hence, they are syntactically unrelated to the host but intersect with it at the terminal string, as is somewhat suggestively depicted in our example (2).

Many thanks to the anonymous reviewers, to the audience of the Temmerman workshop on ellipsis (Leiden, 27 June 2012), and specifically to Dennis Ott for their questions and comments. We cannot possibly do full justice to all relevant issues in this squib, but we have tried to make our position as clear as possible. This research was financially supported by the European Research Council.

Linguistic Inquiry, Volume 44, Number 2, Spring 2013 332–344 © 2013 by the Massachusetts Institute of Technology



Although the abovementioned approaches account for the well-known scopal independence of parentheses (see below), we do not think the word string can be treated as a given; rather, it should be derivable from the syntactic structure (possibly in combination with some PF rule system). Therefore, let us turn to a more wholehearted integration approach, which we adopt below. De Vries (2009, 2012) argues that the appositive is "parenthetically coordinated" to the anchor, mediated by a syntactic functional head that can be dubbed *Par*.¹ Like a coordination phrase, ParP is inserted in the position of the relevant noun phrase, which then occupies its specifier (3).²

(3) [host_clause[ParP[DP John] [Par' Par⁰ [who is my neighbor]]] is a good guy].

To be clear, we discard a plain *right-adjunction* analysis of ARCs as in, for example, Jackendoff 1977 because it does not account for scopal independence, among other things. To illustrate, in (4) a quantifier in the host fails to bind a pronoun inside the ARC (see, e.g., Espinal 1991, De Vries 2007, and Kluck 2011 for more discussion).

(4) *Everybody_i laughed at Mary, who he_i saw last week.

In our approach, Parenthetical Merge effectively blocks c-command (see De Vries 2012 for details).

Adopting Par has some immediate benefits. First, the Par approach trivially explains why the anchor and the appositive are linearly adjacent, as they are phrase-mates. Note that this is much less clear on an orphanage approach (more generally, the unlinearizability of orphans or otherwise multirooted structures seems to be a major problem). Second, on a more abstract level—again presupposing that syntax mediates between sound and meaning—the head Par provides the necessary syntactic locus for Potts's (2005) "comma feature," the semantic operator that renders the information appositives convey as secondary to the proposition denoted by the host clause. Finally, a

² Hence, the categorial status of ParP, as well as CP, is underspecified or transparent for selection purposes.

¹ For remarks on how the approach might be generalized to other types of parentheses, see De Vries 2007, 2012 and Kluck 2011, 2012. Because of obvious space limitations, we cannot go into this here.

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syntactic integration approach such as the Par account predicts that parentheticals can be recursively construed with respect to each other. They obviously can, as (5) illustrates.

(5) I like linguists, who study language, such an intriguing phenomenon, as you know, and in particular syntacticians, the most intelligent of all.

Thus, there are clear indications for structural integration.

We cannot discuss the *internal* structure of appositives in this squib (see Cardoso and De Vries 2010, Heringa 2011, and the references there for extensive discussion). What interests us here is the *connection* between parenthetical material and the host (or a constituent thereof). Below, we discuss data involving fragment answers whose distribution receives a natural explanation on the Par approach. Such an account does not seem to be available in any straightforward manner on an orphanage approach, and therefore the data presented constitute (yet another) challenge to this line of thinking (see Arnold 2007).

2 Appositives, Fragment Answers, and Ellipsis

Fragment responses are nonclausal utterances that can be seen as the remnant of some ellipsis process. Here, we will subscribe to—and indirectly provide support for—the gist of a *PF deletion approach*, which implies a complete syntactic structure combined with ellipsis at the PF interface (see Ross 1969, Lasnik 2001, Merchant 2001, 2004, Watanabe 2004, Griffiths and Lipták, to appear). As in sluicing constructions, the eventual remnant is focus-moved to the left periphery of the clause, and ellipsis targets roughly C'.³ This is illustrated in (6).

- (6) a. A: Someone kissed John.
 - B: $[_{CP} Who_1 [_{C'} C^0 [_{TP} t_1 kissed John]]]$?
 - b. A: John kissed someone.
 - B: Yeah, $[_{CP} Lucy_1 [_{C'} C^0 [_{TP} John kissed t_1]]].$

Presupposing that grammatical processes apply to constituents only, we expect not only the moved fragment but also the ellipsis site to be a complete phrase (here, the entire C', which is possible because the fragment fronts out of it). This will become relevant later on. Furthermore, we will assume that ellipsis involves *given* material, in the sense that it is recoverable from the context (see Tancredi 1992, Schwarzschild 1999, Merchant 2001). Therefore, no difference in interpretation should obtain between an elliptical clause and its nonelliptical counterpart.

³ Precisely which categorial projections in the clausal domain are involved is tangential to our purposes. See Merchant 2004, Van Craenenbroeck and Lipták 2009, and Šimík 2011:204–210 for discussion. We do, however, adhere to the idea that clausal ellipsis targets the syntactic sister of the operator (see also Thoms 2011). With these prerequisites in place, let us return to appositive constructions. Observe that an ARC may be anchored to a nominal constituent (7a) or a clause (7b).

(7) a. John stole [Mary's computer, which crashes all the time].b. [John stole Mary's computer, which got him arrested].

In the context of a question, we can test whether the ARC can be retained with or as part of the remnant. Unsurprisingly, if the question triggers a direct object fragment answer, as in (8), the object-related ARC may surface; see (8Bi). However, a clause-related ARC is also fine; see (8Bii). If the question involves the subject, as in (9), the object-related ARC is completely unacceptable, as in (9Bi), but the clause-related ARC is still fine, as in (9Bii). This is the case not only for clausal ellipsis: VP-ellipsis produces the same results. We indicate this by placing the auxiliary *did* in parentheses. Moreover, the observations in (8) and (9) extend to languages other than English, including Dutch. It is fair to note that data similar to those in (8) and (9) are discussed by Arnold and Borsley (2008), albeit from a different perspective, but whose main conclusion we share (see footnote 9 for a few remarks).

- (8) A: What did John steal?
 - B: i. Mary's computer, which crashes all the time. ii. Mary's computer, which got him arrested.
- (9) A: Who stole Mary's computer?
 - B: i. *John (did), which crashes all the time.
 - ii. John (did), which got him arrested.

In short, an ARC can only surface next to an anchor that is at least partially overt. Given that ellipsis constructions are semantically identical to their nonelliptical counterparts, this is a mystery that needs to be resolved.

First, notice that the pattern in (9) is confirmed by additional data. Depending on lexical choices, an ARC can be ambiguous between two readings. This is shown in (10), where *which is awful* relates either to the object *Mary's computer* or to the proposition as a whole, involving a stealing event. In the context of an object fragment answer, (11), this remains the same. Interestingly, however, the ambiguity disappears if the elided phrase includes the object, (12); here, only the propositional reading survives.

- (10) John stole Mary's computer, which is awful.
- (11) A: What did John steal?

B: Mary's computer, which is awful.

(12) A: Who stole Mary's computer?B: John (did), which is awful.

A similar pattern is observed if sentential adverbs like *probably* and *unfortunately* are employed as fragmentary responses (note that these elements can escape ellipsis, as they are base-generated above TP; see

Cinque 1999). For instance, the ambiguity present in (13) is lost in (14B), where only the "clausal anchor" reading is retained.

- (13) Possibly, John stole Mary's computer, which is awful.
- (14) A: Did John steal Mary's computer?
 - B: Possibly, which is awful.

Again, a constituent-related ARC can only surface if its anchor is overt.

We will now show that the syntactic integration approach to appositives, in combination with the PF deletion account of ellipsis, provides a natural explanation of the above data. First consider the propositional reading. In such examples, the ARC takes the full CP as its anchor.⁴ The analyses in (15) and (16) repeat the relevant (Bii) examples from (8) and (9). In both cases, ellipsis targets a constituent, the C' (residing within Spec,ParP), and the derivation is syntactically and semantically convergent. Observe that the elliptical parts in the answers are fully recoverable from the preceding questions. In the diagrams, the ovals with gray type represent the ellipsis sites.⁵

- (15) A: What did John steal?
 - B: $[P_{arP}[_{CP}[_{DP} Mary's computer]_1[_{C'} \in^0 [_{TP} John stole t_1]]] [_{Par'} Par^0 [_{ARC} which got him arrested]]].$



⁴ That proposition-related ARCs may relate to CP is shown by (i). Adverbs like *allegedly*, which are base-generated in the CP domain (Cinque 1999), can be scoped over by the ARC.

(i) John allegedly stole Mary's computer, which I don't however believe.

We think lower attachment sites would still be compatible with our analysis, but this requires an elaboration for which space is lacking.

⁵ Note that the specifier-internal ellipsis required to derive (15) is observed elsewhere, for example in conjoined *sluices* (Ross 1967). Thanks to a reviewer for pointing this out.

(i) John met someone, but I don't know [[who₁ John met t₁] or [where this was]].

- (16) A: Who stole Mary's computer?
 - B: $[_{ParP}[_{CP}[_{DP} John]_1 [_{C'} \in^0 [TP t_1 stole Mary's computer]]] [_{Par'} Par^0 [_{ARC} which got him arrested]]].$



Next, let us turn to the regular constituent reading, where the ARC takes a noun phrase (here, the direct object) as its antecedent. The analysis in (17) repeats example (8Bi). Here, the entire ParP is focus-moved,⁶ and consequently elision of the C' leaves the direct object in combination with the ARC as a fragment answer.

- (17) A: What did John steal?
 - B: $[_{CP}[_{ParP}[_{DP} Mary's computer]]_{Par'} Par^{0} [_{ARC} which crashes all the time]]]_{1} [_{C'} C^{0} [_{TP} John stole t_{1}]]].$



⁶ This is entirely reasonable: overt fronting of arguments in nonelliptical contexts also drags along potential appositive material; moreover, \bar{A} -movement of only the antecedent from Spec,ParP (illegally stranding the appositive in the middle field) would constitute an island-violating instance of subextraction.

Finally, the analysis in (18) represents the impossible case, repeated from (9Bi). Although the ellipsis site in (18B) would be recoverable from (18A), ellipsis necessarily targets a nonconstituent here, which is excluded. Notice that if the ARC were not paratactically coordinated but some kind of orphan, nothing would have prevented the derivation of this very sentence.⁷

- (18) A: Who stole Mary's computer?
 - B: $*[_{CP} \text{ John}_1 [_{C'} C^0 [_{TP} t_1 [_{VP} \text{ stole} [_{ParP} [_{DP} \text{ Mary's computer}] [_{Par'} Par^0 [_{ARC} \text{ which crashes all the time}]]]]]].$



To complete the argument, let us briefly return to the examples in (11), (12), and (14), repeated in (19), (20), and (21). Recall that (19)

⁷ One may argue that (18B) is unacceptable simply because the ARC is incongruously interpreted as modifying *John*. Such an "explanation" tacitly appeals to some parsing constraint dictating that an ARC is interpreted as modifying the closest overt XP that linearly precedes it. However, we doubt that the resolute unacceptability of (18B) is caused by violating such a parsing constraint, as these constraints can be easily overridden. This is exemplified by (i) and (ii), where focus clearly improves acceptability.

- (i) A: What happened?
 - B: #John kissed Mary, my brother.
- (ii) A: Bill kissed Mary.
 - B: No, JOHN kissed Mary, my brother.

has two readings. The structure of the constituent reading (19Bi) equals the one in (17), the propositional reading (19Bii) the one in (15). By contrast, (20) only has the propositional reading, like the example represented in (16). The impossible constituent reading would have to correspond to (18), which is excluded because it would involve ellipsis of a nonconstituent. For the same reason, the derivation of (21) only converges if the ARC modifies the entire clause.

- (19) A: What did John steal?
 - B: Mary's computer, which is awful.
 - i. $[_{CP}[_{ParP}[_{DP} Mary's computer] [_{Par'} Par^0 [_{ARC} which is awful]]]_1 [_{C'} C^0 [_{TP} John stole t_1]]].$
 - ii. $[P_{arP}[_{CP}[_{DP} Mary's computer]_1 [_{C'} C^0 [_{TP} John stole t_1]]] [_{Par'} Par^0 [_{ARC} which is awful]]].$
- (20) A: Who stole Mary's computer?
 - B: John, which is awful.
 - i. $[_{ParP}[_{CP}[_{DP} \text{ John}]_1 [_{C'} \mathbb{C}^0 [_{TP} t_1 \text{ stole Mary's com$ $puter}]]] [_{Par'} Par^0 [_{ARC} which is awful]]].$
 - ii. *[$_{CP}[_{DP} \text{ John}]_1 [_{C'} C^0 [_{TP} t_1 [_{VP} \text{ stole } [_{ParP}[_{DP} \text{ Mary's computer}] [_{Par'} Par^0 [_{ARC} \text{ which is awful]]]]]].$
- (21) A: Did John steal Mary's computer?
 - B: Possibly, which is awful.
 - i. $[P_{arP} [CP Possibly [C' C^0 [TP John stole Mary's computer]]] [Par' Par^0 [ARC which is awful]]].$
 - ii. *[CP Possibly [$_{C'} \in^0$ [TP John [$_{VP}$ stole [$_{ParP}[_{DP} Mary's computer$] [$_{Par'} Par^0$ [$_{ARC}$ which is awful]]]]]].

Thus, the Par approach straightforwardly explains why ellipsis leads to disambiguation in (20) and (21) but not in (19). Since ellipsis sites, by definition, are semantically interpretable (as they must be recoverable from the context), an appeal to "uninterpretability" is excluded.

In the explanation advanced above, we adopted a mediating functional projection ParP in the structure. A potential alternative might be to extend Hornstein and Nunes's (2008) approach to "non-c-commanded adjuncts" to parentheses. From this perspective, an ARC would be "concatenated" with the anchor, but the projection would not be "labeled," which effectively leads to a multirooted structure. According to Larson (2012), who applies this strategy to elliptical sentences involving *swiping* (Merchant 2002), the additional structure does not count as a constituent part of the host; this in turn allows

⁸ *Swiping* is illustrated in (i). We suggestively depict Larson's analysis in (ii), where the adjunct PP is a "concatenated-only" phrase, which survives clausal ellipsis.

- (i) John fixed the car, but I don't know what with.
- (ii) ... $[_{CP}[_{DP} \text{ what}]_1 \in^0 [_{TP} \text{ John fixed } [_{VP} \text{ the car } \downarrow]]].$ $[_{PP} \text{ with } t_1]$

clausal ellipsis to take place such that the relevant phrase survives.⁸ When we apply these ideas to our crucial example (18), the structure becomes as shown in (22).

(22) A: Who stole Mary's computer? B: *John, which crashes all the time.



However, as is evident from this representation, the elliptical sentence is incorrectly ruled in, similarly to the situation in true orphanage approaches. For this and other reasons, it seems to us that this is not the way to go.

3 Parallel Issues in the Nominal Domain

To explain the unacceptability of (18B)/(22B), one might fancy a rule that bans anchors that are phonologically null. However—apart from the stipulative nature of such a constraint—it runs into difficulties with respect to the following data:

- (23) A: A book about WHICH English queen won the award?B: *Elizabeth I, which was published in hardback.
- (24) A: Whose film won the award?
 - B: Fellini's, which is truly a masterpiece.

(23B)'s unacceptability cannot be due to the incompleteness of the DP anchor, as incomplete DPs—like incomplete CPs—make for acceptable anchors in other environments, as (24B) illustrates.

The difference in acceptability between (23B) and (24B) follows naturally from the Par approach. In (24B), the partial covertness of the anchor is derived by NP-ellipsis, licensed by the genitive -'s (see Lobeck 1995), in combination with clausal ellipsis; see (25).



There is no NP-ellipsis in (23B), and consequently, the derivation of (23B) would require subextraction as well as nonconstituent deletion, which is banned; see (26).



Thus, we have shown that quite intricate patterns involving complex noun phrases can be explained on the same set of very general assumptions we used before.

4 Conclusion

We provided evidence from the distribution of appositives in ellipsis environments to demonstrate that they form a constituent with their anchor, mediated by a functional parenthetical phrase. The findings here thus provide further support for the general idea that parenthetical constructions are integrated at the level of syntax with the host clause

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into which they interpolate,⁹ and indirectly for the PF deletion approach to ellipsis, which maintains the presence of syntactic structure.

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⁹ As we mentioned before, this conclusion is shared by Arnold and Borsley (2008), in an interesting paper. They try to account for data like (8) and (9) by employing theoretical assumptions from Head-Driven Phrase Structure Grammar. Roughly summarized, they claim that (a) ARCs are right-adjoined, (b) fragment answers are base-generated elements with an enhanced clausal semantics (see Ginzburg and Sag 2000), and (c) (18B) is ruled out because the ARC has no place to adjoin to. As the reader can verify, this differs significantly from our own approach, which affords fragments underlying syntactic structure and appeals to a general constraint on nonconstituent deletion to rule out the relevant examples.

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