ATB extraction without coordination[*]

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1.   Background and goals

What is the class of syntactic environments that allow ATB extraction? In his seminal treatment of this topic, Ross (1967, §4.2.4) took ATB extraction to be the outcome of a rule that circumvented the Coordinate Structure Constraint (see the quote below). Given that the CSC is (obviously) a constraint on coordinate structures, Ross effectively restricted ATB extraction to coordinate structures.

> "There is an important class of rules to which [the CSC] does not apply. These are rule schemata which move a constituent out of all the conjuncts of a coordinate structure. [. . .] We propose a rule of Conjunction Reduction which Chomsky-adjoins to the right or left of the coordinate node a copy of some constituent which occurs in all conjuncts, and then deletes the original nodes."

As the quotes below illustrate, Ross's generalization has been widely accepted as descriptively correct (this is only a selection: see also Schachter 1977, Johannessen 1998, Citko 2003, 2005, Goodall 2009, Chaves 2007, 2012, and others). As far as I am aware, the only people who have explicitly argued that ATB extraction can happen in the absence of a coordinate structure are those that seek to treat parasitic gaps as a special case of ATB extraction (i.a., Haïk 1985, Williams 1990). This is a line of analysis that I am going to ignore here, given that there exist a number of asymmetries between ATB extractions and parasitic gaps that make a unified analysis, if not impossible, at least far from obvious (Postal 1993, 1998, Nissenbaum 2000, Niinuma 2010, and references).

> "If a rule applies into a coordinate structure, then it must affect all conjuncts of that structure."   [Williams 1977, 419]

"ATB is only possible if the conjunction is analyzed as a coordinating conjunction in the structure in question"   [Huybregts & van Riemsdijk 1985, 173]

"ATB extractions are, of course, a special case of coordinate structures."
[Postal 1993, 735]

"Informally, ATB extraction is the phenomenon where the same element is extracted from both conjuncts simultaneously."   [de Vos 2005, 21]

"Across-the-board wh- movement [. . .] involves simultaneous movement of a single wh- phrase from two (or more) conjuncts."   [Citko 2006, 225]
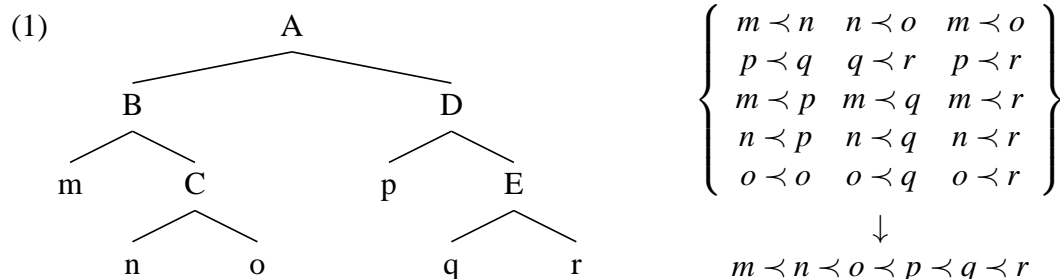
"Across-the-board constructions are coordinate constructions in which each conjunct contains a gap."   [Zhang 2010, 222]
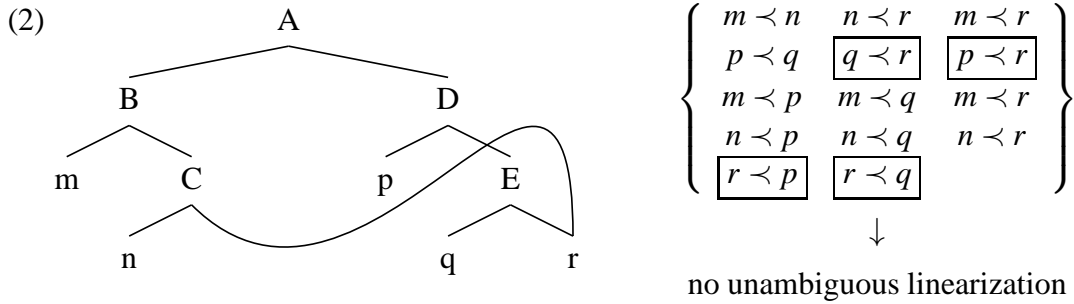
"ATB is only attested in coordinate structures."   [Weisser 2014, 184]

"Coordination is certainly an important factor."   [de Vries to appear, 1]
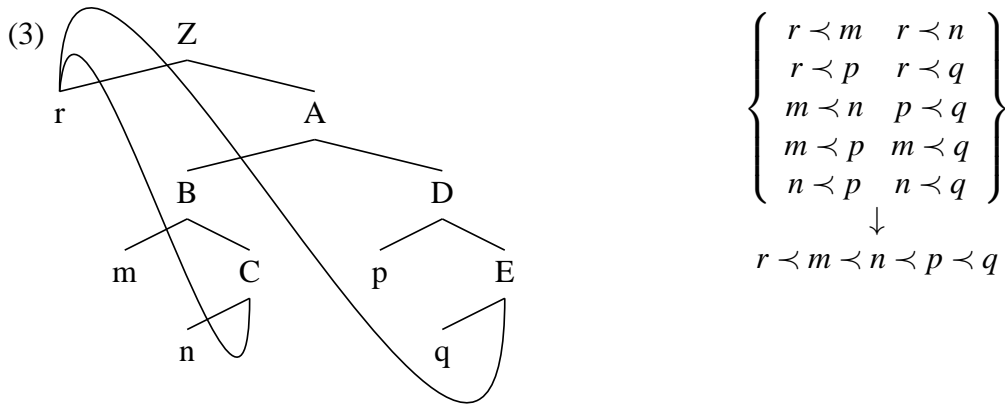
But the idea that ATB extraction is restricted to coordinate environments is a theoretically awkward one, in the sense that it is difficult (if not outright impossible) to implement in current mainstream models. It was possible to do so in an *Aspects*-like framework like the one Ross was working with, where one could write a rule whose structural description made explicit reference to things like the presence of a coordinate structure and the internal make-up of its conjuncts. This possibility is not available to those of us working with models where movement is the outcome of some featural relation (Agree, feature checking, EPP satisfaction. . .) between the extractee and a higher head. As long as this relation obtains and no islands intervene, movement (including ATB extraction) should be possible.

Citko's (2003, 2005) analysis, which I follow here, is noteworthy in that it implicitly acknowledges this limitation by defining licensing conditions on ATB extraction that make no direct reference to coordinate structures. Her proposal is that ATB extraction involves a multidominant structure, which is known to conflict with the hypothesis that a successful linearization requires unambiguously determining the linear position of every terminal relative to every other terminal (Kayne 1994, Nunes 2004, Fox & Pesetsky 2005). This requirement is easy to satisfy with non-multidominant trees (1), but not with multidominant trees: in (2), the position of r relative to p and q cannot be uniquely established.

(1)

$$\left\{ \begin{array}{ccc} m \prec n & n \prec o & m \prec o \\ p \prec q & q \prec r & p \prec r \\ m \prec p & m \prec q & m \prec r \\ n \prec p & n \prec q & n \prec r \\ o \prec o & o \prec q & o \prec r \end{array} \right\}$$

$$\downarrow$$

$$m \prec n \prec o \prec p \prec q \prec r$$

(2)

$$\left\{ \begin{array}{ccc} m \prec n & n \prec r & m \prec r \\ p \prec q & \boxed{q \prec r} & \boxed{p \prec r} \\ m \prec p & m \prec q & m \prec r \\ n \prec p & n \prec q & n \prec r \\ \boxed{r \prec p} & \boxed{r \prec q} & \end{array} \right\}$$
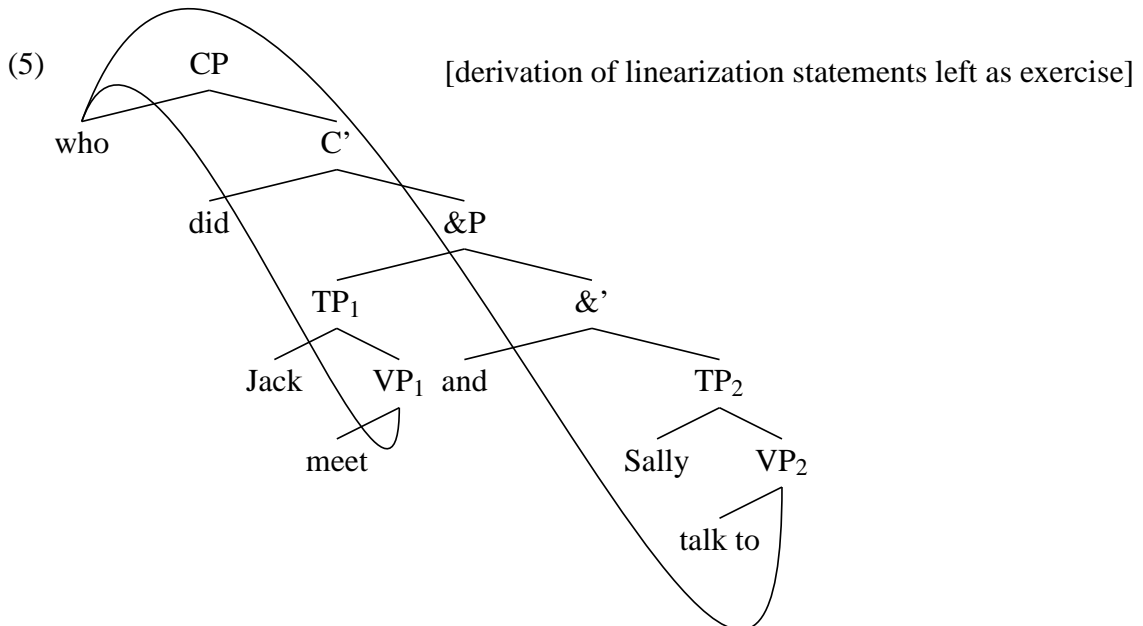
$$\downarrow$$

no unambiguous linearization

Citko proposes that (2) can be salvaged by extracting *r* to a position external to A, so as to provide it with an unambiguous linearization site. In other words, she proposes that ATB extraction amounts to extraction of a multidominated constituent (5). This is an analysis that derives a number of properties of the construction: at the very least, (i) the fact that multiple gaps can be associated to a single filler; (ii) the non-existence of covert ATB extraction (Bošković & Franks 2000); and (iii) the pervasive form identity effects on the extractee (Dyla 1984, Huybregts & van Riemsdijk 1985, Kathol 2001, Fanselow 2002).

(3)

$$\left\{ \begin{array}{cc} r \prec m & r \prec n \\ r \prec p & r \prec q \\ m \prec n & p \prec q \\ m \prec p & m \prec q \\ n \prec p & n \prec q \end{array} \right\}$$

$$\downarrow$$

$$r \prec m \prec n \prec p \prec q$$

(4) <u>Who</u> did [[Jack meet [$_{ATB}$__]] and [Sally talk to [$_{ATB}$__]]]?

(5) [derivation of linearization statements left as exercise]

But again, note that nothing in Citko's account makes reference to the presence of a co-ordinate structure. All we need for a successful ATB extraction (other than an appropriate movement trigger) is the presence of a multidominated constituent, such that neither of its mothers dominates the other. It follows from this that non-coordinate ATB extractions ought to exist, contrary to what Ross (1967) and a vast majority of the subsequent literature assumes. The rest of this paper is an argument to the effect that this prediction is correct. I present three classes of examples that, at first sight, look like parasitic gaps; then, I show that, under closer scrutiny, they pattern together with canonical (coordinate) ATB extractions, rather than canonical parasitic gaps. The overall conclusion, then, is that these examples instantiate the non-coordinate ATB extractions we are looking for.

2.   Case #1: island-insensitive "parasitic gaps"

Kathol (2001, 321) provides (6), which he claims features a parasitic gap embedded inside two relative clauses.[1]

(6) This is the book [that everyone [who reads [$_{PG}$__]]] raves about [$_{LG}$__].

The acceptability of (6) is remarkable, given that parasitic gaps are island-sensitive (Kayne 1983, Longobardi 1984). Example (7a) is unacceptable because the parasitic gap is contained in a subject island; in general, island-internal parasitic gaps are acceptable only if there is an acceptable island-external parasitic gap that can act as their licensing gap (7b).

(7)   a.   * A person that I hang out with [$_{LG}$__] [because [friends of [$_{PG}$__]] are famous].
      b.   A person that I hang out with [$_{LG}$__] [because [friends of [$_{PG}$__]] admire [$_{PG}$__]].

I propose that (6) and comparable examples are acceptable because they are not parasitic gaps, as it might appear at first sight; rather, they are cases of non-coordinate ATB extraction fed by Right Node Raising. Arriving at this result requires discussing various aspects of RNR. To begin with, I am going to follow McCawley (1982), Wilder (1999), Bachrach & Katzir (2007, to appear), and references in taking RNR to be a type of multidominant structure (8)/(9), at least in a non-trivial amount of cases (Barros & Vicente 2011). The intuition here is that, besides extraction (see above), the linearization conflict created by multidominant structures can also be resolved by linearizing the multidominated constituent (the *right node*) at the right edge of the structure. Crucially, this is only a possibility if the right node appears at the right edge of each relevant superconstituent.

(8) Jack bought [$_{RNR}$__] and Sally drank beer.

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[1]Throughout this article, I use [$_{PG}$__], [$_{LG}$__], [$_{ATB}$__], [$_{RNR}$__], and [$_{LNR}$__], to mark the locations of, respectively parasitic gaps, licensing gaps, gaps left by ATB extraction, and gaps left by Right and Left Node Raising. I use [__] whenever (for expository purposes) I don't want to commit to the exact nature of a gap. In all cases, the overt fillers of these gaps are underlined.

(9)

&P — TP₁ — Jack, VP₁ — bought; &' — and, TP₂ — Sally, VP₁ — drank, beer
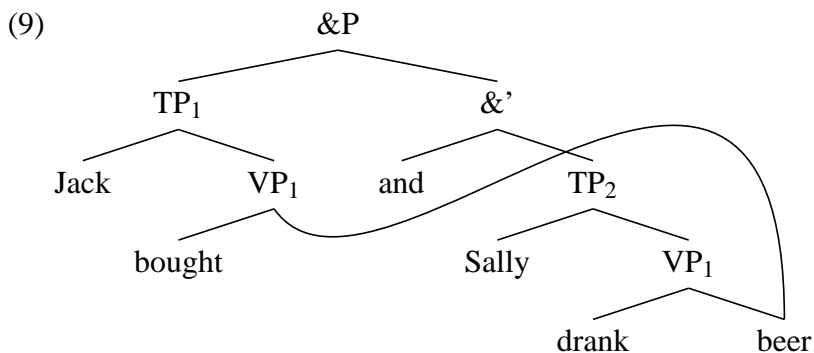
This analysis of RNR has two notable properties that we can exploit. First, in the same way as Citko's analysis of ATB extraction, it is a means of ensuring a licit linearization of a multidominant structure. It doesn't make direct reference to the presence of a coordinate structure, and so we expect to find cases of non-coordinate RNR. Many such examples have, in fact, already been noted (Hudson 1976, Postal 1993, Phillips 1996).

(10)   a.   [Those who liked [$_{RNR}$__]] outnumbered by two to one [those who disliked <u>the way in which the devaluation of the pound had been handled</u>].
       b.   He was sitting [on the edge of [$_{RNR}$__]] rather than [in the middle of <u>the puddle</u>].
       c.   The distance from [the top [$_{RNR}$__]] to [the bottom <u>of the precipice</u>] is 500 feet.
       d.   Stone suggests that Nixon [knew of [$_{RNR}$__]], although he didn't [attempt to participate in <u>US attempts to assassinate Fidel Castro</u>].

Second, even though this analysis of RNR doesn't require extraction of the right node, nothing prevents it, provided that a suitable trigger exists. The resulting configuration (extraction of a multidominated constituent) is the same that Citko (2003, 2005) proposes for ATB extraction, but with one important proviso: Bachrach & Katzir (2007, to appear) note that, unlike regular ATB extraction, RNR-fed ATB extraction can cross islands contained in the coordinate structure.[2] Compare (11a) to (11b): here, extraction across the relative clause boundary is possible only in (11a), where it takes place out of a right node (Sabbagh 2007 uses quantifier scope to make essentially the same point).

(11)   a.   <u>Which animals</u> did Jack meet a man [who wrote [$_{RNR}$__]] and Sally meet a woman [who published <u>a book about [$_{ATB}$__</u>]]?
       b.   * <u>Which animals</u> did Jack meet a man [who wrote a book about [$_{ATB}$__] for Fred] and Sally meet a woman [who published a book about [$_{ATB}$__] with Penguin]?

We can combine these two effects to produce a novel prediction, namely, that ATB extractions fed by non-coordinate RNR should exhibit the same kind of island-insensitivity as (11a). I propose that (6) instantiates this pattern. Note that the gaps appear at the right edges of both the larger relative clause and the main clause, as required, and that the corresponding RNR structure is acceptable (12).

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[2]For the purposes of this paper, we need not worry about the cause of this effect: see Sabbagh (2007), Bachrach & Katzir (2007, to appear), and Yatabe (2012)

(12) Everyone who reads [$_{RNR}$__] raves about <u>Neal Stephenson's debut novel</u>.

Compare (12) to (13a), where RNR is illicit. I don't have anything to say as to why (13a) is deviant, but the fact that it is deviant correctly predicts that (13b) is also unacceptable: given that it cannot be analyzed as an ATB extraction fed by RNR, it must instead be analyzed as either a parasitic gap or a regular ATB extraction, both of which are island sensitive.

(13)   a.   ?? I introduced a man who reads [$_{RNR}$__] to a woman who sells <u>books about</u>
            <u>Teddy Roosevelt</u>.

       b.   * This is <u>the president</u> that I introduced a man who reads [$_{RNR}$__] to a woman
            who sells <u>books about [$_{ATB}$__]</u>.

The same reasoning can be applied to the German (14a) and Dutch (14a) counterparts of (6), which are both ungrammatical (Kathol 2001). This status follows from the fact that the OV order of embedded clauses in these languages independently blocks RNR. As such, we are (as above) forced into a non-RNR-fed ATB extraction, which is island sensitive.[3]

(14)   a.   * Dies ist <u>das Buch</u> [welches, jeder   [der [__] liest]] [__] bewundert.
              this is the book   which   everyone who   reads   admires

       b.   * Dit is <u>het boek</u> [dat iedereen [die [__] leest]] [__] bewondert.
              this is the book that everyone that   reads   admires

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[3]There is one difficulty here (Riny Huybregts, p.c.): this reasoning (incorrectly) predicts that (ia) ought to be grammatical, given that the extractee (a PP) can extrapose to the right of the verb, and extraposition can feed RNR (I only provide German data; the Dutch data are analogous). Note that analogous coordinate ATB extractions are grammatical (ib), making it difficult to ascribe the ungrammaticality of (ia) to a generalized ban on ATB extraction of PPs.

(i)   a.   * Dies ist etwas,   [<u>womit</u>   jeder,   [der rechnet [__]]] zufrieden ist [__].
             this is something with.which everyone who counts   happy   is
             "This is something that everyone who counts on is happy with"

      b.   Dies ist etwas   <u>womit</u>   jeder   rechnet [$_{ATB}$__] und niemand zufrieden ist [$_{ATB}$__].
             this is something with.which everyone counts   and nobody happy   is
             "This is something that everone counts on and nobody is happy with"

On the other hand, examples analogous to (ia) remain ungrammatical even when locality is not an issue (Dennis Ott, p.c., *contra* the judgments in Kathol 2001, 320; again, the same pattern obtains for Dutch). This is especially apparent in (ii), where *glauben* necessarily takes an *an*-complement; note also that (ii) features an *ohne*-clause, which Kathol (2001) argues is a type of clause that otherwise allows this type of extraction. Kathol (2001, 337), who shares the ungrammaticality of (ii), simply comments that "additional factors, presumably semantic in origin, often render constructions with shared PP arguments rather unacceptable even when the same prepositional head is compatible with either predicate". I have nothing insightful to add here.

(ii)   * Hans hat <u>an Gott</u> [ohne   [__] wirklich zu glauben] [__] einen Brief geschrieben.
         Hans has to God without   really   to believe   a   letter written
         "Hans has written a letter to God without really believing in him"

3.   Case #2: "parasitic gaps" in Dutch and German

Huybregts & van Riemsdijk (1985) discuss Dutch sentences like (15), as do Felix (1985) and Kathol (2001) for German (16). Here, the movements of *er* and *Hans* seems to be licensing parasitic gaps inside the *zonder* and *anstatt* clauses, respectively.

(15) Ik heb er [zonder [__] over na te denken] [[__] in] toegestemd.
     I have it without   about to think   to agreed
     "I have agreed to it without thinking about it"

(16) Lisa hat Hans [anstatt [__] zu küssen] [__] geohrfeigt.
     Lisa has Hans instead   to kiss   slapped
     "Lisa has slapped Hans instead of kissing him"

However, both Huybregts & van Riemsdijk and Kathol argue that these sentences have properties that contraindicate a parasitic gap analysis (see also Yatabe 1993 and Postal 1994). First, the movement that creates the "licensing gap" is arguably A-movement, given that it doesn't create WCO violations ((17), Huybregts & van Riemsdijk 1985, 169) and it feeds anaphoric binding ((18), Kathol 2001, 318).

(17) Hij heeft [deze$_i$ artikelen] [zonder ze$_i$ te lezen] [__] opgeborgen.
     he has   these articles   without them to read   filed
     "He has filed these articles without reading them"

(18) Peter hat [die Gäste]$_i$ [ohne   [__] anzuschauen] einander$_i$ [__] vorgestellt.
     Peter has the guests   without   to.look.at   each.other   introduced.
     "Peter has introduced the guests to each other without looking at them"

Additionally, these extractions have the form-identity effects characteristic of ATB extractions: in Dutch, the extractee has to be unifomly either an R-pronoun, selected by *(over) te denken* and *(in) toegestemd*, or a D-pronoun, selected by *bestuderen* and *geaccepteerd* (Huybregts & van Riemsdijk 1985, 172).

(19)   a.   Ik heb er   [zonder [__] over na te denken] [[__] in] toegestemd.
             I have there without   about to think   to agreed
             "I have agreed to it without thinking about it"

       b.   Ik heb het [zonder [__] te bestuderen] [__] geaccepteerd.
             I have it without   to study   accepted.
             "I have accepted it without studying it"

       c.   * Ik heb { het / er   } [zonder [__] over na te denken] [__] geaccepteerd.
             I have it   there   without   about to think   accepted
             "I have accepted it without thinking about it"

    d.   * Ik heb { het / er   } [zonder [__] te bestuderen] [[__] in] togesteemd.
              I have it   there   without   to study   to agreed.
              "I have agreed to it without studying it"

The same pattern obtains in German with morphological case: *unterstützen* assigns structural accusative, and both *geben* and *helfen* assign dative (Kathol 2001, 327–328).

(20)   a.   Karl hat seinem Kind [ohne   [__] Geld   zu geben] [__] helfen können.
              Karl has his.DAT child without   money to give   help could
              "Karl was able to help his child without giving him money"

      b.   * Karl hat { seinen / seinem } Kind [ohne   [__] Geld   zu geben] [__]
              Karl has   his.ACC his.DAT child without   money to give
              unterstützen können.
              support   could
              "Karl was able to support his child without giving him money"

On the basis of these data,[4] both Kathol and Huybregts & van Riemsdijk conclude that neither Dutch nor German has true parasitic gaps. That said, the analyses they propose are tantalizingly close to the one I propose here, even though they stop short of actually

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[4]Kathol (2001, 329) provides an additional argument based on Williams's (1990, 277) observation that in English multiple questions, if one wh- phrase licenses a parasitic gap inside an adverbial clause, so must the other (i). Kathol then reports that this restriction doesn't hold for German, but this is only partially true: the speakers I have consulted report that pronoun-gap combinations are acceptable only if it is the dative argument that is realized as a pronoun. Dutch speakers report the same paradigm.

(i)   a.   <u>Which book</u> do you wonder <u>who</u> Bill told [$_{LG1}$__] that Mary bought [$_{LG2}$__] before Sam persuaded [$_{PG1}$__] that Sally wanted [$_{PG2}$__].

      b.   * <u>Which book</u> do you wonder <u>who</u> Bill told [$_{LG1}$__] that Mary bought [$_{LG2}$__] before Sam persuaded [$_{PG1}$__] that Sally wanted it].

      c.   * <u>Which book</u> do you wonder <u>who</u> Bill told [$_{LG1}$__] that Mary bought [$_{LG2}$__] before Sam persuaded [him that Sally wanted [$_{PG2}$__].

(ii)   a.   <u>Das</u> <u>Auto</u> hat <u>ihr</u> Karl [anstatt [$_{PG1}$__] [$_{PG2}$__] zu schenken] [$_{LG1}$__] [$_{LG2}$__] teuer verkauft.
          the car   has her Karl instead   to give   costly sold
          "Karl sold the car to her for a lot of money instead of giving it to her for free"

      b.   ? <u>Das</u> <u>Auto</u> hat <u>ihr</u> Karl [anstatt [$_{PG1}$__] ihr zu schenken] [$_{LG1}$__] [$_{LG2}$__] teuer verkauft.
          the car   has her Karl instead   her to give   costly sold

      c.   * <u>Das</u> <u>Auto</u> hat <u>ihr</u> Karl [anstatt es [$_{PG2}$__] zu schenken] [$_{LG1}$__] [$_{LG2}$__] teuer verkauft.
          the car   has her Karl instead it   to give   costly sold

(iii) a.   <u>Deze</u> <u>auto</u> heeft Jan <u>haar</u> [in plaats van [$_{PG1}$__][$_{PG2}$__] te geven][$_{LG1}$__][$_{LG2}$__] duur verkocht.
          this car has Jan her instead of   to give   costly sold

      b.   ? <u>Deze</u> <u>auto</u> heeft Jan <u>haar</u> [in plaats van [$_{PG1}$__] haar te geven] [$_{LG1}$__] [$_{LG2}$__] duur verkocht.
          this car has Jan her instead of   to give   her   costly sold

      c.   * <u>Deze</u> <u>auto</u> heeft Jan <u>haar</u> [in plaats van hem [$_{PG2}$__] te geven] [$_{LG1}$__] [$_{LG2}$__] duur verkocht.
          this car has Jan her instead of   to give it   costly sold

concluding that the relevant type of extraction is non-coordinate ATB extraction. Note, however, that the reason for not reaching this conclusion seems to be a wish to preserve the hypothesis that ATB extraction takes place only out of coordinate structures. This is especially clear in Huybregts & van Riemsdijk's paper, as they stipulate that *zonder* 'without' (and other adverbial complementizers) can exceptionally function as coordinators rather than subordinators (see the quote at the top of page 2; they refer to this process as "insubordination"). Clearly, we can remove this stipulation by not restricting ATB extractions to coordinate structures.

The situation is perhaps less clear in Kathol's case, who follows Postal (1994, 113) in taking the German data to instantiate non-coordinate Left Node Raising, the leftward counterpart of non-coordinate Right Node Raising (what Postal refers to as "pseudo-parasitic gaps"). A LNR analysis, however, is problematic, because the adverbial clause gap is clearly not leftmost (it is to the right of the adverbial complementizer, for one): compare Kathol's examples to canonical cases of LNR in Japanese, where the gap is truly leftmost (Yatabe 2012, Bachrach & Katzir to appear, and references).

(21) [omoi-das-u   ka] [[$_{LNR}$__] -das-an-ai   ka] ga   mondai da.
     think-get-PRS Q   -get-NEG-PRES Q   NOM problem be.PRES
     "Whether you recall it or not (recall it), it is the problem"

This problem can be circumvented by treating the relevant German examples as non-coordinate ATB extractions, given that ATB gaps need not appear at the edges of the relevant superconstituents.

4.   Case #3: "parasitic gaps" with sloppy readings

Munn (1999) notes that ATB extractions allow "sloppy" readings, where each gap maps to a different individual despite being bound by the same wh- phrase (22a). Parasitic gaps don't allow this kind of reading, as far as I've been able to determine (22b).

(22)   a. Which city did Jack travel to [$_{ATB}$__] and Sally decide to live in [$_{ATB}$__]?
           [possible answer: "Jack travelled to Berlin and Sally decided to live in Paris"]
       b. Which city did Jack travel to [$_{LG}$__] after Sally decided to live in [$_{PG}$__]?
           [impossible answer: "Jack travelled to Berlin after Sally decided to live in Paris"]

Assume that this is a true asymmetry between ATB extractions and parasitic gaps.[5] Example (23) is given in Munn (1992, fn. 3), who treats it as an exception to the generalization that parasitic gaps disallow sloppy readings, and points out that existing theories of parasitic gaps offer no insight as to why it is an exception.[6] Comparable examples are not hard

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[5]For the purposes of this paper, we need not worry about why this asymmetry exists. Munn (1999) claims that the sloppy reading of (22a) reflects the fact that wh- traces have a functional argument, which can take a different binder in each conjunct. If we want to analyze parasitic gaps in terms of null operator movement inside the adverbial clause (Kayne 1983, Nissenbaum 2000), we would have to say that the traces of null operators lack this functional argument. I do not know to what extent this is correct.

[6]As far as I've been able to determine, this particular example originates in Chomsky (1981, 203), who marks it as ungrammatical, claiming that its status follows from the assumptions of the LGB framework

to come by: (24) was overheard in August 2014, with several American English speakers independently confirming its acceptability; (25) came up during a Google search for exact "⟨verb⟩ to from" strings.

(23) Who did you send pictures of [__] to [__]?
   [possible answer: "I sent pictures of Jack to Sally"]

(24)   A: We did our swimming workout in the lake.

       B: Oh really? Where exactly did you swim from [__] to [__]?
           [possible answer: "We swam from the Southern to the Northern shore and back"]

(25)

If (23)–(25) were parasitic gaps, the availability of a sloppy reading would be surprising. In contrast, if we treat these examples as instances of non-coordinate ATB extractions, we can group them together with (22a).

5.   Conclusion and some speculative remarks

The take-home message of this paper is that there is a non-trivial amount of support for the idea that non-coordinate ATB extractions exist, and that they are different and distinguishable from parasitic gaps. As such, the inability of contemporary models to restrict ATB extraction to coordinate structures (as implicit in Citko's 2003, 2005 analysis) turns out to be an asset, rather than a shortcoming.

By and large, the greatest challenge for this proposal comes from the fact that we fail to observe ATB extraction effects in certain non-coordinate environments where we would expect to. Footnote 3 already documents one such case in German and Dutch. We can also point to Postal's (1993, 1994) observation that gaps left by RNR and ATB extraction are licit in certain positions (e.g., antipronominal contexts, such as the color position in *paint* ⟨*object*⟩ ⟨*color*⟩ small clauses) where parasitic gaps are not. I refer the reader to the relevant pages of Postal's papers for several more environments where parasitic gaps are similarly restricted.


(though see Postal 2012 for discussion). Later on, Culicover (2001, 33), Citko (2008, 420), and Chaves (2012, 472) reverse this judgment, but only Munn (1992) observes the availability of the sloppy reading.
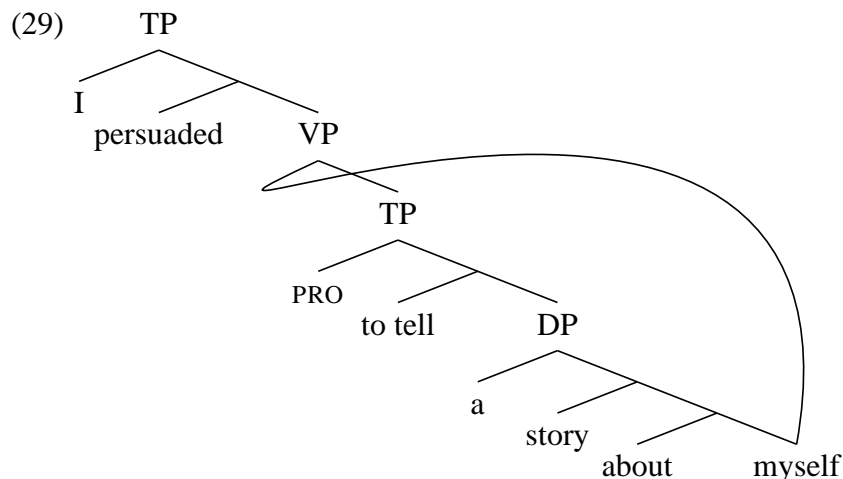
(26) a.   Blake painted his house {green / * it}.

 b.   <u>What color</u> did Blake paint his house [__]?

 c.   Sally painted her stable [_{RNR}__] and Mike painted his barn <u>green</u>.

 d.   <u>What color</u> did Sally paint her stable [_{ATB}__] and Mike paint his barn [_{ATB}__]?

 e.   * <u>What color</u> did they criticize [_{LG}__] after painting their house [_{PG}__]?

The analysis I have defended in this paper, as it stands, fails to predict the unacceptability of (26e). The acceptability of (26c) and (26d) indicates that there is no general ban on "color" positions being multidominated. Additionally, one cannot appeal to a putative ban on multidomination across island boundaries, as that would incorrectly rule out (6), (11a), and (11b). Rather in order to account for the status of (26e), we need to say that multidomination of "color" positions is not possible in the particular environment illustrated here.

  This last statement contains a mixture of truism and stipulation. On the one hand, the truism is the intuition that there have to be restrictions on the distribution of multidominated nodes. To illustrate, consider the trees in (27) and (29), with irrelevant projections omitted: analyses that treat movement as a type of multidomination (i.a., Starke 2001, Gärtner 2001, Johnson 2012, Bachrach & Katzir to appear, and references, plus Carnie 2010, ch. 10 for a summary) would yield the orders (28a) and (30a), respectively. Examples (28b) and (28b) are controls to show that, in principle, it is possible to have both relevant positions occupied by the same reflexive. The conclusion, then, is that the trees in (27) and (29) instantiate an illicit type of multidomination. More precisely (but still keeping details vague), one would have to make multidomination, qua an implementation of movement, sensitive to some appropriate formulation of a *Barriers*-style Theta Criterion.

(27)
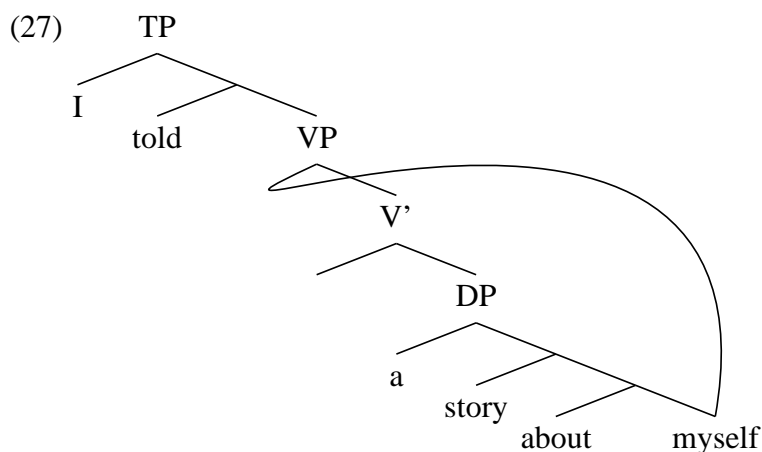
(28) a.   * I told <u>myself</u> a story about [__].

 b.   I told myself a story about myself.

(29)   TP

```
        TP
       /  \
      I    VP
   persuaded
              \
               TP
              /  \
           PRO    \
              to tell   DP
                       /  \
                      a    \
                        story  \
                           about   myself
```

(30)   a.   * I persuaded <u>myself</u> to tell a story about [__].
        b.   I persuaded myself to tell a story about myself.

On the other hand, the stipulation is the fact that, currently, I do not know how to block multidomination in (26e) and other similar environments discussed by Postal (1993, 1994). Defining a theory of multidomination that derives these effects is something that I need to defer to a different paper.

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References

Bachrach, Asaf, & Roni Katzir. 2007. Right Node Raising and delayed Spell Out. URL http://ling.auf.net/lingbuzz/000314, ms., MIT.

Bachrach, Asaf, & Roni Katzir. to appear. Linearizing Structures. *Syntax* .

Barros, Matthew, & Luis Vicente. 2011. Right Node Raising requires both ellipsis and multidomination. In *University of Pennsylvania Working Papers in Linguistics 17(1)*, ed. Friedman, 1–9.

Bošković, Željko, & Steven Franks. 2000. Across-the-Board movement and LF. *Syntax* 3:107–129.

Carnie, Andrew. 2010. *Constituent structure*. Oxford: Oxford University Press.

Chaves, Rui P. 2007. Coordinate structures: constraint-based syntax-semantics processing. Doctoral dissertation, Universidade de Lisboa.

Chaves, Rui P. 2012. On the grammar of extraction and coordination. *Natural Language and Linguistic Theory* 30:465–512.

Chomsky, Noam. 1981. *Lectures on Government and Binding*. Dordrecht: Foris.

Citko, Barbara. 2003. ATB wh- movement and the nature of Merge. In *Proceedings of NELS 33*, ed. Kadowaki & Kawahara, 87–102. Amherst, MA: GLSA.

Citko, Barbara. 2005. On the nature of Merge: External Merge, Internal Merge, and Parallel Merge. *Linguistic Inquiry* 36:475–496.

Citko, Barbara. 2006. The interaction between across-the-board wh- movement and left-branch extraction. *Syntax* 9:225–247.

Citko, Barbara. 2008. Missing labels. *Lingua* 118:907–944.

Culicover, Peter W. 2001. Parasitic gaps: a brief history. In *Parasitic gaps*, ed. Peter W. Culicover & Paul M. Postal, 3–68. Oxford: Oxford University Press.

Dyla, Stefan. 1984. Across-the-Board dependencies in Polish and case. *Linguistic Inquiry* 15:701–705.

Fanselow, Gisbert. 2002. Quirky subjects and other specifiers. In *More than words: a festschrift for Dieter Wunderlich*, ed. Kaufmann & Stiebels, 227–250. Berlin: Akademie Verlag.

Felix, Sasha. 1985. Parasitic gaps in German. In *Erklärende Syntax des Deutschen*, ed. Werner Abraham, 173–201. Tübingen: Niemeyer.

Fox, Danny, & David Pesetsky. 2005. Cyclic linearization of syntactic structure. *Theoretical Linguistics* .

Gärtner, Hans-Martin. 2001. *Generalized transformations and beyond (reflections on minimalist syntax)*. Berlin: Akademie Verlag.

Goodall, Grant. 2009. *Parallel structures in syntax: coordination, causatives, and restructuring*. Cambridge: Cambridge University Press.

Haïk, Isabelle. 1985. The syntax of operators. Doctoral dissertation, MIT.

Hudson, Richard A. 1976. Conjunction Reduction, Gapping, and Right Node Raising. *Language* 3:535–562.

Huybregts, Riny, & Henk van Riemsdijk. 1985. Parasitic gaps and ATB. In *Proceedings of NELS 15*, ed. Stephen Berman, Jae-Wong Choe, & Joyce McDonough, 168–178. Amherst, MA: GLSA.

Johannessen, Janne Bondi. 1998. *Coordination*. Oxford: Oxford University Press.

Johnson, Kyle. 2012. Towards deriving the differences in how Wh- movement and QR are pronounced. *Lingua* 122:529–553.

Kathol, Andreas. 2001. Non-existence of parasitic gaps in German. In *Parasitic gaps*, ed. Peter W. Culicover & Paul M. Postal, 315–338. Cambridge, MA: MIT Press.

Kayne, Richard S. 1983. Connectedness. *Linguistic Inquiry* 14:223–249.

Kayne, Richard S. 1994. *The antisymmetry of syntax*. Cambridge: MIT Press.

Longobardi, Giuseppe. 1984. Connectedness, scope, and c-command. *Linguistic Inquiry* 16:163–192.

McCawley, James. 1982. Parentheticals and discontinuous constituent structure. *Linguistic Inquiry* 13:91–106.

Munn, Alan. 1992. A null operator analysis of ATB gaps. *The Linguistic Review* 9:1–26.

Munn, Alan. 1999. On the identity requirement of ATB extraction. *Natural Language Semantics* 7:421–425.

Niinuma, Fumikazu. 2010. Across-the-Board and parasitic gap constructions in Romanian. *Linguistic Inquiry* 41:161–169.

Nissenbaum, Jon. 2000. Investigations of covert phrase movement. Doctoral dissertation, MIT.

Nunes, Jairo. 2004. *Linearization of chains and sideward movement*. Cambridge, MA: MIT Press.

Phillips, Colin. 1996. Order and structure. Doctoral dissertation, MIT.

Postal, Paul M. 1993. Parasitic gaps and Across-the-Board phenomenon. *Linguistic Inquiry* 24:735–754.

Postal, Paul M. 1994. Parasitic and pseudoparasitic gaps. *Linguistic Inquiry* 25:63–117.

Postal, Paul M. 1998. *Three investigations of extraction*. Cambridge: MIT Press.

Postal, Paul M. 2012. Two case studies of Chomsky's play acting at linguistics. URL `http://ling.auf.net/lingbuzz/001686`, ms., New York University.

Ross, John R. 1967. Constraints on variables in syntax. Doctoral dissertation, MIT.

Sabbagh, Joey. 2007. Ordering and linearizing rightward movement. *Natural Language and Linguistic Theory* 25:349–401.

Schachter, Paul. 1977. Constraints on coördination. *Language* 53:86–103.

Starke, Michal. 2001. Move dissolves into Merge: a theory of locality. Doctoral dissertation, Université de Geneve.

de Vos, Mark. 2005. The syntax of verbal pseudo-coordination in English and Afrikaans. Doctoral dissertation, Leiden University.

de Vries, Mark. to appear. Across-the-Board phenomena. In *Blackwell Companion to Syntax*, ed. Everaert & van Riemsdijk. Oxford: Blackwell.

Weisser, Philipp. 2014. Derived coordination: a minimalist perspective on clause chains, converbs, and asymmetric coordination. Doctoral dissertation, Universität Leipzig.

Wilder, Christopher. 1999. Right Node Raising and the LCA. In *Proceedings of WCCFL 18*, ed. Bird et al, 586–598. Somerset: Cascadilla Press.

Williams, Edwin. 1977. Across-the-Board application of rules. *Linguistic Inquiry* 8:419–423.

Williams, Edwin. 1990. The ATB theory of parasitic gaps. *The Linguistic Review* 6:265–279.

Yatabe, Shûichi. 1993. Scrambling and Japanese phrase structure. Doctoral dissertation, Stanford University.

Yatabe, Shûichi. 2012. Comparison of the ellipsis-based theory of non-constituent coordination with its alternatives. In *Proceedings of HPSG 19*, ed. Gereon Müller. Stanford: CSLI Publications.

Zhang, Niina Ning. 2010. *Coordination in syntax*. Cambridge: Cambridge University Press.