Pseudogapping, parallelism and the scope of focus

Abstract. In this paper I defend a particular analysis of pseudogapping where the focussed remnant is moved by leftward A′-movement (Jayaseelan 2002, Gengel 2013). Noting the superficial similarity between pseudogapping and stripping, I show that pseudogapping is much more restricted than we would expect if it were just another version of stripping, failing to apply across clause boundaries and allowing a much narrower range of remnants. I provide an analysis of these restrictions in terms of Parallelism, arguing that the difference between pseudogapping and stripping is keyed to the different ways in which their correlates may take scope. The proposal accounts for the exceptional behaviour of pseudogapping in comparatives, and it leads us to the conclusion that there exists a set of movement operations that occur only in the context of ellipsis.

Keywords: pseudogapping, stripping, ellipsis, Parallelism, focus

1.   Introduction

This paper defends a particular analysis of the English ellipsis construction known as pseudogapping, shown in the second conjunct of (1), in which a VP-like string is deleted (by a deletion rule similar to VP-ellipsis) to the exclusion of one other focused VP-contained constituent, called the *remnant*. In (1), the remnant is *beer*, and the second clause is interpreted as "Mary will bring beer to the party."

(1)   John will bring wine to the party, and Mary will beer.

Since Jayaseelan (1990), most analyses of pseudogapping have assumed that the remnant moves out of the VP-like constituent which is deleted, since otherwise it would require non-constituent deletion to derive the string in (1); however, there has been significant disagreement regarding the movement rule which is involved. Building on Gengel (2013) and Thoms (2010), I will argue for a "sub-stripping" analysis of pseudogapping, in which the remnant undergoes leftward focus movement to an IP-internal focus position, with this focus movement licensing ellipsis of the constituent it immediately dominates. I then argue that a number of restrictions on the construction follow from ellipsis parallelism, which requires the overt focus movement in the ellipsis clause to be paralleled by covert focus movement in the antecedent. Finally, by comparing pseudogapping with regular stripping I argue that the analysis motivates an approach to focus whereby its scope is set both by covert movement and by in-situ binding mechanisms, in the spirit of Reinhart (1997), Dayal (2002) and Drubig (2003).

2.   Basic properties

In this section I outline the basic properties of pseudogapping, largely consolidating findings in Levin (1986), Jayaseelan (1990, 2002) Lasnik (1999b, 1999a, 2006), Baltin (2003), Agbayani and Zoerner (2004), Lasnik (2006) and Gengel (2013).[1]

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[1] Some of the data points reported are disputed between the different sources cited; I note these conflicts where relevant, but for the most part report judgments which call in line with what I have found in my own consultations, typically erring on the side of permissiveness.

First, the remnant is focused, typically contrastively, and requires a focussed correlate in the antecedent. It is not enough for there to be focused elements in both clauses; rather, the focus in the antecedent must match up with the remnant, (2c).[2]

(2)   a.   *Rab ate fish, and Mary did fish too.

       b.   *Rab ate fish, and Mary did some, too.

       c.   ?*Rab gave A BOOK to Tom, and Mary did TO BILL.

Second, the auxiliary verb in T always survives the ellipsis process, with *do* surfacing much like it does in VP-ellipsis when there is no other appropriate auxiliary. Strings like (3) look a lot like pseudogapping, but Johnson (2004) shows that structures in which the auxiliary is missed out are fundamentally different, i.e. they involve gapping, not pseudogapping.

(3)   Rab will bring wine to the party, and Morag beer.

Johnson (2009) argues that gapping is not to be analysed as an ellipsis construction but instead as a form of coordination, so I will put gapping to one side for now.[3]

Third, various constituents can be the remnant of pseudogapping. (1) demonstrates this for objects of the matrix verb, and (4a) for objects of embedded control clauses (Lasnik 2006). (4b)-(4c) show that subjects of ECM clauses and of small clauses may also be remnants (Lasnik 1999a, Lasnik 2006), and (4d) demonstrates that indirect objects are also possible (Lasnik 1999a), as are direct objects in ditransitives (Baltin 2003).

(4)   a.   ?Kathy wants to study astronomy, but she doesn't **meteorology**.

       b.   I didn't expect John to like it, but I did **you**.

       c.   The DA will prove Jones guilty and the assistant will **Smith**.

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[2]Smallcaps indicate focus where it is necessary to mark it.

[3]Toosarvandani (2012) has recently argued that Johnson's coordination analysis may not be general enough for all cases of gapping, and he proposes to replace this with an analysis which brings gapping much closer to pseudogapping. Nevertheless, even on Toosarvandani's account gapping and pseudogapping remain distinct, in that gapping necessarily involves low coordination, while pseudogapping is not so restricted.

     d.   ?John gave Bill a lot of money, and Mary will **Susan**.

     e.   Although John wouldn't give Bill the book, he would the **paper**.

Argument PPs are also possible remnants, with some allowing for P-stranding (Levin 1986):

(5)   a.   Rab will talk to Mary, but he won't **to Tam**.

     b.   John spoke to Bill and Mary should **Susan**.

     c.   Mary is proud of John, and Bill is **of Sally**.

Thus the movement rule which applies to extract the remnant from the VP seems to apply fairly freely to DP and PP arguments. Interestingly, Levin (1986) notes that a wider range of constituents seem to appear as remnants in cases of pseudogapping in comparatives. For instance, APs, VPs and PP complements to nominal arguments may occur as comparative pseudogapping remnants only; they are ungrammatical as remnants in "regular" pseudogapping in coordination.

(6)   a.   I probably feel more jubilant than you do **relieved**.   (Levin 1986, 232)

     b.   *You probably just feel relieved, but I do **jubilant**.

(7)   a.   Rab felt more comfortable dancing than he did **singing**.

     b.   *Rab felt comfortable dancing, but Bill did **singing**.

(8)   a.   Rab bought more pictures of his dog than he did **of his cat**.

     b.   *Rab bought pictures of his dog, and Bill did **of his cat**.

Levin argues that the naturalness of pseudogapping in comparatives is because the comparative structure set up the contrast very clearly. I will return to the exceptionality of comparatives in section 5.3; for now, I will put comparative pseudogapping to one side, focusing on the more restricted case.

3.   Previous analyses

How, then, should pseudogapping be analysed? There have been a number of proposals in the literature, with analyses largely differing in terms of the nature of the movement rule which removes the remnant from the elided constituent. Jayaseelan's (1990) original proposal was that the movement is Heavy NP Shift, where the landing site for movement is a high right-adjoined position above the VP. This had the advantage of reducing pseudogapping to independently available rules of English grammar, and he argued that it was supported empirically by data like (9a), where the claim is that pseudogapping is ungrammatical for the same reason that (9b) is ungrammatical, namely the ban on P-stranding with HNPS.

(9)   a.   (*)You cannot count on a stranger, but you can a friend.

b.   *John counted on for support a total stranger.

However many speakers (including myself and others I've consulted) disagree with the judgment reported in (9a), allowing P-stranding in such examples, and Lasnik (1999a,b) points out that P-stranding with pseudogapping is even better in cases like (5b) above, originally noted by Levin; as Lasnik notes, this is problematic for the HNPS account. This problem is further compounded by the fact that indirect objects can be remnants, as in (4d), but they cannot undergo HNPS, cf. (10a). Moreover the remnant can also be a non-heavy pronominal, such as in (4b), but non-heavy NPs obviously cannot undergo HNPS, cf. (10b).

(10)   a.   *John gave a lot of money the people that deserved it most.

b.   *I saw yesterday you.

Finally we may note that Jayaseelan's theory needs to be generalised, allowing pseudogapping to be generated not just by HNPS but by other kinds of rightward extraposition, since PPs can also be pseudogapping remnants. However this leads to further problems, such as the fact that PP complements to nouns cannot be remnants, as (33) above shows, even though they can be

extraposed quite high:

(11)   I saw a picture yesterday of Gorbachov in the bath.

These facts all indicate that rightward extraposition is not the right movement ingredient for pseudogapping.

Lasnik (1999a,b) offers an intriguing alternative analysis based on the idea that all English objects undergo a form of overt leftward A-movement to Spec,AgrOP, building on proposals in Chomsky (1995). Specifically, Lasnik proposes that pseudogapping is derived by regular application of this leftward A-movement of objects, but then with application of ellipsis to a lower VP segment including V-in-situ. In a standard non-elliptical derivation V would raise to a higher verbal projection, deriving VO, but Lasnik proposes that the verb can exceptionally stay in situ just in case ellipsis applies to "bleed" verb movement.[4] Pseudogapping is thus derived as in (12); for comparison, (13) demonstrates a derivation for the regular non-elliptical counterpart, where the verb raises through AgrO to v.

(12)   [$_{TP}$ Morag$_i$ will [$_{vP}$ t$_i$ v [$_{AgrOP}$ beer$_j$ AgrO ~~[$_{VP}$ bring t$_j$~~]]]].

(13)   [$_{TP}$ Morag$_i$ will [$_{vP}$ t$_i$ bring$_k$+AgrO+v [$_{AgrOP}$ beer$_k$ t$_j$ [$_{VP}$ t$_k$ t$_j$]]]].

Thus in Lasnik's derivation, the relevant operation for getting the remnant out of the elided constituent is A-movement to AgrOP, with ellipsis applying to a small segment of the verbal domain.

Unfortunately the A-movement theory experiences a number of problems as well. First, PPs should not undergo A-movement to Spec,AgrOP, since they do not need Case, yet they may be pseudogapping remnants (5a)-(5c). Second, DPs originating in infinitives may be remnants, as in (4a)-(4b); deriving the relevant structures would incur a violation of A-locality, requiring at least A-movement over PRO, which should intervene; similarly, the second object of double objects may

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[4]See Baltin (2003) for a related proposal, where the movement in question is also to an AgrP projection, but it is not clearly A-movement as it is typically understood, since it applies to PPs and other categories which would not need Case. Gengel (2013) shows that some of the binding data reported by Baltin can be handled equally well by the leftward A′-movement account.

be remnants (4e),[5] also requiring a violation of A-locality. Third, Lasnik's theory predicts that pseudogapping should always delete a smaller part of the tree than VP-ellipsis, but the opposite seems to be true, as pointed out by Agbayani and Zoerner (2004) and Gengel (2013):[6] when multiple auxiliaries are present, VP-ellipsis allows them to remain undeleted, but they can only remain undeleted in pseudogapping if they are cliticized onto the aux in T.[7]

(14)   a.   Rab has been drinking beer, and Tam has (been), too.

      b.   Rab might have been drinking beer, and Tam might (have (been)), too.

(15)   a.   Rab has been drinking beer, and Tam has (*been) wine.

      b.   *Rab wouldn't have been playing chess, but he might have been checkers.

      c.   ??Rab wouldn't have been playing chess, but he might have checkers.

      d.   Rab wouldn't have been playing chess, but he might've checkers.

Taking all these factors into consideration, it seems unlikely that the movement ingredient should be leftward A-movement either.

In more recent work, Jayaseelan (2002) proposes that the movement in pseudogapping is leftward A$'$-movement to an IP-internal focus projection FocP, a projection which he argues is motivated by data from Mayalalam scrambling and English focus anaphors. The data in (14)-(15) motivates an analysis where the FocP projection is below T but above the other verbal projections:

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[5] Lasnik (1999a) originally reported that the ungrammaticality of variants of (4e) provided evidence for his approach, but Baltin's (4e) seems to be robust enough to counterexemplify that claim.

[6] Merchant (2008a) also argues that VP-ellipsis and pseudogapping target different-sized constituents on the basis of an analysis of voice mismatches, which he claims are possible with VP-ellipsis but not with pseudogapping. However Tanaka (2011) challenges the argument and its empirical basis.
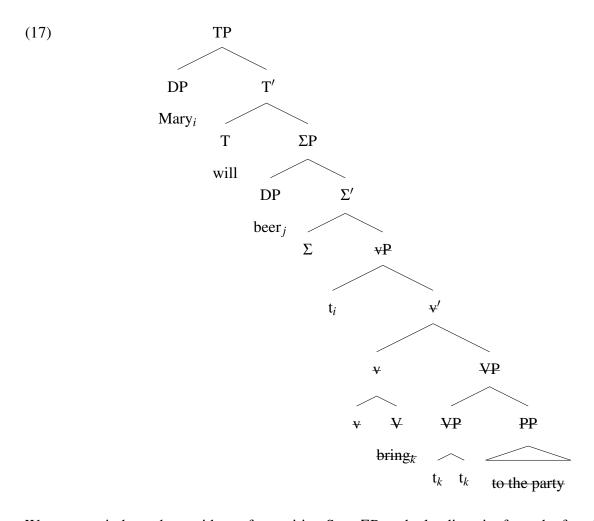
[7] Given these facts, the landing site for A-movement of the object has to be quite high, above most other auxiliary positions and immediately below T. This raises a further A-locality conflict: if we assume that the subject is base-generated in a *v*P-internal position well below the auxiliary positions in the inflectional layer, object remnants would have to A-move to an AgrOP position above the base position of the subject prior to A-movement of the subject to its surface position. It is possible that one may try to dismiss these A-locality violations in terms of "repair by ellipsis," following the line of research initiated by Bošković (2011) where interveners for movement are "starred" and ellipsis saves the derivation. However, while this sort of analysis would work for the cases of indirect objects and PRO as intervener, this would not carry over to the more simple case of subjects: the subject is pronounced after it is moved, and the star that would be placed on the subject would be "visible" at PF, causing a crash. The fact that the subject undergoes A-movement after the object has moved should not make a difference to the locality violation; see Bošković (2011, 12-13) for details.

(16)   [$_{TP}$ Tam$_i$ has [$_{FocP}$ beer$_j$ [~~VoiceP been [vP t$_i$ v [VP drinking t$_j$]]~~]]].

This proposal has been adopted and filled out by Gengel (2013), who shows that it is sufficiently flexible to account for the data that is problematic for previous accounts; that is, it may target DPs and PPs, it may target both options of a double object structure, it allows for P-stranding, it is unaffected by A-intervention, it may target light DPs. That the movement is A′-movement is also compatible with the fact that the relevant movement in pseudogapping has a predictable discourse effect of focusing the remnant.

Considering its empirical advantage, I adopt the leftward A′-movement approach here, with some minor alterations to what is proposed by Jayaseelan (2002), Merchant (2008a) and Gengel (2013). To capture the facts in (14)-(15), I posit that the relevant focus projection is immediately below T. More precisely, I propose that the relevant projection is actually ΣP, since this allows us to put to use a focus-related projection that is already independently motivated (for English[8]) and which is in the right position in the clause. (17) provides a tree representation of the proposed structure for (1):

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[8]Jayaseelan claims that such a projection is motivated on comparative grounds by the fact that Malayalam has such a TP-internal focus position. An alternative take on such data (maintaining cross linguistic uniformity) is that the landing site in Malayalam is Spec,ΣP; teasing apart these proposals is beyond the scope of this article, and the details of the landing site are not crucial here anyway.

(17)

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                        TP
              ┌──────────┴──────────┐
             DP                     T′
            Mary_i         ┌────────┴────────┐
                           T                 ΣP
                          will        ┌──────┴──────┐
                                      DP            Σ′
                                    beer_j     ┌────┴────┐
                                               Σ        vP
                                              ┌─────────┴─────────┐
                                             t_i                  v′
                                                        ┌─────────┴─────────┐
                                                       v̶                   V̶P̶
                                                    ┌───┴───┐         ┌──────┴──────┐
                                                   v̶   V̶          V̶P̶           P̶P̶
                                                      bring̶_k      ┌─┐       ┌────┴────┐
                                                                 t_k  t_k    t̶o̶ ̶t̶h̶e̶ ̶p̶a̶r̶t̶y̶
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We may get independent evidence for positing Spec,ΣP as the landing site from the fact that there seems to be an interaction between pseudogapping and elements that some authors have proposed are generated in Σ, such as negation and polarity particles like *so* (see Laka 1990, López 1999). (18) shows that full negation and particles like emphatic *too* and *so* are incompatible with pseudogapping, even though they are clearly semantically compatible, as shown by a comparison with cases of clitic negation, which could either be the realisation of a higher negation head (as in Zanuttini 1997, Sailor 2011, Holmberg 2013) or the Σ head incorporated into the auxiliary which has moved to T.

(18)   a. ?*Students may bring wine, but they may not beer.

    b.   *John won't bring beer, but he will TOO wine!

    c. *?John has not brought beer, but he has SO wine!

(19)   Students should bring wine, but they shouldn't beer.

If these polarity elements are generated in Spec,Σ, their complementary distribution with the pseudogapping remnant can be easily understood. See Drubig (2003) for more arguments in favour of identifying the clause-internal focus-related projection as a polarity-related projection like ΣP.

The other alteration I make to the proposals in Jayaseelan (2002) and Gengel (2013) is to divorce the construction from VP-ellipsis. Instead I propose, following Thoms (2010), that the ellipsis in pseudogapping is licensed by the focus-moved element itself from the position of the landing site. There are reasons to believe that such an analysis may be correct. Most tellingly, pseudogapping is possible in Icelandic, at least in comparatives, as shown by (20) from Gengel (2013, 42). Icelandic lacks VP-ellipsis, as noted by Platzack (2012) and Thoms (2012) and shown by (21), which differs minimally from (20). This indicates that pseudogapping is not reliant upon the licensor for VPE.

(20)   Pétur hefur lesið fleiri bækur fyrir Kàra en   Páll hefur fyrir María
         Peter has   read more books for Kari than Paul has   for Maria
         'Peter has read more books for Kari than Paul has for Maria'

(21)   *Pétur hefur lesið fleiri bækur fyrir Kàra en   Páll hefur
         Peter has   read more books for Kari than Paul has
         'Peter has read more books for Kari than Paul has

Developing a theory of ellipsis licensing, Thoms (2010) argues that focused-moved elements may generally license ellipsis of the structural complement of their landing sites, with the same being seen in sluicing, stripping and fragment answers.[9] This is not a crucial ingredient of the analysis for pseudogapping to be proposed here, in that a very similar analysis with VP-ellipsis as the licensor may also be developed.

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[9]That it is indeed the moving element that licenses ellipsis in sluicing, rather than a functional head like C, is indicated by the fact that C is always deleted when it is preceded by the *wh*-remnant; this is what is known as Merchant's (2001) "sluicing-comp generalization."

4. Differences between stripping and pseudogapping

An important aspect of the leftward A′-movement analysis alluded to above is that it brings pseudogapping a lot closer to a number of other ellipsis "constructions"; in particular, it looks like a variant on stripping (22)-(23), which Sag (1976), Reinhart (1983), Reinhart (1993), Depiante (2000) and Merchant (2003a) argue involves leftward A′-movement to a focus projection in the left periphery.

(22)   John sent me RECORDS last year, and BOOKS ~~he sent me~~, too.

(23)   Lucie will admit she stole THE DIAMONDS if you press her, but not THE CAR ~~she'll admit she stole~~.

Many cases of stripping also share with pseudogapping the striking property that they are ungrammatical in the absence of ellipsis: (24) is an unelided variant of (23) and (25) an unelided variant of (1).[10]

(24)   ... *but not the car she'll admit she stole.

(25)   *John will beer bring to the party.

Similarly, stripping usually requires that the remnant is focused and that it has a correlate that has some degree of focus (Konietzko and Winkler 2010), though this seems to be less strict than with pseudogapping.[11]

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[10]Unelided variants of some cases of stripping are reasonably well-formed (i.e. (22)), since English allows for some cases of focus fronting, but in most cases a lack of ellipsis leads to degradation or ungrammaticality. The same is also seen with fragment answers (Merchant 2004).

[11] As noted by an anonymous reviewer, some apparent cases of stripping with *too*, as in (i), seem to occur without focussed correlates, since the antecedent for ellipsis in such cases is deaccented on the XP that is the correlate for sluicing. Moreover, as noted by (Konietzko and Winkler, 2010, 1441), in some cases stripping can occur even with an implicit correlate, like an implicit *by*-phrase in a passive.

(i)   A: Who admitted that she stole the diamonds?
        B: LUCIE admitted that she stole them.
        C: And THE CAR, too.

(ii)   Mistakes were made, but not BY ME.

(26)   a. ??Rab gave a A BOOK to Tom, but NOT TO MARY.

       b. *I'm sure that Rab ate, but NOT CAVIAR ~~I'm sure that he ate~~.

       c. ??As for the beans, RAB ate them, but NOT THE CAVIAR

Given these similarities, we may assume that stripping and pseudogapping are basically the same, with the only real difference being that the focus movement in stripping lands in Spec,CP while in pseudogapping it targets a TP-internal focus position. This would allow us to move away from the construction-specific view of ellipsis, a welcome result.

However, there are two substantial differences between stripping and pseudogapping which seem to militate against such a unification. The first problem is that the focus-movement rule in pseudogapping seems to be clause-bounded, in that pseudogapping remnants may not originate in lower clauses (Lasnik 2006), a fact that could be brought in favour of the rightward extraposition analysis. This unlike stripping, which is unbounded like regular A$'$-movement.

The same sort of mismatch in focus structure can be seen with VP-ellipsis examples like (iii); moreover this mismatch is also possible when B's utterance is a single fragment, which is presumably derived by focus movement of the answer XP to the left periphery.

(iii)   A: Who did John punch?
         B: (He punched) BILL.
         C: And Mary did, too.

I propose that in such cases of mismatches between antecedent and ellipsis with respect to focus structure, the speaker is *accommodating* (in the sense of Fox 1999, Thoms (2013)) an additional variant of the antecedent with a different focus structure, specifically one where the correlate is focussed; this is usually easier to do in dialogues, since speakers may differ in the focus structures that the assign to a given string, but it should also be possible with examples like (ii), where the additional antecedent is heavily implied (Konietzko and Winkler 2010).
    Unfortunately it is not so clear that pseudogapping also allows for accommodation of additional antecedents, as (iv) (an altered version of an example provided by the same reviewer) is somewhat degraded.

(iv)   A: What did the boys eat?
        B: ??Bob ate A STEAK and Bill did A SALAD

It is not clear whether the relative degradation of (iv) is due to some syntactic property that distinguishes pseudogapping and stripping, or a combination of external factors (i.e. the oft-observed markedness of pseudogapping along with some tax on accommodating an additional antecedent, and perhaps a preference for gapping). Establishing the exact nature of this accommodation process and how it may distinguish between pseudogapping and stripping is beyond the scope of this article; see Fox (1999), Thoms (2013) for related discussion.

(27)   *Kathy thinks she should study French, but she doesn't German ~~think she should study~~.

(28)   Lucie will admit she stole the diamonds if you press her, but not the car ~~she will admit she~~

~~stole t~~.   (Reinhart 1993)

Second, stripping targets a much wider variety of categories than pseudogapping, such as APs, VPs and PP complements to nominals; as we saw, these elements cannot be pseudogapping remnants.

(29)   a.   Ailsa will be nice if you ask her, but not nasty.

         b.   Ailsa is always comfortable singing, but not dancing.

         c.   Ailsa will buy a picture of John if you ask her nicely, but not (of) Bill.

These restrictions may lead us to believe that pseudogapping is a different beast altogether.[12]

In the next section I argue that unification may still be possible once we consider the role of the antecedent to ellipsis. I propose an account of the restrictions on pseudogapping in terms of *Parallelism*, where the relevant restrictions follow from restrictions on creating appropriate antecedents. In the following section I then propose an account of why these restrictions apply to pseudogapping but not stripping.

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[12]As noted by an anonymous reviewer, one other difference between pseudogapping and stripping is the ability to occur in embedded clauses: only the former allows for this, as observed by Lobeck (1995) and others.

(i)   a.   Some had eaten mussels, because others had shrimp.
       b.   *John left early, because not Mary.

I propose that this root of this difference is the fact that stripping targets the CP-left periphery, while pseudogapping does not. It is well-known that the CP layers of root and embedded clauses differ substantially in English and other languages, so a difference in whether or not these different CP-layers may host focus movement is not surprising. Thus one cartographically flavoured account could be that matrix CPs are unlike embedded CPs in that only the former hosts true focus movement, perhaps because it is "truncated" (e.g. Benincà and Poletto 2004) and thus lacks a FocP projection that may serve as a landing site for stripping; the possibility of embedded topicalization with at least some embedding predicates may then follow from the fact that TopP projections can be projected below FocP (Rizzi 1997).

5.   Pseudogapping and Parallelism

5.1   *Parallelism*

Much work on ellipsis has converged upon the conclusion that ellipsis identity is subject to a condition known as *Parallelism* (Sag 1976, Rooth 1992, Fiengo and May 1994, Fox 2000, Fox and Lasnik 2003, Fox and Pesetsky 2005, Hartman 2011, Griffiths and Lipták 2014, Barker 2013). Parallelism is motivated by data from scope, and an informal definition of the kind of constraint that is required is given in (30) (from Griffiths and Lipták 2014):

(30)   Scope parallelism in ellipsis: variables in the antecedent and the elided clause are bound from parallel positions.

Different theories of ellipsis identity account for the effects of (30) in different ways, but I will put this to one side for now. What is important for my purposes here is that the condition in (30) is a syntactic isomorphism condition which regulates the position of variable-binding operators (Fox 1999, Fox and Lasnik 2003).

To see how this works, consider a case of sluicing:

(31)   Everyone bought a book, but I don't know which one.

The relevant empirical observation with examples like (31) is that the scope of the antecedent is fixed, with the existential correlate *a book* scoping over the universal quantifier subject (see Chung et al. 1995, Barker 2013). The indefinite in the antecedent is required to take sentential scope to ensure that there is parallel variable binding relation in the ellipsis clause created by *wh*-movement, which takes sentential scope in Spec,CP; if the indefinite took narrow scope in some IP-internal position, the variables in the two clauses would not be bound from parallel positions and (30) would be violated. (32) provides a schematic LF for illustration, where the wide scope of the indefinite is derived by QR to some TP-adjoined position or higher, and traces are represented as variables bound by λ-operators (Keenan 1971, Sag 1976):

(32)   [$_{DP}$ **a book**] λx [$_{TP}$ everyone [$_{VP}$ bought **x**]] but I don't know

[$_{DP}$ **which one**] λy ~~[TP everyone [VP bought **y**]]~~

We can see in this representation that the variables in the antecedent and ellipsis clause are bound from parallel positions. By contrast, consider the LF where the indefinite correlate scopes below the universal quantifier in some VP-adjoined position:

(33)   [$_{TP}$ everyone [$_{DP}$ **a book**] λx[VP bought **x**]] but I don't know

[$_{DP}$ **which one**] λy ~~[TP everyone   [VP bought **y**]]~~

Here the variables are not bound from parallel positions, and so condition (30) is not satisfied and hence the antecedent LF in (33) is not a suitable antecedent for sluicing. The fact that the antecedent is disambiguated for the wide scope reading may thus be taken to be evidence for a condition like (30).[13]

5.2   *The restrictions on pseudogapping*

Now consider again the structure in (16) for a basic case of pseudogapping. In all cases of pseudogapping there is extraction from the ellipsis site in the ellipsis clause, that is movement of the remnant to Spec,ΣP, so Parallelism will require that there be a parallel variable-binding dependency in the antecedent. Recall that the correlate of the pseudogapping remnant is always focussed. I follow Krifka (2006) and Griffiths and Lipták (2014) in assuming that focussed XPs may take scope by covert movement, much like other quantificational elements (see also Chomsky 1976). Given this, we may say that QR of the correlate to a parallel IP-internal adjunction position may provide a suitable antecedent for pseudogapping. (34) schematises this for (16):

(34)   [$_{TP}$ Rab$_i$ has [$_{FocP}$ **wine** λ**x** [$_{PassP}$ been   [$_{vP}$ t$_i$ *v* [$_{VP}$ drinking **x**]]]]] and

[TP Tam$_i$ has [$_{FocP}$ **beer** λ**y** ~~[PassP been [vP t$_i$ *v* [VP drinking **y**]]]~~]].

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[13]Importantly, (31) is ambiguous if there is no ellipsis.

The key proposal here is this: the covert movement rule that establishes the scope of focus in pseudogapping is the same rule that moves other quantificational elements, namely QR. Importantly, this predicts that pseudogapping will be subject to broadly the same locality conditions as QR, and that it will apply to the same kinds of constituents that QR applies to. We will see that this allows us to give an account of the restricted nature of pseudogapping in terms of parallelism.

First, consider the locality condition on pseudogapping demonstrated in (27): it cannot cross a finite clause boundary. As is well-known, QR is typically unable to escape finite clauses, as demonstrated by the inability of universal QPs to scope out of finite clauses (May 1985, but see Farkas and Giannakidou 1995 and Kayne 1998 for systematic exceptions; see also Dayal 2002 on QR of *wh*-phrases).

(35)   Someone thinks you should kiss everyone. $\exists > \forall, *\forall > \exists$

If QR is generally restricted by clause boundaries, (27) follows as a Parallelism failure: the correlate in the antecedent will never be able to move to a position in the matrix clause parallel to that to which the pseudogapping remnant must have moved.

(36) $[_{TP}$ Kathy $[_{T'}$ T $[_{\Sigma P}$ $[_{\Sigma'}$ $\Sigma \ldots$ $[_{CP}$ $[_{VP}$ study astronomy $]]]]]]$

$[_{TP}$ She $[_{T'}$ doesn't $[_{\Sigma P}$ **meteorology** λx $[_{\Sigma'}$ $\Sigma \ldots [_{CP} [_{VP}$ study **x** $]]]]]]$

Note that we need not propose that it is the overt movement operation that moves the pseudogapping remnant that is bounded; indeed, we may expect that this is wholly capable of crossing clause boundaries like any other form of overt A$'$-movement. Nevertheless, this will not suffice when the correlate cannot QR to a parallel position, as Parallelism will not be satisfied.

Interestingly, the locality of pseudogapping tracks that of QR in a number of other contexts too. First, consider infinitives. QR can typically escape control infinitives (37a), but it seems to be blocked (at least for many speakers[14]) with ECM infinitives (37b). This is exactly parallel

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[14]The contrast between control and ECM infinitives is reported by Lasnik (2006). Wurmbrand (to appear) provides examples of ECM which are intended to show QPs scoping wide out of the infinitive, but I disagree with the judgments

to happens with pseudogapping, as shown by (38a)-(38b), where pseudogapping escapes control infinitives but not ECM infinitives.

(37)   a.   Someone wants to visit everyone. $\forall > \exists$

       b.   Someone wants John to visit everyone. $*\forall > \exists$

(38)   a.   ?Kathy wants to study astronomy, but she doesn't meteorology.   (Lasnik 2006)

       b.   ?*Kathy wants John to study astronomy, but she doesn't meteorology (Lasnik 2006)

Now consider complements to NP and AP. It is well-known that DPs contained by PP complements to nominals are unable to scope out of the DP, a fact that led Larson (1985) to propose that DP is an island for QR, with the "inverse linking" readings of complex QPs like *a piece of two cakes* being derived by other means.[15]

(39)   Everyone ate a piece of two cakes. $*2 > \forall > \exists$

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for ECM reported there (and agree with Lasnik's). But haziness with this data is not wholly incompatible with the present account, since it seems that the contrast between the ECM and control infinitives with respect to pseudogapping is also not as clear as it might be.

Note also that I describe *want* as "ECM", though it may in fact be better analysed as a null *for* infinitival complement; here I am simply adopting Lasnik's broad characterisation which pulls together ECM and other overt subject infinitives.

[15]Sauerland (2005) challenges this on empirical grounds, arguing that there are other cases of QR out of DP that cannot be handled by the mechanisms proposed by Larson (1985) and others. Sauerland's proposals are challenged by Charlow (2010), who shows that Sauerland's arguments are problematic and the analysis in terms of Superiority flawed. See also Shan and Barker (2006).

Relatedly, an anonymous reviewer points out that the claim that QR cannot extract from DPs is challenged by data from antecedent-contained deletion reported by Kennedy (1997), where a QR-based approach to ACD resolution is committed to an analysis where QR escapes the DP.

(i)   Jim read a report on every book that you did ~~read a report on t~~

However Fintel and Iatridou (2003) show that the QR which is required to license ACD ("ACD-QR") is different from regular QR in a number of respects, including locality (i.e. it can escape finite CPs; see also Wilder 1996); this may be due to some "last resort" effect whereby QR can do exceptional things when a structure would otherwise be ill-formed. Besides this, there are also good reasons to be skeptical about the idea that the problem of ACD is "solved" by (and hence requires) QR, such as the fact that the ACD problem also surfaces where QR could not be the solution, namely in cases "antecedent-contained sluicing" discussed by Yoshida (2010).

Given this, we correctly predict that pseudogapping will not be able to escape DP, regardless of whether the DP allows for overt extraction, since the restriction is on deriving a parallel antecedent by QR out of the correlate. Recall (45b), repeated here as (40).

(40)   *Rab bought pictures of his dog, and Bill did (of) his cat.

On the other hand, APs are unlike DPs in that they do in fact allow for extraction of their complement PPs in pseudogapping, as shown by (5c), repeated below as (42). This again correlates with QR: QPs in complements of adjectives can take wide scope by QR.

(41)   At least one teacher was proud of every student. $\forall > \exists$

(42)   Mary is proud of John, and Bill is of Sally.

We can see, then, that a number of the restrictions on pseudogapping follow from Parallelism, in combination with independently attested locality constraints on QR.

In addition to this, the QR-based approach may also allow us to understand the restrictions on what kinds of XPs can be pseudogapping remnants. Recall that pseudogapping generally does not allow for CP, VP and AP remnants, but it does allow for DP and PP remnants. Why would this be? One possible explanation is that QR applies just to DPs (modulo pied-piping). This may be derived from the semantics of the different constituents; for instance, APs and VPs may not undergo QR because they are predicates, and as such they cannot leave lower traces of lower types in their base position and hence they cannot create variable binding configurations by movement; rather, they will always semantically reconstruct, rendering the effects of a rule like QR invisible, and hence we may expect that a principle like Scope Economy (Fox 2000) may rule out such vacuous covert movement rules. If this line of reasoning is on the right track, the fact that we do not get AP and VP-remnants in regular pseudogapping may again follow from Parallelism.[16]

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[16]I leave open whether this explanation extends to the case of CP complements, since this would require an excursion into the question of whether or not such complements are nominals.

5.3   Pseudogapping in comparatives

Importantly, the account of pseudogapping proposed here may also allow us to get a handle on why it behaves differently in comparative contexts. Recall that regular pseudogapping forbids making APs, VPs and PP complements to nominals the remnant, while these restrictions are lifted in comparative contexts, as shown by (6)-(33) (repeated here).

(43)   a.   I probably feel more jubilant than you do **relieved**.   (Levin 1986, 232)

     b.   *You probably just feel relieved, but I do **jubilant**.

(44)   a.   Rab felt more comfortable dancing than he did **singing**.

     b.   *Rab felt comfortable dancing, but Bill did **singing**.

(45)   a.   Rab bought more pictures of his dog than he did **of his cat**.

     b.   *Rab bought pictures of his dog, and Bill did **of his cat**.

In the previous subsection the restriction in non-comparative pseudogapping in the (b) examples here was attributed to the inability of the correlates – *relieved* in (43b), *dancing* in (44b), *of his dog* in (45b) – to undergo QR to a position parallel to the landing site for pseudogapping in the ellipsis clausal; in the case of the APs and VPs, it was proposed that this is a categorial restriction on the application of QR, while in the case of PP complements it was a locality condition on QR.

    The question, then, is why these restrictions are lifted in comparatives. In the context of the analysis proposed here, the obvious answer is that the correlates are clearly different in the comparatives from their non-comparative counterparts, in that in all cases they are contained in quantificational *more*-phrases which, by most analyses of comparative semantics, would undergo QR to an adjoined position in the clause. The idea, then, is that this allows for the creation of a parallel antecedent to pseudogapping where it would not normally be possible. This, in combination with the deletion operations that are active in comparatives independent of pseudogapping, allows for the effect of a wider range of remnants.

For concreteness I will adopt the approach to comparatives in Kennedy (2002), where it is not the degree head *-er* but rather the whole phrase that makes up the head of the comparative (the *more*-phrase) that undergoes QR in the matrix/antecedent clause.[17] (46) provides a simplified schematic for an AP-remnant, where we can see that Parallelism is satisfied.

(46)　　$[_{TP}$ I $[_{vP}$ $[_{DegP}$ more jubilant $]_i$ $[_{vP}$ feel t_i $]]]$.

　　　　$[_{CP}$ $[_{TP}$ you $[_{FocP}$ $[_{DegP}$ d-relieved $]_k$ ~~$[_{vP}$ feel t_k $]$~~ $]]]$.

Almost exactly the same structure is given for a "VP-remnant," which is actually analysed as an AP-remnant that has undergone comparative subdeletion, with *d-comfortable* elided under identity with the antecedent (see Kennedy 2002 and references cited therein).

(47)　　$[_{TP}$ I $[_{vP}$ $[_{DegP}$ $[_{Deg'}$ more $[_{AP}$ comfortable $[_{VP}$ dancing $]]]]_i$ $[_{vP}$ felt t_i $]]]$.

　　　　$[_{CP}$ $[_{TP}$ you $[_{FocP}$ $[_{DegP}$ $[_{Deg'}$ ~~d-comfortable~~ $[_{VP}$ singing$]]]_k$ ~~$[_{vP}$ felt t_k $]$~~ $]]]$.

Extraction of PP complements to nominals gets a similar analysis: these are regular DP-comparatives in which the whole compared DP undergoes movement (and its correlate QR), but comparative subdeletion targets the NP component to the exclusion of the PP complement. That this subdeletion is attested independent of pseudogapping is shown by examples like (49).

(48)　　$[_{TP}$ Rab $[_{vP}$ $[_{DP}$ $[_{D'}$ more $[_{NP}$ pictures $[_{PP}$ of his dog $]]]]_i$ $[_{vP}$ bought t_i $]]]$.

　　　　$[_{CP}$ $[_{TP}$ you $[_{FocP}$ $[_{DP}$ $[_{D'}$ ~~d~~ $[_{NP}$ ~~pictures~~ $[_{PP}$ of his cat $]]]]_k$ ~~$[_{vP}$ bought t_k $]$~~ $]]]$.

(49)　　I bought more pictures of my dogs than you bought of yours.

Hence we see that the cases of apparent PP and VP-remnants in comparative pseudogapping are only apparent, in that they are not moved out of the DPs and APs which contain them but rather pied-piped with them and then retained after comparative subdeletion. The only true additional option for pseudogapping remnants in comparatives are APs, and we can understand this in terms

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[17]I thank an anonymous reviewer for stressing the importance of Kennedy's work to this particular analysis.

of parallelism. This all follows in a fairly natural way from the parallelism-based analysis of pseudogapping proposed here.

5.4 *The difference between stripping and pseudogapping*

The analysis proposed proposed above derives constraints on moving the remnant in pseudogapping as a side-effect of the fact that its correlate must take scope by QR. An immediate question that one may ask is this: *why* must the focussed correlate of pseudogapping take scope by QR? The simplest answer may be to follow Krifka (2006) and Wagner (2006) in assuming that this is the only way for focus to get scope; by doing this, we would thus have to assume (with these authors) that many cases where focus takes exceptionally wide scope – say, out of islands – is due to covert pied-piping.[18] However, if we took this option we would be at a loss to explain the many differences between pseudogapping on the on hand and stripping on the other. Recall that stripping is neither clausebound nor particularly category-sensitive (i.e. targeting APs, VPs):

(50)   Lucie will admit she stole THE DIAMONDS if you press her, but not THE CAR ~~she'll admit she stole~~.   (=(23))

(51)   Ailsa will be nice if you ask her, but not nasty.   (= (29a))

If QR were the only way for focus to take wide scope, we would predict these cases to involve parallelism violations: for instance, in (50), QRing the focussed correlate *the diamonds* would not be able to scope out of the embedded clause parallel to the long-extracted remnant in the ellipsis site. How, then, can parallelism be satisfied here if QR is not setting the scope of focus?

Here I will propose that this conflict can be resolved if we assume that the scope of focus may be determined either by QR or by *in-situ scope-taking mechanisms*. This is broadly parallel to what Reinhart (1997) proposes for exceptionally wide-scoping indefinites and *wh*-in-situ, and

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[18]There are a few reasons to be suspicious of this approach to association with focus. One reason, noted by Wagner (2006) in passing, is that pied-piping of an island never affects the scope of the island itself (e.g. it can be *de dicto* with respect to intensional operators). This may be attributed to obligatory reconstruction, but then the question begs whether island pied-piping happened at all.

building on Reinhart's work, Dayal (1996, 2002) has argued that there is empirical evidence which shows that both mechanisms must be independently available for *wh*-in-situ. Here I propose that in-situ wide scope for focus is established by the choice-function mechanisms; more precisely, I assume the implementation of in Reich (2004), where a choice-function analysis for focus-in-situ is worked out in detail. Reich proposes that in-situ focus introduces a choice-function variable that is selectively bound in the scope position of the focus.[19] In the case of association with focus, the binder is the focus particle (i.e. *only*) which bears the relevant index; since the focus particles are typically VP-adjoined, he assumes that the subject typically reconstructs to get into the scope of focus. In the case of "free focus" without a focus particle (as in contrastive focus in English, and pseudogapping and stripping), the focus is selectively bound by a covert operator associated with the mood/force of the sentence, which Reich calls ASSERT or ASK. Following Reich, I will assume that the relevant operators are merged in the CP layer, the locus of mood/force interpretation (Rizzi 1997); interpretation of the operator there allows the focus to take the background proposition in its scope. This is broadly similar to the interpretation of *wh*-in-situ in Reinhart's and Dayal's approach, where the relevant operator is the question-operator in C. Crucially, it is different from the interpretation of indefinites, which allow for intermediate scope via existential closure in arbitrary structural positions (see Reinhart 1997, p.374-375).

This mixed approach to the scope of focus allows us to capture the difference between stripping and pseudogapping. To begin with, let us assume that the focussed correlates of stripping (and other clausal contrastive ellipsis constructions) all take clausal scope by choice functions. Binding of the focussed correlate by the focus operator in the left periphery will trivially satisfy Parallelism with clausal ellipsis, and it is compatible with the unboundedness of these constructions, since binding can cross clause boundaries. (52) illustrates this:

(52)   A: $[_{\text{FocP}}$ Foc-Op$_i$ ....   CORRELATE$_{F-i}$ ... $]$

E: $[_{\text{FocP}}$ REMNANT$_j$ ....   t$_j$ ... $]$

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[19]See Wold (1996) for a similar approach that invokes unselective binding rather than choice functions, and Reich (2004) for reasons to prefer the latter analysis.

Crucially, the choice function mechanisms are *not* compatible with pseudogapping. Recall the correlate of pseudogapping must take scope in a clause-medial position in order to satisfy Parallelism, since the remnant has itself moved to a clause-medial focus-related position. QR of the correlate derives a parallel antecedent straightforwardly, since this lands in a clause-internal position. However, a choice function interpretation for focus in-situ does not take scope in a clause-internal position, since the covert operator associated with the focus binds the choice-function variable from a higher position in the left periphery (as with *wh*-in-situ). Thus pseudogapping with a focussed correlate that takes scope by in-situ mechanisms would always violate parallelism:

(53) A: [$_{\text{FocP}}$ Foc-Op$_i$ [$_{\text{TP}}$ subj T ....   CORRELATE$_{F-i}$ ...]]

E: [$_{\text{FocP}}$ [$_{\text{TP}}$ subj T   REMNANT$_j$ t$_j$ ...   ]

↑ *not parallel!*

The claim that binders in CP cannot be parallel to clause-internal binders is supported by the fact that pseudogapping cannot be used to answer either a *wh*-question in English.

(54) A: What (else) did he eat?

B: *He did A SALAD.

Hence the in-situ mechanisms are not available to derive antecedents for pseudogapping, as they would never be able to satisfy Parallelism.[20]

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[20]One might argue that (54) is ruled out independently due to a clash in the focus structure of *wh*-questions and pseudogapping, since the latter typically has a contrastive focus interpretation. However this would surely be a problem that is common to fragment answers as well, since they involve focus fronting of a kind that is typically contrastive, with and without ellipsis (cf. stripping), and we would also need to take into account the interpretation of *what else* questions, which are often assumed to have a contrastive interpretation. An alternative take on this, following É. Kiss (1998), would be that contrast is simply not grammatically encoded by focus in English, and hence not a hard constraint on pseudogapping and stripping.

Another possible objection to the data point in (54) could be that pseudogapping is bad because it is more redundant than the simple fragment answer, something which may be modelled in terms of a constraint like MaxElide (Merchant 2008b). However this would incorrectly predict pseudogapping to be ruled out in favour of stripping in comparatives:

(i)   John bought more books than (he did) RECORDS.

The result of this is that the only way to derive a parallel antecedent to pseudogapping is to QR the correlate. This explains the fact that pseudogapping is tied to QR, in terms of locality and the restrictions on possible remnants, while the other kinds of clausal ellipsis construction are much freer, being able to cross finite clause boundaries (because binding can cross these boundaries) and being able to target almost any constituent (because F-marking is done by simply adjoining an F-index to the relevant constituent). Generalizing, we may say that focus movement to the left periphery in an ellipsis construction will always have the freedom of stripping, while elliptical constructions where the focus lands in a clause-internal position will be tied to QR.[21]

5.5   *Summary*

In this section I have argued that a number of restrictions on pseudogapping follow from Parallelism. The Parallelism effects follow from the fact that the remnants in the ellipsis clause must have a focussed correlate which takes scope (and hence binds its variable) from a higher position by means of covert scope-setting mechanisms. What the comparison of pseudogapping with the stripping shows us is that it is necessary to assume that the scope of focus may be established by two different mechanisms. One of these mechanisms, employed with pseudogapping, is highly restricted, only applying to certain constituents subject to strict locality. I proposed that the mechanism for this is QR, since the restrictions on pseudogapping closely tracked restrictions on QR. The other mechanism, employed with stripping and other clausal ellipsis constructions, shows much more freedom, being unbounded and able to apply to a large variety of constituents. I proposed that the mechanism for this is choice functions (Reich 2004), an in-situ scoping strategy which allows for the selective binding of variables by focus operators in the left periphery. Therefore an account of Parallelism effects in ellipsis requires, and we may argue motivates, a mixed approach to the syntax of focus, as argued for on different grounds by Drubig (2003).[22] This has the outcome of

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[21]Note that even if we were to allow the correlate to take scope in a two-step fashion – first by QRing the argument to a position parallel to the correlate and then by binding the focus in its derived position by the Foc operator – we would still predict that pseudogapping would be tied to QR, since the first step of this process would need to be matched by focus movement of the pseudogapping remnant in the ellipsis clause. Hence the categorial and locality constraints would still be expected, even if the final representation of the antecedent would look different.

[22]Thanks to an anonymous reviewer for pressing on the relevance of Drubig's work.

making the scope of focus very like the scope of *wh*, since Dayal (2002) has argued that the mixed approach is motivated for the latter on empirical grounds; given the extensive commonalities between focus and *wh*, this is a theoretically welcome result.

6. Conclusion

In this paper I have argued in favour of the leftward A′-movement account of pseudogapping, showing that some problematic constraints on the construction can be explained in terms of Parallelism. I have shown how the Parallelism-based account can explain the locality and categorial restrictions, the exceptional properties of comparative pseudogapping, and (with some assumptions about the scope of focus) the differences between pseudogapping and stripping.

This account has a number of theoretical implications. First, it shows that Parallelism is a hard constraint on ellipsis, one that seems to necessitate some degree of LF-isomorphism between ellipsis and antecedent; this is of interest in the context of recent debate of the nature of the identity condition, which shows signs of being syntactic (Chung 2013, Merchant 2013) while still allowing the kinds of mismatches that seem to require something looser than LF-isomorphism (Merchant 2001, Thoms 2013). Second, by arguing strongly for the A′-movement account I have strengthened the case for allowing ellipsis-specific movement operations in the syntax, since overt A′-movement to a clause-internal focus position is generally impossible in English in the absence of ellipsis. Such a position has argued for elsewhere independent of pseudogapping, such as Merchant (2003b) on head movement in comparatives, but in this case in the domain of A′-movement. This indicates that the conditions on movement are not purely syntactic but at least partly phonological, in line with theories of movement like the one in Bobaljik (2002). Finally, the proposal here also has implications for the proposals in Griffiths and Lipták (2014), where it is proposed that the island-boundedness of contrastive sluicing, stripping and other "contrastive ellipsis" constructions is due to the fact that the correlate in the antecedent takes scope by an unbounded but island-bound covert movement operation, with the ungrammaticality of island-escaping contrastive remnants being due to a Parallelism failure (the correlates can't scope out of the islands). If the analysis provided here

is correct, the focussed correlates of contrastive ellipsis constructions may in fact take scope by in-situ mechanisms that would be able to scope out of islands. This would mean that the island-boundedness of contrastive ellipsis should receive an alternative explanation, for instance one in terms of non-repair (i.e. Barros to appear, Barros et al. to appear).

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Agbayani, Brian and Zoerner, Ed. 2004. Gapping, pseudogapping and sideward movement. *Studia Linguistica* 58:185–211.

Baltin, Mark. 2003. The interaction of ellipsis and binding: Implications for the sequencing of Principle A. *Natural Language and Linguistic Theory* 21:215–246.

Barker, Chris. 2013. Scopability and sluicing. *Linguistics and Philosophy* 36:187–223.

Barros, Matthew. to appear. A non-repair approach to island-sensitivity in contrastive TP ellipsis. In *Proceedings of Chicago Linguistics Society 48*, Chicago, IL.

Barros, Matthew, Elliott, Patrick, and Thoms, Gary. to appear. More variation in island repair: the clausal/non-clausal island distinction. In *Proceedings of CLS 49*, Chicago, IL.

Benincà, Paola and Poletto, Cecilia. 2004. Topic, focus, and V2: Defining the CP sublayers. In Luigi Rizzi, ed., *The Structure of CP and IP*, 52–75, Oxford: Oxford University Press.

Bobaljik, Jonathan. 2002. A-chains at the PF-interface: copies and 'covert' movement. *Natural Language and Linguistic Theory* 20:197–267.

Bošković, Željko. 2011. Rescue by PF deletion, traces as (non)interveners and the *that*-trace effect. *Linguistic Inquiry* 42:1–44.

Charlow, Simon. 2010. Can DP be a scope island? In Thomas Icard and Reinhard Muskens, eds., *ESSLLI 2008 and ESSLLI 2009 Student Sessions. Selected Papers*, volume 6211, 1–12, Lecture Notes In Computer Science.

Chomsky, Noam. 1976. Conditions on rules of grammar. *Linguistic Analysis* 2:303–350.

Chomsky, Noam. 1995. *The minimalist program*. Cambridge, Massachusetts: MIT Press.

Chung, Sandra. 2013. Syntactic identity in sluicing: how much and why. *Linguistic Inquiry* 44:1–44.

Chung, Sandra, Ladusaw, William A., and McCloskey, James. 1995. Sluicing and Logical Form. *Natural Language Semantics* 3:239–282.

Dayal, Veneeta. 1996. *Locality in Wh-Quantification: Questions and Relative Clauses in Hindi*. Dordrecht: Kluwer Academic Press.

Dayal, Veneeta. 2002. Single-pair versus multiple-pair answers: wh-in-situ and scope. *Linguistic Inquiry* 33:512–520.

Depiante, Marcela A. 2000. The syntax of deep and surface anaphora: A study of null complement anaphora and stripping/bare argument ellipsis. Ph.D. thesis, University of Connecticut.

Drubig, Hans Bernhard. 2003. Towards a typology of focus and focus constructions. *Linguistics* 41:1–50.

É. Kiss, Katalin. 1998. Identificational focus versus informational focus. *Language* 74:245–273.

Farkas, Donka and Giannakidou, Anastasia. 1995. How clause-bounded is the scope of universals? In T. Gallway, ed., *Proceedings of SALT 6*, 35–52.

Fiengo, Robert and May, Robert. 1994. *Indices and identity*. Cambridge, Massachusetts: MIT Press.

Fintel, Kai von and Iatridou, Sabine. 2003. Epistemic Containment. *Linguistic Inquiry* 34:173–198.

Fox, Danny. 1999. Focus, parallelism, and accommodation. In T. Matthews and Devon Strolovitch, eds., *Proceedings of the Ninth Conference on Semantics and Linguistic Theory*, 70–90, Cornell University, Ithaca, NY: CLC Publications.

Fox, Danny. 2000. *Economy and semantic interpretation*. Cambridge, Massachusetts: MIT Press.

Fox, Danny and Lasnik, Howard. 2003. Successive-cyclic movement and island repair: the difference between Sluicing and VP-ellipsis. *Linguistic Inquiry* 34:143–154.

Fox, Danny and Pesetsky, David. 2005. Cyclic linearization of syntactic structure. *Theoretical Linguistics* 31:1–46.

Gengel, Kirsten. 2013. *Pseudogapping and ellipsis*. Oxford: Oxford University Press.

Griffiths, James and Lipták, Anikó. 2014. Contrast and island-sensitivity in clausal ellipsis. *Syntax* 17:189–234.

Hartman, Jeremy. 2011. The semantic uniformity of traces: evidence from ellipsis parallelism. *Linguistic Inquiry* 42:367–388.

Holmberg, Anders. 2013. The syntax of answers to polar questions in English and Swedish. *Lingua* 128:31–50.

Jayaseelan, K. A. 1990. Incomplete VP deletion and Gapping. *Linguistic Analysis* 20:64–81.

Jayaseelan, K. A. 2002. IP-internal topic and focus phrases. *Studia Linguistica* 55:39–75.

Johnson, Kyle. 2004. In search of the English middle field, ms., University of Massachusetts.

Johnson, Kyle. 2009. Gapping is not (VP) ellipsis. *Linguistic Inquiry* 40:289–328.

Kayne, Richard S. 1998. Overt vs. covert movement. *Syntax* 1:128–191.

Keenan, Edward. 1971. Names, quantifiers, and the sloppy identity problem. *Papers in Linguistics* 4:211–232.

Kennedy, Chris. 1997. Antecedent contained deletion and the syntax of quantification. *Linguistic Inquiry* 28:662–688.

Kennedy, Chris. 2002. Comparative deletion and optimality in syntax. *Natural Language and Linguistic Theory* 20:553–621.

Konietzko, Andreas and Winkler, Susanne. 2010. Contrastive ellipsis: mapping between syntax and information structure. *Lingua* 120:1436–1457.

Krifka, Manfred. 2006. Association with focus phrases. In V. Molnár and Susanne Winkler, eds., *The architecture of focus.*, number 82 in Studies in Generative Grammar, 105–135, Berlin: Mouton de Gruyter.

Laka, Itziar. 1990. Negation in syntax: on the nature of functional categories and their projections. Ph.D. thesis, Massachusetts Institute of Technology.

Larson, Richard K. 1985. Quantifying into NP, manuscript, MIT.

Lasnik, Howard. 1999a. A note on pseudogapping. In Howard Lasnik, ed., *Minimalist Analysis*, 151–174, Oxford: Blackwell Publishers.

Lasnik, Howard. 1999b. Pseudogapping puzzles. In Shlom Lappin and Elabbas Benmamoun, eds., *Fragments: Studies in Ellipsis and Gapping*, 141–174, Oxford: Oxford University Press.

Lasnik, Howard. 2006. A family of questions, handout from a talk at Nanzan University.

Levin, Nancy. 1986. *Main-verb ellipsis in spoken English*. New York: Garland Publishing.

Lobeck, Anne. 1995. *Ellipsis: Functional Heads, Licensing and Identification*. New York: Oxford University Press.

López, Luis. 1999. VP-ellipsis in Spanish and English and the features of Aux. *Probus* 11:263–297.

May, Robert. 1985. *Logical Form: Its Structure and Derivation*. Cambridge, MA: MIT Press.

Merchant, Jason. 2001. *The syntax of silence: sluicing, islands, and the theory of ellipsis*. Oxford: Oxford University Press.

Merchant, Jason. 2003a. Remarks on stripping. Ms., University of Chicago.

Merchant, Jason. 2003b. Subject-auxiliary inversion in comparatives and PF output constraints. In Kerstin Schwabe and Susanne Winkler, eds., *The Interfaces: Deriving and Interpreting Omitted Structures*, 55–77, Amsterdam: John Benjamins.

Merchant, Jason. 2004. Fragments and ellipsis. *Linguistics and philosophy* 27:661–738.

Merchant, Jason. 2008a. An asymmetry in voice mismatches in VP-ellipsis and Pseudogapping. *Linguistic Inquiry* 39:169–179.

Merchant, Jason. 2008b. Variable island repair under ellipsis. In Kyle Johnson, ed., *Topics in Ellipsis*, 132–153, Cambridge, United Kingdom: Cambridge University Press.

Merchant, Jason. 2013. Voice and ellipsis. *Linguistic Inquiry* 44:77–108.

Platzack, Christer. 2012. Cross Germanic variation in the realm of support verbs. In Peter Ackema, Rhona Alcorn, Caroline Heycock, Dany Jaspers, and Guido Vanden Wyngaerd, eds., *Comparative Germanic Syntax: the state of the art*, 279–310, Amsterdam: John Benjamins.

Reich, Ingo. 2004. Association with focus and choice functions: a binding approach. *Research on Language and Computation* 2:463–489.

Reinhart, Tanya. 1983. *Anaphora and Semantic Interpretation*. Chicago, Illinois: University of Chicago Press.

Reinhart, Tanya. 1993. Elliptic conjunctions – non-quantificational LF. In Asa Kasher, ed., *The Chomskyan Turn*, 360–384, Cambridge, MA: Blackwell Publishers.

Reinhart, Tanya. 1997. Quantifier scope: How labor is divided between QR and choice functions. *Linguistics and Philosophy* 20:335–397.

Rizzi, Luigi. 1997. The fine structure of the left periphery. In Liliane Haegeman, ed., *Elements of grammar*, 281–337, Dordrecht: Kluwer Academic Publishers.

Rooth, Mats. 1992. Ellipsis redundancy and reduction redundancy. In Steve Berman and Arild Hestvik, eds., *Proceedings of the Stuttgart Ellipsis Workshop*, Stuttgart.

Sag, Ivan. 1976. Deletion and logical form. Ph.D. thesis, MIT.

Sailor, Craig. 2011. Remarks on retorts, paper presented at NELS 42, University of Toronto.

Sauerland, Uli. 2005. DP is not a scope island. *Linguistic Inquiry* 36:303–314.

Shan, Chung-Chieh and Barker, Chris. 2006. Explaining crossover and superiority as left-to-right evaluation. *Linguistics and Philosophy* 29:91–134.

Tanaka, Hidekazu. 2011. Voice mismatches and syntactic identity. *Linguistic Inquiry* 42:470–490.

Thoms, Gary. 2010. Verb floating and VPE: towards a movement account of ellipsis licensing. *Linguistic Variation Yearbook* 10:252–297.

Thoms, Gary. 2012. Ellipsis, polarity and the variety of verb movement in Scandinavian, paper presented at Comparative Germanic Syntax Workshop, Yale University.

Thoms, Gary. 2013. Lexical mismatches in ellipsis and the identity condition. In Stefan Keine and Shayne Sloggett, eds., *Proceedings of NELS 42*, 559–572, Amherst, MA: CSLI Publications.

Toosarvandani, Maziar. 2012. Gapping is VP-ellipsis: a reply to Johnson, ms., MIT.

Wagner, Michael. 2006. Association by movement: evidence from NPI-licensing. *Natural Language Semantics* 14:297–324.

Wilder, Chris. 1996. Phrasal movement in LF: de re readings, VP ellipsis and binding. In Kiyomi Kusumoto, ed., *Proceedings of North East Linguistic Society*, 425–440, McGill University: Graduate Linguistic Student Association.

Wold, Dag E. 1996. Long distance selective binding: The case of focus. In Teresa Galloway and Justin Spence, eds., *Proceedings of SALT VI*, 311–328, Ithaca, NY: CLC Publications.

Wurmbrand, Susi. to appear. QR and selection: covert evidence for phasehood. In *Proceedings of NELS 42*.

Yoshida, Masaya. 2010. "Antecedent-contained" sluicing. *Linguistic Inquiry* 42:348–356.

Zanuttini, Rafaella. 1997. *Negation and Clausal Structure*. Oxford: Oxford University Press.

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