

# Beyond MaxElide: An investigation of $\bar{A}$ -movement from elided phrases<sup>†</sup>

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Using Takahashi & Fox (2005) as an exemplar, this paper argues that analyses of English ellipsis that make recourse to a MaxElide constraint (first introduced by Merchant 2008) are misguided, and that one must look beyond MaxElide to explain the distribution of acceptability in the ‘rebinding’ elliptical constructions that MaxElide was originally invoked to explain. A novel analysis is outlined which attributes the unacceptability observed in the rebinding dataset to an inability to satisfy a more restrictive, reflexive version of Takahashi & Fox’s Parallelism condition on ellipsis recoverability. More broadly, the success of this analysis supports the notion that clausal and non-clausal ellipsis are governed by distinct recoverability conditions. This paper therefore provides support for a non-unitary approach to the semantic licensing of ellipsis.

## 1 Introduction

This paper contributes to the ongoing debate about how ellipsis is licensed. It focuses on English utterances such as (1), in which  $\bar{A}$ -extraction yields an LF in which a  $\lambda$ -binder outside an ellipsis site binds a variable within it (2).<sup>1</sup> Takahashi & Fox (T&F, 2005) refer to variables in such configurations as *rebound*.<sup>2</sup> Extending this terminology, I will refer to phrases that contain both rebound variables and their  $\lambda$ -binders as *rebinding phrases*. Utterances that display rebinding phrases, such as (1), are *rebinding utterances*.

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<sup>†</sup>My interest in this topic was sparked by Messick & Thoms’ (2016) recent contribution to this journal. For comments on my review of their article (which was abandoned in early 2016), I wish to thank Troy Messick. For comments on my previous ‘MaxElide-friendly’ research on this topic (which, again, has been abandoned), I wish to thank the audience of the *Ellipsis Across Borders conference*, (Sarajevo, June 2016), and the audience of *ISLE4* (Poznań, Sept 2016). For comments on the analysis presented in this paper, I thank the two anonymous reviewers and the audiences of *GLOW 40* (Leiden, March 2017), *Cambridge SyntaxLab* (Cambridge UK, May 2017), and *Leipzig Ellipsis and Inflection seminar* (Leipzig, Sept 2017). For their helpful comments throughout this project, I wish to thank Güliz Güneş and Anikó Lipták. This research was financially supported by the European Commission.

<sup>1</sup>In examples: greyout represents phonological suppression (i.e. ellipsis); underlining on labels for phrases (e.g. VP) denotes that such phrases are phonologically, morphologically, and syntactically licensed for ellipsis; small caps represent information-structurally triggered accent placement; acute accents on vowels represent neutral stress; italics denote post-focal deaccentuation; subscripted ‘F’ adorns semantically F-marked items.

<sup>2</sup>*Rebinding* contrasts with *cobinding*, which occurs when the ellipsis site and its antecedent phrase contain a variable bound by the same c-commanding binder:

(i) I know who  $\lambda y$  [ [Fred<sub>F</sub> likes *y*] and [Mary<sub>F</sub> does [VP like *y*]]]

- (1) I know who JOHN will kiss and also who<sub>1</sub> MARY will [kiss  $t_1$ ].  
 (2) ... who  $\lambda y$  MARY will [<sub>VP</sub> kiss y]

T&F state that ellipsis is recoverable (i.e. semantically licensed) if the Parallelism condition in (3) is satisfied. According to (3),  $\beta$  is a PD in (4). This is because the ordinary semantic value of  $\alpha$  (roughly,  $\exists x. \text{John will kiss } x$ ) is a member of the focus semantic value of  $\beta$  (roughly,  $\{\exists y. \text{John will kiss } y\}$ ). Ellipsis should therefore be licensed in (4).

- (3) *Parallelism condition on ellipsis* (informal version, to be reformulated)  
 Let  $\beta$  be a phrase that reflexively dominates<sup>3</sup> an ellipsis site E. E is recoverable only if the ordinary semantic value of an antecedent phrase  $\alpha$  is an element of the focus semantic value of  $\beta$ .  $\beta$ s that satisfy this condition are *parallelism domains* (PDs).  
 (4) \*We heard that [ $\alpha$  John will kiss someone], but we don't yet know [ $\beta$  WHO<sub>1</sub> he will [kiss  $t_1$ ]].

To account for (4)'s unacceptability, T&F propose that, if all independent constraints on ellipsis are satisfied, maximal elision must occur in PDs.<sup>4</sup> This requirement, named *MaxElide* after – and clearly inspired by – Merchant's (2008; circulated in 2001) very similar constraint, accounts for the observation that rebinding utterances such as (4) are unacceptable.<sup>5</sup> Under the MaxElide approach, (4) is unacceptable because minimal elision (VP ellipsis) occurs within the PD, which violates MaxElide. If maximal elision (TP ellipsis) occurs instead (5), MaxElide is satisfied.

- (5) We heard that John will kiss someone, but we don't yet know WHO<sub>1</sub> [he will kiss  $t_1$ ].

I demonstrate in this paper that, in addition to being an *ad hoc* constraint (why is maximal elision only required in PDs, and not everywhere maximal elision is possible?), MaxElide both over- and undergenerates English rebinding utterances and is therefore descriptively inadequate. Considering that T&F appeal to MaxElide because their Parallelism condition treats unacceptable rebinding utterances such as (4) as semantically recoverable, the failure of MaxElide suggests that Parallelism is too lenient, and should be replaced with a more restrictive condition that treats rebinding utterances such as (4) as straightforwardly

<sup>3</sup>XP reflexively dominates YP if XP dominates YP or XP = YP (T&F 2005:237).

<sup>4</sup>The morphosyntactic conditions on ellipsis licensing are irrelevant to the discussion presented in this paper. In each example considered, ellipsis is syntactically licensed (according to either Lobeck's 1995 or Merchant's 2001 conditions) and morphologically licensed (according to Chung's 2006 condition).

<sup>5</sup>Although the original version of MaxElide from Merchant (2008) is more frequently adopted in the literature than T&F's formulation (198 versus 115 search hits on *Google Scholar*), I concentrate exclusively on T&F's formulation of MaxElide in this paper because (i) research that focuses specifically on rebinding utterances (e.g. Hartman 2011, Messick & Thoms 2016, Wu 2017) adopt it and (ii) T&F's formulation of MaxElide is stated in more general terms than Merchant's.

unrecoverable.

I suggest that the main problem with Parallelism is that it allows rebinding phrases to be PDs. My argument against the notion that rebinding phrases can ever satisfy the recoverability condition on ellipsis, which is explicated in §3, can be summarized as follows:

- Premise 1:**  $\lambda$ -binders derived from  $\bar{A}$ -movement are interveners for Hamblin-style Alternative Semantic composition (Hamblin 1973; Rooth 1985, Rooth 1992a): focus semantic values cannot be procured for phrases that contain such  $\lambda$ -binders (following Shan 2004 and Kotek 2016).
- Premise 2:** For a phrase containing an ellipsis site to satisfy the recoverability condition on ellipsis, it must have a focus semantic value (following Rooth 1992b).
- Conclusion:** Because rebinding phrases contain  $\lambda$ -binders by definition, they do not have a focus semantic value. Consequently, they cannot be used to satisfy the recoverability condition on ellipsis, *contra* T&F.
- Repercussion:** Because no phrase is available to satisfy the recoverability condition on ellipsis in rebinding utterances such as (4) (see §3 for arguments that this is the case), ellipsis is unrecoverable. Consequently, the utterance in (4) is judged to be unacceptable.

Although it suffices to show that rebinding utterances that allegedly violate MaxElide are actually merely unrecoverable, this argument alone does not constitute a viable alternative analysis to T&F (2005). This is because adopting this argument and keeping the Parallelism condition in (3) yields an analysis that incorrectly predicts that ellipsis is never recoverable in rebinding utterances. As explicated in §3, this result obtains because neither phrases that contain free variables nor phrases that contain their  $\lambda$ -binders satisfy Parallelism. To remedy this situation, I propose in §3 to reinstate Rooth's (1992b) recoverability condition on ellipsis and I also propose that free variables may be existentially-bound for the sake of satisfying this recoverability condition, in the spirit of Merchant's (2001) *e*-GIVENness condition.

When my argument for treating rebinding phrases as unrecoverable and my appeal to  $\exists$ -closure are combined, they yield a theory of ellipsis recoverability that predicts that, for ellipsis to be recoverable in a rebinding utterance, a phrase containing the ellipsis site must contain an F-marked element (to satisfy Rooth's recoverability condition) and must not contain a  $\lambda$ -binder derived from syntactic movement (so that a focus semantic value can be procured for the phrase in question). To rephrase this in schematic terms, my theory predicts that ellipsis is potentially recoverable in rebinding utterances that fit either of the schemata in (6) but unrecoverable in rebinding utterances that fit the schema in (7).

- (6) a. ...[ λy ... [ ...Z<sub>F</sub> ... [ XP ... y ... ]]] ... *intervening focus*  
 b. ...[ λy ... [ XP ... [Z<sub>F</sub> y] ... ] ] ... *elided focus*
- (7) \* ... [ Z<sub>F</sub> ... [ λy ... [ XP ... y ... ]]] ... *superordinate focus*

Based on the VP ellipsis data discussed above, this prediction is borne out. The unacceptable rebinding utterance in (4) fits (7), while the acceptable example in (1) fits (6a). I will show that this prediction extends to all rebinding utterances, with one crucial exception.

The exception is sluicing. If one assumes that sluicing involves *wh*-movement in English (Ross 1969, Merchant 2001, and many others; *contra* Ginzburg & Sag 2000, among many others), all sluices are incorrectly predicted to be unrecoverable. This is because sluices such as (5) fit the schema in (7).

Ginzburg & Sag (2000) claim that the propositional meaning of fragmentary responses (including sluices) is recovered by recourse to the pragmatic *question under discussion* (QUD, Roberts 2012). Reinterpreted as a claim about how clausal ellipsis is recovered, this position has since been defended in the Minimalist literature (Reich 2002, Barros 2014, Barros & Kotek to appear). I claim that my analysis' inability to capture sluicing provides additional evidence that this position is correct. I maintain that clausal ellipsis is different from all other forms of ellipsis as far as recoverability is concerned: In English, an elided TP must satisfy a QUD-based constraint on recoverability, whereas elided phrases of other syntactic types must satisfy the recoverability condition developed and defended in §3 of this paper. In §4, I use the differing acceptability of exceptive questions (i.e. clauses headed by *who else* or *which other girl*) in TP and VP ellipsis environments as supporting evidence for this division.

In short, this paper does five main things: (i) it demonstrates that the MaxElide approach to rebinding is untenable, (ii) it argues that unacceptable rebinding utterances are semantically unrecoverable (thus making MaxElide superfluous), (iii) it provides a descriptively adequate analysis of rebinding utterances, (iv) it provides support for the idea that clausal ellipsis is semantically recovered in a different way to all other forms of ellipsis, and (v) it provides empirical support for the notion that Predicate Abstraction and Hamblin-alternatives don't mix. In other words, this paper claims that, by addressing the narrow question of how best to analyse the rebinding data, one can address the wider question of whether ellipsis is recovered in a uniform way (as e.g. Merchant 2001 claims) or not (see Jacobson 2016, Weir 2017) and the wider question about how alternatives should be modelled semantically.

It should also be made clear from the beginning that, because much of the previous syntactic research on rebinding has focused on rebinding configurations derived from overt  $\bar{A}$ -movement (Schuyler 2001, Merchant 2008, Takahashi & Fox 2005; see also Nakamura 2016 and references therein), the analysis offered in §3 is built around these configurations.

In other words, any mention of ‘rebinding’ or ‘rebound variables’ in the main body of this paper (§2 to §4) should be understood as shorthand for ‘rebinding derived from overt  $\bar{A}$ -movement’ or ‘variables rebound by a  $\lambda$ -binder derived from overt  $\bar{A}$ -movement’. Although I will make no serious attempt to extend my analysis to rebinding configurations derived from other syntactic dependencies, I nonetheless provide cursory remarks in §5 about how the analysis seems, at least for simple datasets, to extend to all of them. In that section, I discuss QR, bound variable pronouns, and string-vacuous movement.<sup>6</sup>

The remainder of the paper proceeds as follows. In §2, I outline the mechanics of T&F’s analysis and then critique it. Through reviewing T&F’s analysis, I introduce the most of the rebinding data that the analysis offered in §3 will capture.

In §3.1, I offer a generalization that captures the distribution of acceptability across the rebinding dataset introduced in §2. This generalization, which utilizes Fox’s (2002) Trace Conversion operation and semantic approaches to reconstruction (see Ruys 2015 for an overview), is a generalization over LFs. In §3.2 and §3.3, I outline my analysis (a summary of which has already been given in this introductory section) and show how it derives the semantic generalization offered in §3.1. I also explain why it applies to ellipsis in particular and not also to deaccented domains.

In §4, I defend the idea that clausal ellipsis is semantically recovered in a different way to all other forms of ellipsis. In §5, I discuss how the analysis from §3 might be extended to account for rebinding configurations derived from other syntactic dependencies. The paper is summarized in §6.

## 2 Rebinding utterances: Takahashi & Fox’s MaxElide analysis

This section outlines and critiques T&F’s (2005) analysis of rebinding. Because this analysis is built on Mats Rooth’s theory of focus, an acquaintance with Rooth’s (1992b) theory of focus licensing and ellipsis recoverability is required. I therefore introduce Rooth’s theory in §2.1 before turning to T&F’s analysis in §2.2.

### 2.1 VP ellipsis is licensed under Appropriate Contrast: Rooth (1992b)

According to Rooth (1992a), an F-marked item must enter into a particular semantic relationship with a discourse-salient antecedent to be interpreted as contrastively focused. Rooth suggests that, for a contrastive interpretation to obtain, the ordinary semantic value of an antecedent phrase  $\alpha$  (henceforth,  $\llbracket \alpha \rrbracket^o$ ) must be an element of the focus semantic value of a phrase  $\beta$  (henceforth,  $\llbracket \beta \rrbracket^f$ ) that reflexively dominates the F-marked item, for

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<sup>6</sup>Because the literature on the LF-import of A-movement is so vast and varied (see Sportiche 2006 for a useful overview), I do not attempt to extend my analysis to (possible) rebinding configurations derived from A-movement. This must remain a task for future research.

all assignments  $g$ . Furthermore,  $\alpha$  and  $\beta$  cannot overlap syntactically, and  $\llbracket \alpha \rrbracket^o$  cannot be equal to  $\llbracket \beta \rrbracket^o$ . If these conditions are satisfied, then  $\beta$  is said to *Contrast Appropriately* with  $\alpha$ :<sup>7</sup>

- (8) A phrase  $\beta$  Contrasts Appropriately with a phrase  $\alpha$  iff:
- for all assignments  $g$ , the ordinary semantic value of  $\alpha$  with respect to  $g$  is an element of the focus semantic value of  $\beta$  with respect to  $g$ ;
  - $\alpha$  and  $\beta$  don't overlap;
  - for all assignments  $g$ , the ordinary semantic values of  $\alpha$  and  $\beta$  are different.
- (Rooth 1992a:81, fn.4, fn.8)

Rooth (1985) calculates the focus semantic value for any given phrase in the Alternative Semantics compositional system (Hamblin 1973), which proceeds in parallel with ordinary semantic composition. In Roothian alternative semantics, all regular denotations are treated as sets of denotations. Unfocused items are singleton sets, whereas focused items (among other alternative-inducing elements) are sets which include their ordinary denotation plus their salient alternatives in the domain of discourse. From a simple extensional type-theoretic perspective, this treatment lifts expressions of an arbitrary type  $\tau$  to  $\langle \tau, t \rangle$ . Phrases are concatenated in alternative semantics using Hamblin's (1973) pointwise Functional Application rule. In this system, the focus semantic value of the proposition 'Mary kissed JOHN' is constructed as follows (where the salient alternative to *John* is *Fred*, and focus semantic values are presented in typewriter font):

$$\begin{array}{c}
 (9) \quad \left\{ \begin{array}{l} \text{Mary kissed John} \\ \text{Mary kissed Fred} \end{array} \right\} :: \langle t, t \rangle \\
 \swarrow \quad \searrow \\
 \{ \text{Mary} \} :: \langle e, t \rangle \quad \left\{ \begin{array}{l} \lambda y. y \text{ kissed John} \\ \lambda y. y \text{ kissed Fred} \end{array} \right\} :: \langle \langle e, t \rangle, t \rangle \\
 \quad \quad \quad \swarrow \quad \searrow \\
 \quad \quad \quad \{ \lambda y \lambda x. y \text{ kissed } x \} \quad \{ \text{John, Fred} \} \\
 \quad \quad \quad :: \langle \langle e, t \rangle, \langle \langle e, t \rangle, t \rangle \rangle \quad \quad :: \langle e, t \rangle
 \end{array}$$

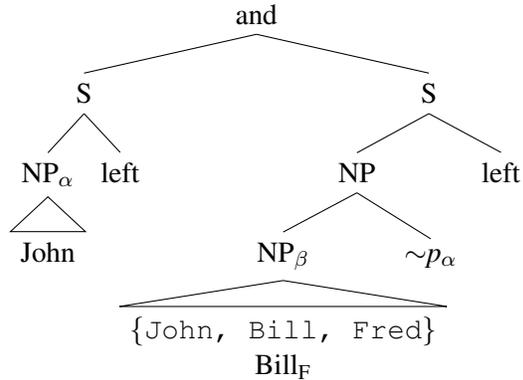
In Rooth's system, the constraint on contrastive construal in (8) is enforced by the 'squiggle' operator  $\sim$ , which associates  $\beta$  with a variable that co-refers with  $\alpha$ . To give an example, the F-marked item *Bill* is construed as contrastively focused in (10a) because the ordinary semantic value of the antecedent *John* is an element of *Bill*'s focus semantic value

<sup>7</sup>To account for certain patterns of focus and deaccentuation, Rooth also allows  $\llbracket \alpha \rrbracket^o$  to entail an element of  $\llbracket \beta \rrbracket^f$  (a process referred to as 'implicational bridging'). Following Takahashi & Fox (2005), the recoverability condition defended in §3 makes no recourse to entailment. For this reason, I ignore the import of implication bridging throughout.

(see 10b-c). Similarly, *Bill* is construed as contrastively focused in (11a) because the ordinary semantic value of the antecedent phrase *John will leave* is an element of the focus semantic value of the phrase that contains *Bill*, namely *Bill will leave* (see 11b-c).

(10) a. John left – and BILL left, too.

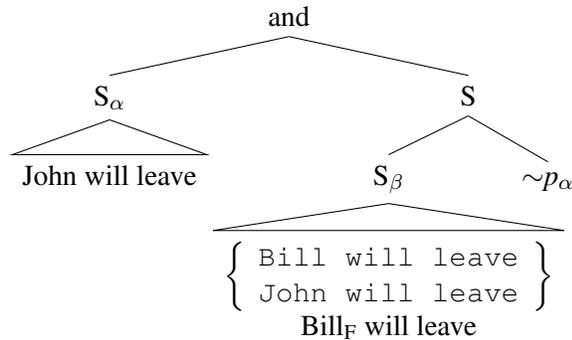
b.



c.  $[[\text{John}]]^o \in [[\text{Bill}]]^f$ , therefore *Bill* is interpreted as contrastive.

(11) a. John will leave – and BILL<sub>F</sub> will leave, too.

b.

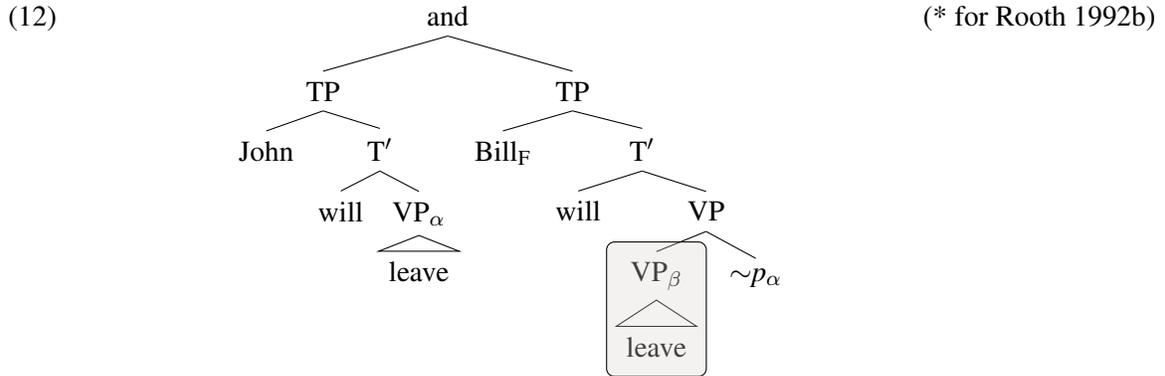


c.  $[[\text{John will leave}]]^o \in [[\text{Bill}_F \text{ will leave}]]^f$ , therefore *Bill* is interpreted as contrastive.

Rooth (1992b) claims that this constraint on interpreting F-marked items as contrastive foci in (8) also governs the recoverability of VP ellipsis. Under his approach, we can licitly elide *leave* in (11a) if we want (hence deriving ‘*John will leave and Bill will, too*’) because ellipsis is recoverable in this configuration. *Leave* is reflexively dominated by  $\beta$ ,  $\beta$  contrasts appropriately with  $\alpha$ , and VP ellipsis is therefore semantically licensed.

Because Rooth’s conception of Appropriate Contrast requires the phrases being compared to have different ordinary semantic values (as per 8c), the  $\sim$  operator must always adjoin to a phrase that contains both the ellipsis site and an F-marked item in ellipsis con-

texts. Put differently, Rooth claims that the  $\sim$  operator never adjoins to the ellipsis site itself, as it does in (12). A relation of appropriate contrast is not obtained in (12) because  $\llbracket \text{VP}_\alpha \rrbracket^o = \llbracket \text{VP}_\beta \rrbracket^o$  for all assignments  $g$ . (In 12, greyout represents ellipsis.)



To summarize: Rooth (1992b) ties the recoverability of VP ellipsis to contrastivity. Under his analysis, an elided VP is recoverable if contained in a phrase that *Contrasts Appropriately* with an antecedent.

## 2.2 *Contrasting Enough: Takahashi & Fox (2005)*

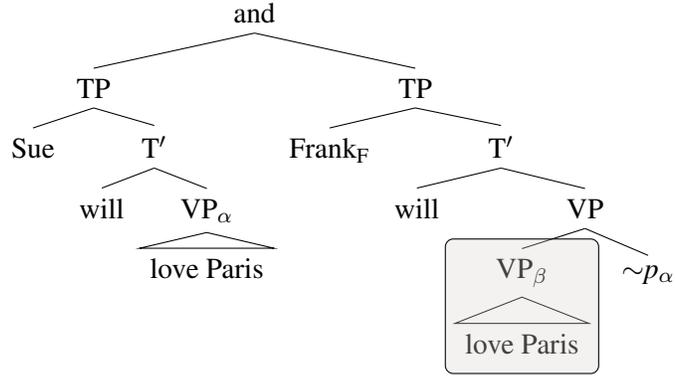
Aside from one crucial difference, T&F's (2005) Parallelism condition is identical to Rooth's licensing condition. This difference is that T&F jettison (8c). Let us refer to this weakened relation as *Contrasting Enough*:

- (13) A phrase  $\beta$  *Contrasts Enough* with a phrase  $\alpha$  iff:
- a. for all assignments  $g$ , the ordinary semantic value of  $\alpha$  with respect to  $g$  is an element of the focus semantic value of  $\beta$  with respect to  $g$ ;
  - b.  $\alpha$  and  $\beta$  don't overlap.

Under the more lenient contrast relation in (13), ellipsis sites themselves can be used to satisfy recoverability – something that Rooth's theory prohibits (see 12). Put differently, adopting (13) allows ellipsis to be recovered in an utterance such as (14a) via the configuration in (14b), in which the  $\sim$  operator adjoins directly to the ellipsis site. Ellipsis is recoverable in (14a) because  $\text{VP}_\beta$  *Contrasts Enough* with  $\text{VP}_\alpha$ . As (14c) shows,  $\llbracket \text{VP}_\alpha \rrbracket^o$  is an element of  $\llbracket \text{VP}_\beta \rrbracket^f$  (assuming alphabetic variance across  $\lambda$ -expressions yields their equivalence, see Sag 1976). It just so happens that, because  $\llbracket \text{VP}_\beta \rrbracket^f$  is a singleton set,  $\llbracket \text{VP}_\alpha \rrbracket^o$  is the **only** element in  $\llbracket \text{VP}_\beta \rrbracket^f$ .

- (14) a. Sue will love Paris, and FRANK will [ love Paris ], too.

b.



c.  $[[\lambda x. x \text{ love Paris}]]^o \in [[\lambda y. y \text{ love Paris}]]^f$ . Ellipsis is licensed in  $VP_\beta$ .

Rephrased in Roothian terms, T&F's Parallelism condition is given in (16). The definitions in (15) and (16) retain the terminology used by T&F: *parallelism domain* refers to the sister of  $\sim$ , while *antecedent constituent* refers to the phrase with which  $\sim$ 's second argument co-refers. Importantly, Contrast Enough in (16) refers to the more lenient version of Appropriate Contrast given in (13).

(15) For ellipsis to be recovered in an ellipsis site E there must exist a constituent  $\beta$  that reflexively dominates E and which satisfies the Parallelism condition in (16). This constituent is called the *parallelism domain* (PD).

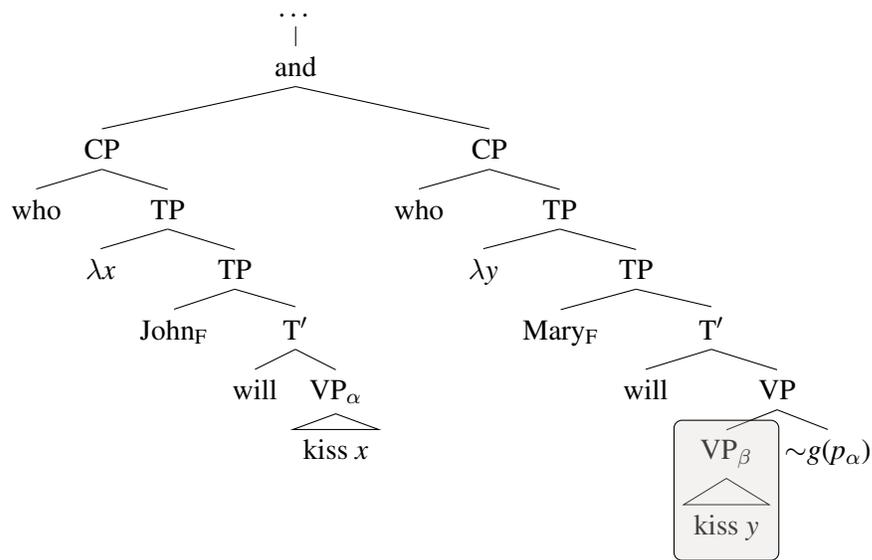
(16) *Parallelism* (Takahashi & Fox 2005)  
 $\beta$  must Contrast Enough with an antecedent constituent (AC).

Although the elided VP in (14a) satisfies T&F's Parallelism condition and is therefore a PD (see 14b above), elided VPs in rebinding utterances do not satisfy Parallelism, and are therefore never PDs. This because the  $\bar{A}$ -trace in a rebinding utterance such as (1) (repeated below) is interpreted as a variable at LF. Although bound from a c-commanding position outside the VP, this variable is free within it (see 17). Because the denotation of free variables varies under different assignments,  $[[VP_\alpha]]^o$  will not be an element of  $[[VP_\beta]]^f$  for all assignments  $g$  in (17) (see Sag 1976), and consequently the elided VP does not Contrast Enough with its antecedent, which violates Parallelism.<sup>8</sup>

(1) I know who JOHN will kiss and also who<sub>1</sub> MARY will [ kiss  $t_1$  ].

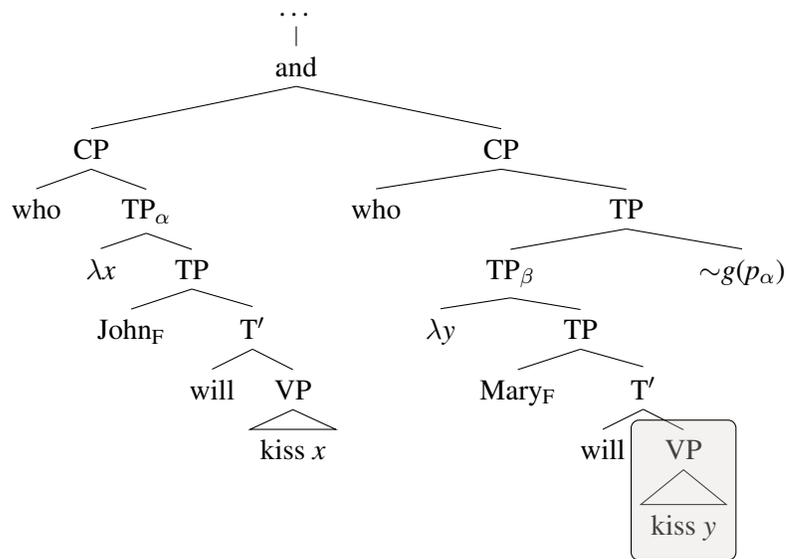
<sup>8</sup>Notice that the tree representation in (17) is more explicit about the role of assignment functions in Roothian alternative semantics. An attempt to establish a relation of Enough Contrast between  $VP_\beta$  and  $VP_\alpha$  is mediated through  $VP_\beta$ 's relationship to  $p_\alpha$  under a particular assignment  $g$  for  $p_\alpha$ . Because this assignment is global, it determines the assignment for variables in both  $VP_\alpha$  and  $VP_\beta$ . Parallelism is not satisfied in (17) if, for a particular assignment (e.g.  $g^3$ ),  $x$  and  $y$  are assigned to distinct individuals in  $D_e$ .

(17) \*



For T&F, ellipsis is recoverable in (1) because the  $\sim$  operator may instead adjoin to TP, which contains both the ellipsis site and the binder of the variable within it (see 18). In this scenario, the domains being used to determine recoverability contain bound (rather than free) variables, and therefore the problem observed in (17) is circumvented. Thus, in T&F's terms, TP is a PD.

(18)



As mentioned in §1, the rebinding utterance in (4) (repeated below) is recoverable. This is because the ordinary semantic value of  $\alpha$  (roughly,  $\exists x. John\ will\ kiss\ x$ ) is a member of the focus semantic value of  $\beta$  (roughly,  $\{\exists y. John\ will\ kiss\ y\}$ ). This example is recoverable according to T&F's analysis because the Parallelism condition permits PDs and ACs to

have the same ordinary semantic value, *contra* Rooth (1992b).

- (4) \*We heard that [ $\alpha$  John will kiss someone], but we don't yet know [ $\beta$  WHO<sub>1</sub> *he will* [ kiss  $t_1$  ]].

To account for (4)'s unacceptability, T&F introduce an exogenous constraint on licensing ellipsis. They claim that, if multiple phrases that are morpho-syntactically licensed for ellipsis (XPs) are necessarily contained in the same PD, elision of an XP that dominates another XP is preferred to elision of an XP that is dominated by another XP. This constraint is called MaxElide, following Merchant (2008):

- (19) *MaxElide* (T&F 2005:229)  
Elide the biggest deletable constituent reflexively dominated by PD.

Armed with MaxElide, one may state that (4) is unacceptable because, within the PD  $\beta$ , VP ellipsis occurs when TP ellipsis could have occurred, which violates MaxElide. When an intervening focus removes the potential for TP ellipsis in a rebinding utterance with a similarly-sized PD (as in 1, repeated again below), MaxElide is satisfied.

- (1) I know [ $\alpha$  who JOHN will kiss] and also [ $\beta$  who<sub>1</sub> MARY will [ kiss  $t_1$  ]].

As mentioned in §1, MaxElide is clearly an *ad hoc* constraint. Putting this aside, I will now assess MaxElide's efficacy according to its empirical coverage. In the following subsections, I show that, even when buttressed by additional assumptions, the 'MaxElide approach' both over and undergenerates, ruling out acceptable rebinding utterances and ruling in unacceptable ones.

### 2.2.1 When intervening focus has no effect

According to the MaxElide approach, VP ellipsis is permitted in (1) because an intervening focus precludes TP ellipsis. Under this analysis, one expects that VP ellipsis is also permitted in rebinding utterances similar to (4) when an intervening focus precludes TP ellipsis. This expectation is not met, as the examples in (20) show (20b is modified from Lasnik & Park 2013:240).

- (20) a. \*MARY kissed a HIPSTER, but I don't know who<sub>1</sub> [<sub>TP</sub> JOHN *did* [<sub>VP</sub> kiss  $t_1$  ]].  
b. \*MARY sung a song about LOVE, but I don't know what<sub>1</sub> [<sub>TP</sub> JOHN *did* [<sub>VP</sub> sing a song about  $t_1$  ]].

The MaxElide approach therefore overgenerates in this instance, ruling in these unacceptable rebinding utterances.

### 2.2.2 Focused restrictors

Consider the rebinding utterances in (21) and (22), in which the NP restrictor of the bracketed  $\bar{A}$ -moved phrase is contrastively focused.

- (21) a. I know which GIRL he kissed, but not [ which BOY]<sub>1</sub> *he did* [ kiss *t*<sub>1</sub> ].  
 b. I know which DOGSBODY to fire and also [ which MANAGER]<sub>1</sub> to [ fire *t*<sub>1</sub> ].  
 c. I know every GIRL Joe kissed and also [ every BOY]<sub>1</sub> *he did* [ kiss *t*<sub>1</sub> ].
- (22) A: Which colours does John like?  
 B: Well, BLUE he likes, and GREEN<sub>1</sub> *he does* [ like *t*<sub>1</sub> ], too. (Schuyler 2001)

The LFs for the elliptical clauses in these utterances, which are given in a generalized schematic form in (23), each exhibit a rebinding configuration in which MaxElide applies. Resultantly, TP ellipsis is favored over VP ellipsis, which should make the rebinding utterances in (21) and (22) unacceptable, contrary to observation. Thus, without further assumptions being added, MaxElide overgenerates in this instance.

- (23) ... [DP *Op* NP<sub>F</sub>] [PD  $\lambda y$  ... [TP ... [VP ... *y* ... ]]]

To account for the acceptability of these rebinding utterances, T&F (2005:235) follow Sauerland (1998) and assume that if an element in a head of a movement chain is focused then focus is optionally present within the lower copies. Further assuming that  $\bar{A}$ -movement proceeds successive cyclically through *v*P, T&F argue that MaxElide is satisfied in (21) and (22) because the presence of focus in the intermediate copy of  $\bar{A}$ -movement precludes TP ellipsis:

- (24) I know which GIRL he kissed, but not ⟨which BOY⟩ he did [<sub>vP</sub> ⟨which BOY⟩ [ kiss ⟨which boy⟩ ]]. (copy-theoretic representation of 21a)

This solution has two shortcomings. Firstly, it is not restrictive enough. It predicts that MaxElide can be satisfied in all VP ellipsis rebinding utterances in which the head of the movement chain contains a focused element, as all such utterances should be capable of having focused intermediate copies that block higher TP ellipsis. As the unacceptable examples in (25) show, this prediction is incorrect.

- (25) a. \*We heard that [ <sub>$\alpha$</sub>  John will kiss someone], but we don't yet know [ <sub>$\beta$</sub>  WHO<sub>1</sub> *he will* [ kiss *t*<sub>1</sub> ]]. (from 4)  
 b. \*I know WHO John likes, but not WHAT<sub>1</sub> *he does* [ like *t*<sub>1</sub> ].

Secondly, the notion that covert foci block ellipsis is rather implausible. T&F assume during most of their paper that intermediate copies of  $\bar{A}$ -movement are ignored by LF,

which means that the postulated covert foci are semantically invisible. Furthermore, these foci are invisible to PF, as they are not pronounced. If they are invisible to both interfaces, then it is highly unlikely that these intermediate covert foci can affect the application of ellipsis in any way.

To summarize: even with additional assumptions in place, T&F's MaxElide analysis cannot account for the acceptability of rebinding utterances in which the NP restrictor inside the head of the movement chain is contrastively focused.

### 2.2.3 Rebinding utterances that display cross-clausal $\bar{A}$ -movement

Consider the utterances in (26), in which cross-clausal  $\bar{A}$ -movement occurs.<sup>9</sup>

- (26) a. I know who JO thinks he'll kiss and also who<sub>1</sub> BO *thinks he will* [ kiss  $t_1$  ].  
 b. I know who JO's likely to kiss and also who<sub>1</sub> POLLY's *likely to* [ kiss  $t_1$  ].  
 c. I know who BILL hopes to kiss and also who<sub>1</sub> BOB *hopes to* [ kiss  $t_1$  ].

As mentioned in §2.2.2 above, Takahashi & Fox assume during most of their paper that intermediate copies of  $\bar{A}$ -movement are ignored at LF. Under this assumption, the elliptical clauses for the utterances in (26) each exhibit the LF rebinding configuration schematized in (27):

- (27) ... [PD  $\lambda y$  ... [VP ... [VP ...  $y$  ... ]]]

Because the two elidable VPs in (27) are both necessarily contained in the same PD, Max-

<sup>9</sup>Additional comments are required about  $\bar{A}$ -extraction from infinitival VP ellipsis here. Firstly, my consultants reported no difference in acceptability between object and subject control constructions (compare (26c) and (i) below). Secondly, VP ellipsis is prohibited in adjunct infinitival TPs regardless of whether the elided VP hosts an  $\bar{A}$ -trace, as a comparison of (ii) and (iii) shows (see Johnson 2001 for discussion). Lastly, T&F (2005:233) report that  $\bar{A}$ -extraction from an elided VP is impossible when the infinitival clause that contains the elided VP is the complement of certain verbs (their example uses *agree*). As Messick & Thoms (2016:325) note, *agree* therefore patterns dissimilarly to raising predicates such as *likely* (see 26b) and control verbs like *hope* (see 26c). From a random selection of 12 control verbs presented to them, my consultants reported that most pattern with *hope* (these include *afford*, *can't stand*, *decide*, *need*, *offer*, *prepare*, *refuse*, *try*), while the remainder are slightly degraded (this set includes *ask*, *beg*, *begin*). Thus, it seems that the unacceptability of (iv) is somewhat exceptional. I suggest that reanalysis is responsible for this anomaly: speakers prefer to incorrectly parse the silence that follows *agree to* in (iv) as DP-gap, rather a VP ellipsis. In other words, they reanalyse *agree to* as verb plus preposition.

- (i) I know who JOHN wants her to kiss and also who<sub>1</sub> [ BILL *wants her to* [ kiss  $t_1$  ] ].  
 (ii) \*I know who JOHN stopped to ask and also who<sub>1</sub> [ BILL *stopped to* [ ask  $t_1$  ] ].  
 (iii) \*JOHN stopped to ask for directions, and BILL *also stopped to* [ ask for directions] ].  
 (iv) \*I don't know which puppy you SHOULD agree to adopt, but I know [ which one]<sub>1</sub> you should NOT agree to [VP adopt  $t_1$  ] .

Elide is satisfied only if the higher VP is elided. Consequently, the MaxElide approach incorrectly predicts that the utterances in (26) should be unacceptable, as lower VP ellipsis is observed. MaxElide therefore undergenerates here.

#### 2.2.4 Unacceptable rebinding utterances that satisfy MaxElide

Consider the utterances in (28) to (30). These utterances involve relativization (28a, 29, 30a-b),<sup>10</sup> tough-movement (28b), and  $\bar{A}$ -movement that forms a Saxon genitive DP (28c)<sup>11</sup> and an *as*-comparative clause (30c).<sup>12</sup>

(28) (From Messick 2015)

- a. \*Sue KNOWS the girl {*Op/who*} Joe kissed, but she doesn't RESPECT *the girl* {*Op/who*}<sub>1</sub> *he did* [ kiss *t*<sub>1</sub> ] .
- b. \*Sometimes he's DIFFICULT to please, but most of the time he's EASY [<sub>CP</sub> *Op*<sub>1</sub> *to* [ please *t*<sub>1</sub> ] ] .
- c. \*John LIKES Beth's boyfriend, but Pete HATES [ *Beth*<sub>1</sub>'s [ *t*<sub>1</sub> boyfriend ] ] .

(29) \*John should KISS [ every girl ]<sub>1</sub> *he should* [ kiss *t*<sub>1</sub> ] . (Schuyler 2001)

- (30)
- a. \*Sue KNOWS the person *Op* to ask, but she doesn't RESPECT *the person Op*<sub>1</sub> *to* [ ask *t*<sub>1</sub> ] .
  - b. \*John will STEAL what Susan is selling: he'd never BUY *what*<sub>1</sub> *she is* [ selling *t*<sub>1</sub> ] !
  - c. \*John LIKES as many girls as *Op*<sub>1</sub> [ *he does* [ like *t*<sub>1</sub> ] ] !

Each of these rebinding utterances exhibits a rebinding configuration that fits the LF schema in (31). In (31), there is only one elidable phrase in the PD. Higher TP ellipsis is unavailable in the PDs for the relativization cases in (28) to (30) because sluicing is not syntactically licensed in English relative clauses (Lobeck 1995, Merchant 2001), whereas higher VP el-

<sup>10</sup>An anonymous reviewer points out that Merchant (2004) first discusses such constructions. While Merchant (2004) states that utterances like (i) lack a sloppy interpretation, it is unclear whether he judges such utterances as acceptable on their strict interpretation. For Messick (2015), my consultants, and myself, these utterances are unacceptable regardless of their strict or sloppy interpretation.

(i) Fred READ the books he was supposed to read. \* He also REVIEWED [*the ones*]<sub>1</sub> *he was* [ supposed to read *t*<sub>1</sub> ] . (modified from Merchant 2004)

<sup>11</sup>For evidence that possessors move from within the complement of  $D^0$  into SpecDP in Saxon genitives, see Munn (1995), Radford (2000), and Alexiadou (2005).

<sup>12</sup>In the case of (29) and (30c), it is worth comparing these examples to their non-elliptical counterparts in (i) and (ii) below which, while tautologous, can be used as evasive answers to *which girls should John kiss?* and *how many girls does John like?* respectively (see Schuyler 2001: fn. 6).

(i) John should KISS every girl he should KISS.  
(ii) John LIKES as many girls as he LIKES.

lipsis outside of the PD is unavailable in all of the rebinding utterances above because of the presence of intervening focus. Because there is only one elidable phrase in the PDs of these rebinding utterances, MaxElide is satisfied in each case. The observed unacceptability of these rebinding utterances therefore demonstrates that the MaxElide approach undergenerates in this instance, as it incorrectly predicts that these rebinding utterances are acceptable.

(31) ... [PD λy ... [XP ... y ... ]]

These data do not provide direct evidence against the MaxElide approach, however. It might be the case that these rebinding utterances are unacceptable because they violate an independent constraint unrelated to rebinding. Indeed, both anonymous reviewers of this paper highlight the possibility that these rebinding utterances are unacceptable because they flout a general preference for maximising anaphoricity, such as Williams' (1997:603) Don't Overlook Anaphoric Possibilities condition:

(32) *Don't Overlook Anaphoric Possibilities* (DOAP)  
Opportunities to anaphorize text must be seized.

I suspect that the reviewers mention DOAP because of its undeniable effect on utterances similar to those in (28–30). For instance, DOAP clearly affects (33), which is the same as (28a), minus (28a)'s relative clause. This utterance is only considered fully acceptable if the deaccented object is pronominalized, in accordance with DOAP.

(33) Sue KNOWS the girl who Joe kissed, but she doesn't RESPECT {*her* / ? *the girl*}.

Despite DOAP's observable effect on utterances similar to (28–30), it is easily shown that the unacceptability of (28–30) is unrelated to DOAP. Firstly, there is nothing to anaphorize in (28b) and (30c): these utterances satisfy DOAP and yet remain unacceptable. Secondly, satisfying DOAP by pronominalising the Saxon genitive possessor does not improve (28c), as (34) shows.

(34) John LIKES Beth's boyfriend, but Pete HATES {\* *Beth's* / \* *hers*}.

These observations confirm that the cause of (28–30)'s unacceptability is related to rebinding, not anaphorization. This point is reinforced by comparing the unacceptable example in (28a) to the acceptable utterance in (35) below. Both utterances violate DOAP, but only the former displays a rebinding configuration.

(35) Sue KNOWS the girl who kissed Joe, but she doesn't RESPECT *the girl who*<sub>1</sub> *t*<sub>1</sub> *did*  
[ kiss Joe ] .

In the absence of an independent explanation for (28–30), the inability of MaxElide to capture these data greatly undermines it. The efficacy of the MaxElide approach is further diminished by the analysis offered in §3, which straightforwardly captures all of the rebinding discussed so far, including (28) to (30).

To summarize: the MaxElide approach predicts that ellipsis is permitted in rebinding configurations in which (i) the entire PD is deaccented and (ii) the PD contains only one elidable phrase. When relative clauses, tough-constructions, Saxon genitive DPs, and *as*-comparatives display such configurations, unacceptability ensues, contrary to expectation. Because no independent explanation for the observed unacceptability is forthcoming, it seems justified to use these observations as evidence against the MaxElide approach.

### 2.3 *Concluding remarks on Takahashi & Fox (2005)*

By critiquing T&F’s (2005) analysis, I demonstrated that replacing the notion of Appropriate Contrast with the weaker notion of Contrasting Enough introduces an issue of how to account for the unacceptability observed across the rebinding dataset. I showed that T&F’s solution to this issue, which is to introduce a MaxElide constraint, is untenable. This criticism extends to any analysis that uses MaxElide (or some theoretical reduction thereof).

## 3 Analysis

Having shown that T&F’s analyses of rebinding is infeasible, I now offer a novel analysis for the distribution of acceptability across the rebinding dataset. I begin the analysis in §3.1 by providing a semantic generalization over the rebinding dataset. I also outline my analysis in general terms in §3.1. In §3.2, I introduce a generic existential-closure rule and demonstrate how it helps to capture the rebinding data. In §3.3, I operationalize the idea that  $\lambda$ -binders derived from  $\bar{A}$ -movement are focus-interveners. I provide concrete examples of how my analysis captures the rebinding dataset throughout this section.

### 3.1 *Deriving the rebinding generalization*

From the examples presented in §1 and §2, it appears that rebinding utterances form a rather heterogeneous dataset. My first task in this section is therefore to provide a descriptively adequate generalization over the rebinding data. Once such a generalization is obtained, the remaining task will be to theoretically derive it.

I claim that a valuable generalization over the rebinding data can only be obtained if we concentrate on their LFs. However, to formulate an adequate LF generalization, we must first adopt a more refined view of how certain long-distance dependencies are

interpreted at the LF interface. In particular, the semantic import of syntactic  $\bar{A}$ -chains must be considered more carefully. The discussion in §1–2 mostly adopted a classical view of how  $\bar{A}$ -chains are interpreted at LF, according to which the tail of the chain is interpreted as a variable that is  $\lambda$ -bound in a position immediately c-commanded by the chain’s head (see Heim & Kratzer 1998):

- (36) a. [ which boy]<sub>1</sub> ... ⟨which boy<sub>1</sub>⟩ ... ⟨which boy<sub>1</sub>⟩  
 b. which boy  $\lambda x$  ... ...  $x$

In contrast to this view, Fox (2002) argues that the tail of an  $\bar{A}$ -chain is interpreted at LF as a definite description (rather than a simple variable, see 37), and introduces a ‘Trace Conversion’ operation to achieve this. Seeing as Merchant (2001:214–215) has provided support for this analysis from utterances that display rebound variable pronouns (see §5.2 for further discussion), I henceforth subscribe to it.

- (37) a. [ which boy]<sub>1</sub> ... ⟨which boy<sub>1</sub>⟩ ... ⟨which boy<sub>1</sub>⟩  
 b. which boy  $\lambda x$  ... the boy  $x$  ... the boy  $x$

One observes that, in (37), the semantic import of the intermediate  $\bar{A}$ -copy is also taken into consideration, and is treated as expressing the same semantic information as the tail  $\bar{A}$ -copy. Pronominal binding relations reveal that intermediate  $\bar{A}$ -copies are visible to LF in rebinding utterances. In (38a) for example, the anaphor *himself* is locally bound in accordance with Principle A of the Binding Theory (Chomsky 1981) only in its intermediate position (see 38b).<sup>13</sup> In (38b), the intermediate copy undergoes (partly) vacuous semantic composition with its sister (Lechner 1998, Rett 2006:364, Ruys 2015).

- (38) a. I know which pictures of himself JOHN thinks Sally will sell and also which pictures of himself BILL *thinks she will* [<sub>VP</sub> ⟨which pictures of himself⟩ [<sub>VP</sub> sell ⟨which pictures⟩]]. (copy-theoretic representation)  
 b. ... which pictures of himself  $\lambda y$  Bill<sub>F</sub> thinks Sally will [<sub>VP</sub> the pictures of himself  $y$  [<sub>VP</sub> sell the pictures  $y$ ]]

The rebinding utterance in (39a) is ambiguous between a *de re* reading in which the *wh*-phrase scopes over *want*, and a *de dicto* reading in which the *wh*-phrase takes narrow scopes under *want*. Because the *de dicto* reading is obtained by ‘scopal reconstruction’ of the *wh*-phrase to an intermediate position, an accurate generalization over the rebinding dataset must take ‘scopal reconstruction’ rebinding LFs into account.

<sup>13</sup>Note that, to ensure that the lowest copy of movement in (38a) does not violate Principle A at LF, sideward syntactic movement is required, see Nunes (2004).

(39) I know how many books BILL wants to buy, and also [how many]<sub>1</sub> ELIZABETH wants [<sub>CP</sub> *t*<sub>1</sub> to [ buy *t*<sub>1</sub> ]].

I know the number *n* such that there are *n* books that Elizabeth wants to buy.

(*De re* reading)

I know the number *n* such that Elizabeth wants it to the case that there are *n* books she buys. (*De dicto* reading)

I adopt a semantic approach to scopal reconstruction (Cheirchia 1995, Cresti 1995, Rullman 1995, Lechner 1998, Ruys 2015, among others), according to which reconstructed readings are derived by interpreting non-head copies as higher-order variables that function as generalized quantifiers of type  $\langle\langle e, t \rangle, t\rangle$ . This analysis is schematized in (40) (see Ruys 2015 for useful summary of the technical details). Under this account, the *de dicto* reading of (39) fits the schema in (40b).<sup>14</sup>

- (40) a. [ which boy ]<sub>1</sub>      ...     $\langle$ which boy<sub>1</sub> $\rangle$       ...     $\langle$ which boy<sub>1</sub> $\rangle$   
 b. which boy  $\lambda P_{\langle\langle e, t \rangle, t\rangle}$     ...     $P_{\langle\langle e, t \rangle, t\rangle}$       ...  
 c. which boy  $\lambda P_{\langle\langle e, t \rangle, t\rangle}$     ...      ...       $P_{\langle\langle e, t \rangle, t\rangle}$

Having provided a more articulated conception of how  $\overline{A}$ -chains are interpreted at LF, I now offer the following generalization over the rebinding dataset:

(41) *Generalization over rebinding utterances:*

A prerequisite of ellipsis being permitted in rebinding utterances is that:

- (i) the  $\lambda$ -binder of the rebound variable asymmetrically c-commands an F-marked item at LF, **or**
- (ii) the rebound variable is contained in an elided clause.

This generalization states that (41i–ii) are necessary but insufficient conditions for ellipsis being permitted in rebinding utterances. As I will demonstrate shortly (and as the reader can confirm for herself), the generalization in (41) separates the acceptable rebinding utterances discussed in §1 and §2 from the unacceptable ones to a high degree of accuracy. However, the reader will notice that there are still some rebinding utterances that fit the description in (41i) but are nonetheless unacceptable (e.g. the examples from §2.2.1). An explanation for why these utterances fit (41i) but are nonetheless unacceptable is provided in §3.4.

In schematic terms, (41) states that rebinding utterances that fit one of the LF schemata in (42) are acceptable, whereas those that fit the LF schemata in (43) are unacceptable. In

<sup>14</sup>To achieve a scopal reconstruction configuration in which more than one token of the NP restrictor is present at LF, Erlewine (2014) makes recourse an ‘inverse’ Trace Conversion operation. Whether or not Erlewine’s theory is better suited for analysing scopal reconstruction in rebinding utterance must remain a question for future research. The schema in (40) is sufficient for now.

these schemata, the variable  $x$  can display any semantic type.

- (42) a. ... [  $\lambda x$  ... [ ...  $Y_F$  ... [  $\underline{XP}$  ...  $x$  ... ] ] ... *intervening focus*  
 b. ... [  $\lambda x$  ... [  $\underline{XP}$  ... [  $Y_F$   $x$  ] ... ] ... *elided focus*  
 c. ... [  $\lambda x$  ... [  $\underline{TP}$  ...  $x$  ... ] ] ... *sluicing*
- (43) \* ... [  $Y_F$  ... [  $\lambda x$  ... [  $\{\underline{VP/N'}\}$  ...  $x$  ... ] ] ... *superordinate focus*

Exemplar rebinding utterances for each schema are provided below. Rebinding utterances in which a focused element intervenes between the ellipsis site and the head of the  $\bar{A}$ -chain, such as (1) (repeated below) fit the ‘intervening focus’ schema in (42a), as (1)’s LF in (44) shows. (Henceforth, variables derived from intermediate  $\bar{A}$ -copies are only represented in LFs when relevant.)

(1) I know who JOHN will kiss and also who<sub>1</sub> MARY will [ kiss  $t_1$  ].

(44) ... who person [  $\lambda x$  [ John<sub>F</sub> will [  $\underline{VP}$  kiss the person  $x$  ] ] ]

If the NP restrictor of the  $\bar{A}$ -moved phrase in rebinding utterances such as (21a) (repeated in 45a) and (45b) is focused, then, according to Trace Conversion, its copy in the ellipsis site is also focused, as the LFs for (45a-b) in (46) show (see Erlewine 2014 for additional benefits of allowing unpronounced F-marked items in ellipsis sites). Such configurations fit the ‘elided focus’ schema in (42b) and therefore satisfy (41i), as the  $\lambda$ -binder  $c$ -commands an F-marked item at LF.<sup>15</sup>

(45) a. I know which GIRL he kissed, but not [ which BOY ]<sub>1</sub> he did [ kiss  $t_1$  ].

b. John likes SUE’s boyfriend, but you like [ BETH<sub>1</sub>’s [  $t_1$  boyfriend ] ].

(46) a. ... [ which boy<sub>F</sub> [  $\lambda y$  he did [  $\underline{VP}$  kiss the boy<sub>F</sub>  $y$  ] ] ]

b. ... [ [ *Op* Beth<sub>F</sub> ] -s [  $\lambda y$  [  $\underline{N'}$  the Beth<sub>F</sub>  $y$  boyfriend ] ] ]

Conversely, because only the top copy of the operator/quantifier in an  $\bar{A}$ -chain is visible at LF (according to Trace Conversion), the presence of focus on this element in will not yield a configuration which satisfies (41i). Rebinding utterances that display this configuration, such as (47a), fit the bad ‘superordinate focus’ schema in (43), as the LF for (47a) in (47b)

<sup>15</sup>Güliz Güneş (p.c.) points out that rebinding utterances that display *wh*-degree phrases and fit the ‘elided focus’ schema in (42b) are further constrained: VP ellipsis cannot be licensed by dummy-*do* (see i to iv). It appears that the difference between (i-ii) and (iii-iv) is lexical/syntactic in nature, and thus beyond this paper’s scope.

- (i) \*I noticed how FRUSTRATED he looked, but not how FRIGHTENED he did.  
 (ii) \*I know how expensive a CAR she bought, but not how expensive a HOUSE she did.  
 (iii) I can imagine how FRUSTRATED he’ll look tomorrow, but not how FRIGHTENED he will.  
 (iv) ?I know how expensive a CAR she’ll buy, but not how expensive a HOUSE she will.

shows.<sup>16</sup>

- (47) a. \*We know that John kissed a girl, but we don't yet know [ WHICH girl]<sub>1</sub> *he did*  
           [ kiss *t*<sub>1</sub> ]  
       b. ... [ which<sub>F</sub> girl [ λy he did [<sub>VP</sub> kiss the girl y]]]

Other rebinding utterances that fit the bad 'superordinate focus' schema are (48a) and (48b) (the latter repeated from 28c). In both cases, the closest c-commanding F-marked item to the rebound variable also c-commands the λ-binder at LF (see 49).

- (48) a. \*SUE doesn't know who he kissed, and MARY *doesn't know who*<sub>1</sub> *he did*  
           [ kiss *t*<sub>1</sub> ], either.  
       b. \*John LIKES Beth's boyfriend, but Pete HATES *Beth*<sub>1</sub>'s [ *t*<sub>1</sub> boyfriend ].
- (49) a. ... [ Mary<sub>F</sub> doesn't know who [ λy he did [<sub>VP</sub> kiss y]]]  
       b. ... Pete [ hates<sub>F</sub> [ [ *Op* Beth] -s [ λy [<sub>N'</sub> the Beth y boyfriend]]]

It should be pointed out that, because the  $\bar{A}$ -moved possessor in (45b) and (48b) is adjacent to the ellipsis site, it is impossible for utterances such as these to fit the 'intervening focus' schema in (42a), as no independent focusable material intervenes between the  $\bar{A}$ -moved item and the ellipsis site. Therefore, such utterances are only acceptable if they fit the 'elided focus' schema, which requires that the  $\bar{A}$ -moved item itself be focused, so that the λ-binder can c-command the  $\bar{A}$ -moved item's F-marked copy. Resultantly, any analysis that can theoretically derive the generalization in (41) (such an analysis will be outlined in the next few subsections) can account for why the possessor must be focused in (45b). Notice that that such an analysis will be extensible, as it will predict that any  $\bar{A}$ -moved phrase that immediately precedes a non-clausal ellipsis site from which it extracts must bear focus on its restrictor. This prediction is borne out for another (potential) rebinding configuration, which is pseudogapping:<sup>17</sup>

<sup>16</sup>It is worth mentioning that relative clauses that a) display rebinding configurations, and b) have non-quantified head noun phrases with a focused NP restrictor, are unacceptable, as (i) shows (Schuyler 2001). This observation is captured by the generalization in (41) under the externally-headed approach to English relative clauses of this type, such as the matching analysis (Chomsky 1965:137) (see ii). Under this analysis, such examples fit the bad 'superordinate focus' schema in (43) (see iii).

- (i) \*I apologized to the TEACHER who I'd insulted, and also to the STUDENT *who I had*.  
 (ii) \*... and also to [<sub>DP</sub> the [<sub>NP</sub> [<sub>NP</sub> STUDENT] [<sub>CP</sub> [ who student ]<sub>1</sub> I had [ insulted *t*<sub>1</sub> ] ]].  
 (iii) ... and also to [the student<sub>F</sub> who student [ λx I had [<sub>VP</sub> insulted the student x]]]

<sup>17</sup>If indeed pseudogapping is derived via  $\bar{A}$ -movement, (Jayaseelan 2001; Gengel 2007, *contra* Baltin 2003), then any analysis which can theoretically derive the generalization in (41) will militate against the syntactic stipulation that remnants of pseudogapping move to a dedicated clause-internal FocP projection. An anonymous reviewer points out that the same might be said for the N'-ellipsis case in (45b): it is feasible that such an analysis can (partly) derive Giannakidou & Stavrou's (1999:305) Contrast Condition on the

- (50) a. JOHN likes SUE more than MARY does [ BILL<sub>1</sub> [ like t<sub>1</sub> ] ].  
 b. \*JOHN likes Sue more than MARY *does* [ Sue<sub>1</sub> [ like t<sub>1</sub> ] ].

The question now arises about how to theoretically derive the generalization in (41). Because (41) is disjunctive, I suggest that (41i) and (41ii) are reflexes of distinct recoverability conditions on ellipsis. I suggest that rebinding is more permissive in clausal ellipsis configurations (as stated in 41ii) because clausal ellipsis is subject to a QUD-based recoverability condition to which rebinding is irrelevant (following Ginzburg & Sag 2000, Reich 2002; Barros 2014, Barros & Kotek to appear, among others). This position is defended in §4. Conversely, I suggest that rebinding is more restricted in VP and N'-ellipsis contexts (as implied by 41i) because these forms of ellipsis are subject to a focus-sensitive recoverability condition. For the remainder of §3, I concentrate on deriving (41i).

### 3.2 Strengthening the Parallelism condition

I have demonstrated that T&F's reliance on the relation of Enough Contrast yields an overly-permissive Parallelism condition that must be buttressed by exogenous constraints such as MaxElide. To ensure that it does not overgenerate rebinding utterances, I propose to reinstate Rooth's (1985, 1992a, b) relation of Appropriate Contrast (see 8) as the foundation of Parallelism. For reasons that will become clear in §2.2.1, the Parallelism constraint must be further strengthened by demanding that the relation of Appropriate Contrast apply reflexively. For reasons discussed momentarily, the existential-closure operation in (51) must also be used. This yields the Parallelism condition in (52).<sup>18</sup>

- (51)  $\exists$ -closure: For the sake of determining whether  $\beta$  Contrasts Appropriately with  $\alpha$  and *vice versa*, existentially-bind free variables in  $\alpha$  and  $\beta$ .
- (52) *Parallelism* (final version)  
*Modulo*  $\exists$ -closure,  $\beta$  must Contrast Appropriately with an antecedent constituent (AC) **and** AC must Contrast Appropriately with  $\beta$ .

$\exists$ -closure allows for phrases that contain an F-marked item and a rebound variable but **not** the variable's binder to be potential PDs. This is because it binds variables in domains in which they would otherwise be free, due to the absence of their regular  $\lambda$ -binders. For

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Licensing of Nominal Subdeletion:

- (i) A nominal subconstituent  $\alpha$  can be elided in a constituent  $\beta$  only if the remnant of  $\beta$  is not identical to the corresponding part of the antecedent  $\gamma$  of  $\alpha$ .

<sup>18</sup>Because it is reflexive and utilizes an  $\exists$ -closure operation, the strengthened Parallelism condition in (52) bears a striking resemblance to Merchant's (2001) *e*-GIVENness condition. The two recoverability conditions are not identical, however, as *e*-GIVENness applies to ellipsis sites (rather than to phrases that contain them) and permits ellipsis sites and their antecedents to have identical ordinary semantic values (which 52 does not).

instance, the TP labelled ‘ $\beta$ ’ in the LF for (1) (repeated below) in (53a) would not be PD without  $\exists$ -closure, as the free variables within this phrase and its antecedent would receive different denotations under certain assignment functions, which violates the first clause of the Appropriate Contrast definition (see 8a). Once  $\exists$ -closure applies, this problem disappears:  $\beta$  Contrasts Appropriately with  $\alpha$  and *vice versa*, and therefore  $\beta$  is the PD (see 53b-c).

- (1) I know who JOHN will kiss and also who<sub>1</sub> MARY will [ kiss  $t_1$  ].
- (53) a. I know who person  $\lambda x$  [ $\alpha$  John<sub>F</sub> will kiss the person  $x$ ] and also who person  $\lambda y$  [ $\beta$  Mary<sub>F</sub> will [<sub>VP</sub> kiss the person  $y$ ]].
- b. *After  $\exists$ -closure:*  
 $\llbracket \alpha \rrbracket^o = \exists x. \text{J will kiss the person } x$   
 $\llbracket \beta \rrbracket^o = \exists y. \text{M will kiss the person } y$   
 $\llbracket \alpha \rrbracket^f = \{ \exists x. \text{J will kiss the person } x, \exists x. \text{M will kiss the person } x, \dots \}$   
 $\llbracket \beta \rrbracket^f = \{ \exists y. \text{M will kiss the person } y, \exists y. \text{J will kiss the person } y, \dots \}$
- c.  $\llbracket \alpha \rrbracket^o \in \llbracket \beta \rrbracket^f$  and  $\llbracket \beta \rrbracket^o \in \llbracket \alpha \rrbracket^f$ , therefore Parallelism is satisfied.

This situation obtains for all rebinding utterances that fit the ‘intervening focus’ and ‘elided focus’ schemata in (42a) and (42b). In the case of rebinding utterances that fit the ‘elided focus’ schema, the ellipsis site itself makes for a potential PD, as it contains an F-marked element at LF.

### 3.3 The $\lambda$ -intervention condition

Because the new Parallelism condition in (52) allows rebinding phrases (i.e. phrases that contain  $\lambda$ -binders of rebound variables) to be PDs, it incorrectly predicts that rebinding utterances that fit the bad ‘superordinate’ schema in (43) are potentially recoverable. As already indicated, I argue that (52) does not require further modification so that rebinding utterances that fit (43) are correctly ruled out: instead, I claim that rebinding phrases have been treated in previous literature as PDs because the import of a general restriction on semantic composition that impedes the recoverability of ellipsis has been overlooked. This restriction on semantic composition is presented schematically in (54) (see Kotek 2016 for a similar constraint).

- (54)  *$\lambda$ -intervention*  
 \* [  $\dots$   $\lambda$   $\dots$  ], iff  $\lambda$  is derived by Trace Conversion

This rule states that  $\lambda$ -binders formed by Trace Conversion (i.e.  $\lambda$ -binders derived from syntactic movement) are interveners to Hamblin-style alternative semantic composition

(Hamblin 1973, Rooth 1985, 1992a), which is represented by the squiggly arrow in (54). The motivation for (54) comes from Shan’s (2004) critique of using variables in semantics. Shan demonstrates that no tenable rule of Predicate Abstraction (Heim & Kratzer 1998) can be defined in Hamblin-style alternative semantics, which entails that alternative semantic composition is unable to proceed once a  $\lambda$ -binder derived via syntactic movement is encountered. This entails that such binders are focus-semantic interveners.

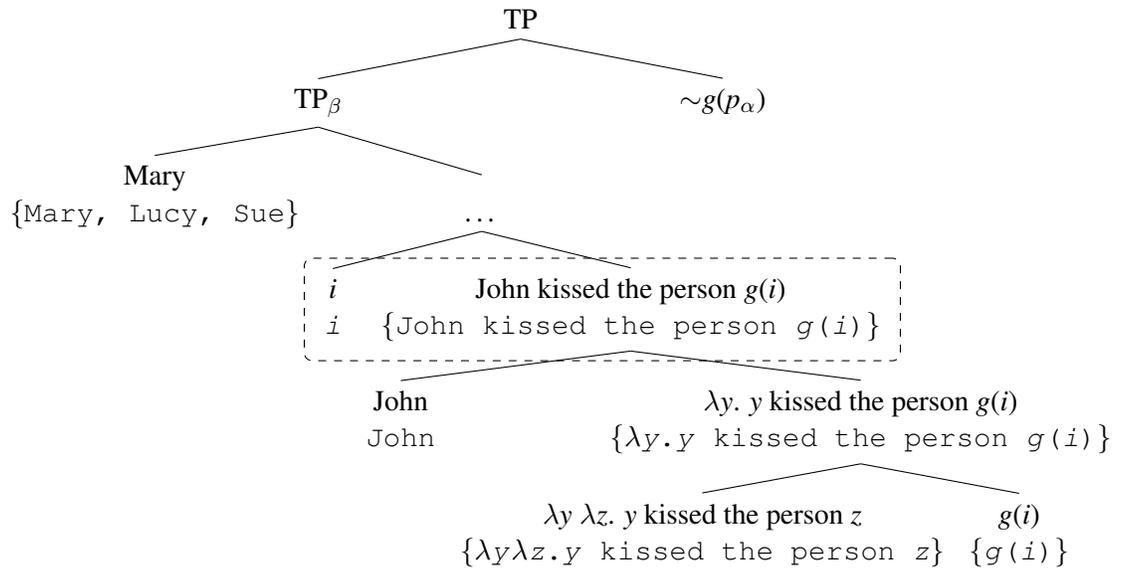
Although attempts have been made to make Predicate Abstraction compatible with Hamblin-style alternative semantics (see, for instance, Romero & Novel 2013), I follow Kotek (2016) and retain the use of variables but simultaneously assume that Shan’s observation about alternative semantics is valid. In other words, I assume that (54) is indeed a general constraint on semantic composition. Because the  $\lambda$ -intervention constraint explains why rebinding utterances that fit the ‘superordinate focus’ schema in (43) are unacceptable, I treat its utility as additional evidence for its existence.<sup>19</sup> To take one example, consider (48a), which is repeated with its LF in (55) below.

- (55) a. \*SUE doesn’t know who he kissed, and MARY *doesn’t know who<sub>1</sub> he did* [ kiss  $t_1$  ], either.  
 b. [ $\alpha$  Sue<sub>F</sub> doesn’t know who person  $\lambda x$  he kissed the person  $x$ ], and [ $\beta$  Mary<sub>F</sub> doesn’t know who person [  $\lambda y$  he did [<sub>VP</sub> kiss the person  $y$ ]]]

Because the ordinary semantic values of the AC and the PD must be different for a relation of Appropriate Contrast to obtain (even after  $\exists$ -closure applies), the best candidate for a PD in (55) is  $\beta$  (see the LF in 55b), which contains the F-marked element *Mary*. However, a focus semantic value cannot be procured for  $\beta$ , as (56) shows. This is because alternative semantic composition cannot proceed past the maximal projection of the embedded TP (see the dashed box in 56), as an application of Predicate Abstraction is required and no tenable rule of Predicate Abstraction is defined in alternative semantics (in other words,  $\lambda$ -intervention occurs). Because  $\beta$  must have a focus semantic value in order to Contrast Appropriately with  $\alpha$  and therefore satisfy Parallelism,  $\beta$  is not a suitable PD in (55). Because no other PDs are available in (55), ellipsis is therefore unrecoverable.

<sup>19</sup>This problem for Roothian alternative semantics is also exploited by Kotek (2016), who demonstrates that association with focus operators such as *only* is impossible if the associated phrase contains a  $\lambda$ -expression. In other words, Kotek shows that  $\lambda$ -binders are ‘interveners’ to association with focus, and therefore provides empirical support against Novel & Romero’s (2013) relatively recent claim to have solved the problem of defining Predicate Abstraction in a system that uses Hamblin alternatives.

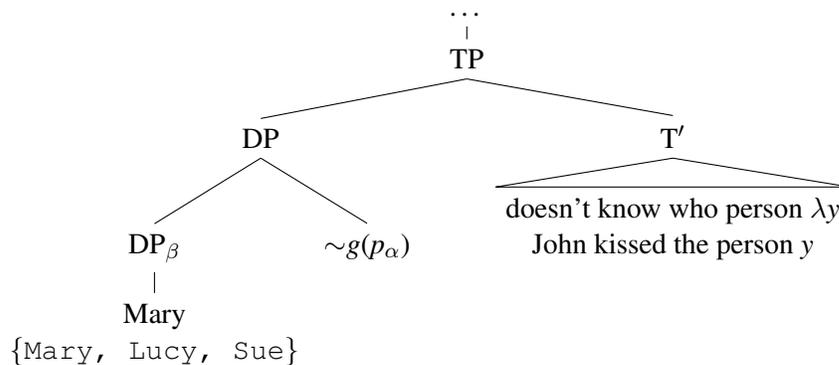
(56)



It should be emphasized that the  $\lambda$ -intervention observed in (56) is not unique to elliptical utterances. It is also impossible to use the configuration in (56) to obtain a contrastive interpretation for the F-marked element in the non-elliptical counterpart to (55a) in (57). The F-marked item in this utterance receives a contrastive interpretation because another option is available: the  $\sim$  operator can adjoin directly to the F-marked element instead, as (58) shows. The configuration in (58) is clearly useless for recovering ellipsis, however, as the sister of  $\sim$  would not contain the ellipsis site, as is required to satisfy Parallelism.

(57) SUE doesn't know who he kissed, and MARY *doesn't know who he kissed*, either.

(58)



To summarize: I propose that rebinding utterances that fit the 'superordinate focus' schema in (43) are unacceptable because  $\lambda$ -intervention (see 54) prevents the procurement of a focus semantic value for what would otherwise be a suitable PD. Without focus semantic values, such phrases cannot Contrast Appropriately with their antecedents and Parallelism

is violated. This yields unacceptability.<sup>20</sup>

### 3.4 Unacceptable rebinding utterances that fit the generalization from §3.1

The generalization in §3.1 describes the structural configurations in which ellipsis is potentially recoverable in rebinding utterances. Reasons why one of these structural configurations (namely, the configuration described by (41i)) must obtain were provided in §3.2–3.3. However, as mentioned in §3.1, certain rebinding utterances can fit the description from (41i) and yet still be unacceptable. The examples from §2.2.1 fall into this category. Keeping to the line of argumentation pursued in §3.2–3.3, one expects that such exceptions to (41) should be unacceptable because they violate Parallelism. In this subsection, I demonstrate that this expectation is met for the rebinding utterances from §2.2.1. By examining these utterances more closely, it will be shown why Parallelism must be defined reflexively, as in (52).

Let us reconsider the unacceptable rebinding utterance from (20a) in §2.2.1 and its acceptable non-elliptical counterpart. One observes that, from an information-structural perspective, the utterance in (59b) is most intuitively understood as a response to the question posed in (59c).

- (59) a. \* $[\alpha$  MARY kissed a HIPSTER], but I don't know who<sub>1</sub>  $[\beta$  JOHN *did* [ kiss  $t_1$  ]].  
 b. MARY kissed a HIPSTER, but I don't know who<sub>1</sub> JOHN *kissed*  $t_1$ .  
 c. Who did JOHN kiss? *eliciting question for (59b)*

As a response to the question in (59c), the first coordinand in (59b) is a paradigmatic 'contrastive-topic' configuration (Büring 2003). In (59b), the prosodic accent on *Mary* serves to convey that the speaker is answering an alternative question to the one posed in

<sup>20</sup>One might be concerned that the current analysis is incompatible with the traditional QR analysis of antecedent-contained deletion (ACD, May 1985). This concern is misplaced, however, as acceptable ACD constructions always contain a focused element in the phrase that is dominated by the  $\lambda$ -binder (i). Consequently, once QR and late merger of the relative clause have occurred (Fox 2002) (ii), alternative semantics and  $\exists$ -closure will deliver a focus semantic value for  $\beta$  that Contrasts Appropriately with the ordinary semantic value of  $\alpha$ , and *vice versa* (iii).

- (i) JOHN visited every town PETE did.  
 (ii) [every town  $\lambda x$   $[\beta$  PETE visited the town  $x$ ]  $\lambda y$   $[\alpha$  John visited the town  $y$ ]  
 (iii)  $[[\exists y. \text{John}_F \text{ visited the town } y]]^o \in [[\exists x. \text{Pete}_F \text{ visited the town } x]]^f$ , and  
 $[[\exists x. \text{Pete}_F \text{ visited the town } x]]^o \in [[\exists y. \text{John}_F \text{ visited the town } y]]^f$ , for all assignments  $g$

Note that the current analysis also explains why (iv) is unacceptable. This is because  $\alpha$  and  $\beta$  have the same ordinary semantic values after  $\exists$ -closure occurs (see v), and therefore no relation of Appropriate Contrast can be established.

- (iv) \*John visited every TOWN *he did*.  
 (v) [every town<sub>F</sub>  $\lambda x$   $[\alpha$  John visited the town<sub>F</sub>  $x$ ]  $\lambda y$   $[\beta$  John visited the town<sub>F</sub>  $y$ ]

(59c), namely an alternative derived by substituting the subject *John* in (59c) for a salient alternative (namely, *Mary*). The second coordinand in (59b) is interpreted as a repetition of the eliciting question in (59c).

According to Buring (2003), Constant (2014), and others, the focus semantic value for the first coordinand in utterances such as (59a) and (59b) is a set of set of propositions:

$$(60) \quad \llbracket \text{Mary}_{\text{CT}} \text{ kissed a hipster}_{\text{F}} \rrbracket^{\text{f}} = \{ \{ x \text{ kissed } y \mid y \in D_e \} \mid x \in D_e \}$$

$$\left( \begin{array}{l} \{ \text{Mary kissed a hipster, Mary kissed a punk, } \dots \} \\ \{ \text{John kissed a hipster, John kissed a punk, } \dots \} \\ \dots \end{array} \right)$$

If one returns to re-examine the ACs discussed so far in this paper, one observes that the focus semantic value for each is a set of elements of type  $\tau$  (e.g.  $\{P, Q, \dots\}$ ) and not a set of set of elements of type  $\tau$ , as in (60). The exceptional status of the antecedent clause in (60) therefore indicates that, in addition to its ordinary semantic value, the focus semantic value of AC in (59a) is relevant to ellipsis recoverability.

It is this observation that motivates the strengthened, reflexive version of Parallelism in (52). This version of Parallelism correctly predicts that ellipsis is unrecoverable in examples such as (59a). Due to  $\lambda$ -intervention, the most suitable candidate for PD in (59a) is the TP labelled ' $\beta$ '. Although  $\beta$  Contrasts Appropriately with  $\alpha$  in this scenario,  $\alpha$  does not Contrast Appropriately with  $\beta$ . Due to the presence of the contrastive topic in  $\alpha$ , the members of  $\llbracket \alpha \rrbracket^{\text{f}}$  are sets of propositions (see 60).  $\llbracket \beta \rrbracket^{\text{o}}$  is not a set of propositions, however: it is simply a proposition. Thus,  $\llbracket \beta \rrbracket^{\text{o}} \notin \llbracket \alpha \rrbracket^{\text{f}}$  (see 61). Parallelism is therefore not satisfied in (59a).<sup>21 / 22</sup>

<sup>21</sup>To ensure that a contrastive-topic interpretation is obtained in utterances such as (59b), Constant (2014:93) claims that  $\in$  can be supplanted by  $*\in$ , which means '*somewhere within*' (see Quine 1963: §15). Although this *ancestral membership* relation may be available for interpreting contrastive topics, I argue that it is unavailable for the purposes of satisfying Parallelism.

<sup>22</sup>In (i) below, successive-cyclic  $\bar{A}$ -movement of the *wh*-phrase yields two intermediate variables in the elliptical clause (see ii, where NP restrictors are ignored). Because QR is clause-bound, the indefinite phrase in the antecedent clause must receive a wide-scope interpretation via existential-binding. Consequently, the intermediate variables in the elliptical clause have no counterparts in the antecedent clause. Messick & Thoms (2016) propose that this mismatch is responsible for (i)'s unacceptability, as *scopal parallelism* (Griffiths & Lipták 2014), which demands that variables in the elliptical and antecedent clauses are bound from parallel positions, is not satisfied. Aside from the fact that there is no clear conceptional reasoning behind scopal parallelism (why should the precise structural configuration of LFs matter to recovering the *meaning* of an ellipsis site?), Messick & Thoms' analysis fails to explain why (59) is unacceptable, as nothing prevents successive-cyclic QR occurring in the antecedent clause, which would satisfy scopal parallelism (see iii). Because the current analysis' explanation of (59) extends straightforwardly to (i), it is therefore favored over Messick & Thoms' analysis. See Nakamura (2016) for critique of other aspects of Messick & Thoms' analysis.

- (i) \*JOHN claims that Mary kissed a HIPSTER, but we don't know who PETE *does*.
- (ii)  $[\exists x. \text{John}_{\text{F}} \text{ claims that Mary kissed } x]$ , but I don't know [who  $\lambda y$  Pete<sub>F</sub> does [<sub>VP</sub> claim [<sub>CP</sub>  $y$  that Mary

(61)	$\llbracket \text{Mary}_{\text{CT}} \text{ kissed a hipster}_{\text{F}} \rrbracket^{\circ}$	=	Mary kissed a hipster
	$\llbracket \text{Mary}_{\text{CT}} \text{ kissed a hipster}_{\text{F}} \rrbracket^{\text{f}}$	=	see (60)
	$\llbracket \exists x. \text{John}_{\text{F}} \text{ kissed the person } x \rrbracket^{\circ}$	=	John kissed someone (after $\exists$ -closure)
	$\llbracket \exists x. \text{John}_{\text{F}} \text{ kissed the person } x \rrbracket^{\text{f}}$	=	{John kissed someone, Mary kissed someone, ...} (after $\exists$ -closure)
	$\llbracket \text{Mary}_{\text{CT}} \text{ kissed a hipster}_{\text{F}} \rrbracket^{\circ}$	$\in$	$\llbracket \exists x. \text{John}_{\text{F}} \text{ kissed the person } x \rrbracket^{\text{f}}$
	$\llbracket \exists x. \text{John}_{\text{F}} \text{ kissed the person } x \rrbracket^{\circ}$	$\notin$	$\llbracket \text{Mary}_{\text{CT}} \text{ kissed a hipster}_{\text{F}} \rrbracket^{\text{f}}$

To summarize: ellipsis is more difficult or impossible recover in environments in which the antecedent phrase is information-structurally complex. This fact should not be treated as coincidental, and can be straightforwardly captured by the reflexive recoverability condition in (52).

### 3.5 Summary of §3

I have now provided my explanation of the generalization in (41i) in full. I have shown in §3.2 to §3.4 that, when coupled, the Parallelism condition in (52) and the  $\lambda$ -intervention condition in (54) capture all the rebinding data discussed so far, except for sluicing. Thus, in terms of empirical coverage, the current analysis is superior to the MaxElide approach. In §3.1, I suggested that rebinding is irrelevant to sluicing (and TP ellipsis more generally) because TP ellipsis is subject to a distinct recoverability condition to which rebinding is irrelevant. In the next section, I explicate and provide empirical support for this claim.

## 4 Sluicing and QUD-recoverability

Ginzburg & Sag (2000) claim that the propositional meaning of fragmentary responses (including sluices) is recovered by recourse to the pragmatic *question under discussion* (QUD, Roberts 1996). Reinterpreted as a claim about how clausal ellipsis is recovered, this position has since been defended in the Minimalist literature (Reich 2002, Barros 2014, Barros & Kotek to appear). I claim that my analysis’ inability to capture sluicing provides additional evidence that this position is correct. I maintain that clausal ellipsis is different from all other forms of ellipsis as far as recoverability is concerned: in English, an elided TP must satisfy a QUD-based constraint on recoverability, whereas elided phrases of other syntactic categories must satisfy the Parallelism condition in (52).<sup>23</sup>

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(ii)  $\llbracket \text{a hipster } \lambda x. \text{Mary}_{\text{F}} \llbracket \text{ }_{\text{VP}} x \llbracket \text{ }_{\text{VP}} \text{ kissed } x \rrbracket \rrbracket \rrbracket$ , but I don’t know [who  $\lambda y$  John<sub>F</sub> did  $\llbracket \text{ }_{\text{VP}} y \llbracket \text{ }_{\text{VP}} \text{ kiss } y \rrbracket \rrbracket$ ]  
(where *a hipster* undergoes QR)

<sup>23</sup>An anonymous reviewer characterizes this position as “constructionist”, a description I reject. Which form of ellipsis is governed by which recoverability condition is determined by the elliptical construction’s

The notion of QUD comes from theories that view conversation as being propelled forward by explicit or implicit (i.e. inferred) questions and partial or complete responses to them (Roberts 2012). Informally speaking, an explicit or implicit question is a QUD at conversational time  $t$  if discourse-salient at  $t$ . Although many factors are involved in determining discourse-saliency, it suffices for our purposes to know that utterances containing indefinite expressions such as *someone* yield salient implicit *wh*-questions about the indefinite expression (see 62) (AnderBois 2014, Barros 2014), and that explicit questions make salient the set of questions to which they belong (see 63).

- (62) a. John kissed someone.  
 b. Who did John kiss? (implicit *wh*-question made salient by 62a)
- (63) a. What does John like?  
 b. {what does John like, who does John like} (implicit set of *wh*-questions made salient by 63a)

Barros (2014) argues that sluicing is recoverable in a question  $Q$  only if  $Q$  is identical to a QUD. Because the questions in (62b) and (63b) are QUDs when raised by the utterances in (62a) and (63a) respectively, sluicing is recoverable in explicit matrix or embedded questions which match these QUDs:

- (64) a. John kíssed someone, but I don't know WHO<sub>1</sub> [ John kíssed  $t_1$  ] .  
 b. A: John kíssed someone.  
 B: Really? WHO<sub>1</sub> [ did John kiss  $t_1$  ] ?  
 c. A: I know what John likes.  
 B: Oh yeah? WHAT<sub>1</sub> [ does John like  $t_1$  ] ?  
 d. I know WHAT John likes, and also WHO<sub>1</sub> [ he likes  $t_1$  ] .

Crucially, this QUD-based recoverability condition appeals to semantic identity between questions, not to focus semantic values. Consequently, the inability to procure a focus semantic value for a phrase that reflexively dominates the ellipsis site (due to  $\lambda$ -intervention) is irrelevant to the recoverability of clausal ellipsis.

The novel evidence that I employ to support the postulation of distinct recoverability conditions for clausal and non-clausal ellipsis comes from the licensing of TP and VP ellipsis in exceptive questions (i.e. questions headed by *wh*-phrases such as *who else* or *information-structural contribution*, not by its syntax. Elliptical constructions that function as *answers* (see Jacobson 2016) or repeat pragmatically-salient questions are governed by the QUD-recoverability condition, whereas elliptical constructions in which a rhetorical relation of CONTRAST is established (see Kehler 2002) are governed by Parallelism. I describe this as a division between 'clausal' and 'non-clausal' ellipsis in the main text merely because those constructions that are governed by the QUD-recoverability condition typically have a clause-sized ellipsis site (though not in e.g. Scottish Gaelic *Verb-answers*, see Thoms 2016).

*which other girl*). Sluicing is permitted in such questions (65), whereas, when no focused item follows the *wh*-phrase, VP ellipsis is not (66).

- (65) a. John kissed Máry, but I don't know [ who ELSE]<sub>1</sub> [ he kissed *t*<sub>1</sub> ] .  
 b. John kissed Máry, but I don't know [ which OTHER girl]<sub>1</sub> [ he kissed *t*<sub>1</sub> ] .
- (66) a. \*John kissed Máry, but I don't know [ who ELSE]<sub>1</sub> *he did* [ kiss *t*<sub>1</sub> ] .  
 b. \*John kissed Máry, but I don't know [ which OTHER girl]<sub>1</sub> *he did* [ kiss *t*<sub>1</sub> ] .

Because (66a-b) display archetypical VP ellipsis rebinding configurations, one expects that these rebinding utterances are unacceptable because Parallelism fails to obtain. To see that this expectation is met, let us consider the LF for (66a) in (67b). Following Barros (2014:180), *else* as an anaphoric exceptive modifier than adjoins to *who*'s silent NP restrictor (see 67a) and serves to ensure that *who* denotes a set of human individuals that does not include a salient individual in the discourse – in this case, *Mary* – as a member. According to Trace Conversion, a copy of this NP restrictor will remain low at LF, accompanying the rebound variable.

- (67) a. [<sub>DP</sub> who [<sub>NP</sub> else [<sub>NP</sub>  $\emptyset_{\text{person}}$ ]]]  
 b. John [ <sub>$\alpha$</sub>  kissed Mary<sub>F</sub>], but I don't know [who not-Mary-person<sub>F</sub>]  $\lambda y$  he did [ <sub>$\beta$</sub>  kiss the not-Mary-person<sub>F</sub> *y*].

Due to  $\lambda$ -intervention, the only plausible candidate for the PD in (66a) is the ellipsis site itself, which contains an F-marked element at LF, as (67b) shows. Once  $\exists$ -closure applies the relevant semantic values for  $\alpha$  and  $\beta$  in (67b) are:

- (68)  $\alpha = \llbracket \lambda x. x \text{ kiss Mary} \rrbracket^o \approx \textit{kissing Mary}$   
 $\beta = \llbracket \exists y \lambda z. z \text{ kiss the not-Mary-person}_F y \rrbracket^f$   
 $\approx \{ \textit{kissing Sue}, \textit{kissing Lucy}, \textit{kissing Paula} \}$

It is clear that  $\alpha$  is not an element of  $\beta$  in (68), and therefore  $\beta$  does not Contrast Appropriately with  $\alpha$  and *vice versa*. This means that  $\beta$  cannot be the PD. Because Parallelism is not satisfied, the current analysis correctly predicts that (66a) is unacceptable. This analysis extends to (66b).

Let us momentarily entertain the notion that  $\lambda$ -intervention does not exist. Let us also adopt a recoverability condition that allows the two phrases being compared to have the same ordinary semantic value (e.g. T&F's 2005 version of Parallelism or Merchant's 2001 *e*-GIVENness condition). Under such assumptions, a single recoverability condition may govern all forms of ellipsis, including sluicing. If we adopt T&F's Parallelism condition, for instance, sluicing in exceptive questions is expected to be unacceptable, just as VP ellipsis is. Although under this analysis the entire embedded interrogative clause in (65a) is

now a plausible PD (see  $\beta$  in 69a), this clause cannot actually be a PD for the same reason that the elided VP in (66a) cannot: it does not Contrast Enough with its antecedent, as (69b) shows.

- (69) a. [ $\alpha$  John kissed Mary<sub>F</sub>], but I don't know [ $\beta$  [who not-Mary-person<sub>F</sub>]  $\lambda y$  [TP he did kiss the not-Mary-person<sub>F</sub> y]]  
 b. [[John kissed Mary]<sup>o</sup>  $\notin$   
 [[who the not-Mary-person<sub>F</sub>  $\lambda y$  kissed the not-Mary-person<sub>F</sub> y]]<sup>f</sup>  $\approx$  {*John kissed Sue, John kissed Lucy, John kissed Paula*}

Problematically for this unified approach to ellipsis recoverability, sluicing in exceptive questions is acceptable, as (65a-b) has already shown. This suggests that Parallelism does not, in any form, govern the recoverability of clausal ellipsis.

Barros' (2014) analysis of sluicing utterances such as (65a) uses a QUD-recoverability condition. He argues that the antecedent clause in (65a) provides a partial answer to an implicit QUD *who did John kiss?*, which is represented as its set of partial true answers in (70a). This set remains discourse-salience but is updated to exclude *John kissed Mary* after the antecedent clause is uttered (see 70b). Because the embedded interrogative clause in (65a) matches semantically with (70b), sluicing is recoverable.

- (70) a. {J kissed Mary, J kissed Sue, J kissed Lucy}  $\approx$  *who did John kiss?*  
 b. {J kissed Sue, J kissed Lucy}  $\approx$  *who else did John kiss?*

Barros' analysis cannot be extended to the VP ellipsis examples in (66), as it would incorrectly predict VP ellipsis to be recoverable. Consequently, it appears that two distinct recoverability conditions on ellipsis are required to account for the differing behavior of TP and VP ellipsis in exceptive questions, which in turn provides support for the notion that clausal and non-clausal ellipsis are governed by distinct recoverability conditions.

To summarize: a significant implication of the analysis advanced in §3 is that Parallelism governs the recoverability of non-clausal ellipsis but not clausal ellipsis. I provided new supporting evidence for this idea from the distribution of ellipsis in exceptive questions.<sup>24</sup>

<sup>24</sup>As an anonymous reviewer points out, the conclusion that clausal and non-clausal ellipsis are governed by distinct recoverability conditions rests on the assumption that sluices fit the bad 'superordinate focus' schema in (43). If this assumption is incorrect, and sluices instead fit either of the good schemata in (42), then one can instead conclude that all forms of ellipsis are licensed by Parallelism. So can a plausible analysis of sluicing be developed that yields LFs that fit either (42a) or (42b)? To my mind, the most promising analysis that achieves this treats the sluiced *wh*-phrase as an existentially-bound choice-function (see Cable 2010) that undergoes exceptional PF-movement to escape clausal ellipsis (Richards 2001, among others). This is essentially Fox & Lasnik's (2003) 'one-fell-swoop' account of sluicing, but with standard *wh*-movement replaced by PF-movement.

## 5 Extensions to other rebinding configurations

As mentioned in §1, the analysis provided in §3 aims only to capture rebinding configurations created from overt  $\bar{A}$ -movement. In this penultimate section, I provide cursory comments on how the analysis applies to rebinding configurations created by other syntactic dependencies. It will be shown that, at least for the small dataset considered, the analysis is naturally extensible.

### 5.1 Quantifier raising

Inverse-scope readings are permitted in clauses which display VP ellipsis, as the examples in (71) show. If such readings are derived by covert  $\bar{A}$ -movement (QR), then utterances such as (71a-b) display rebinding configurations (see 72).<sup>25</sup>

- (71) a. A DOCTOR tried to arrest every patient, and a NURSE tried to [ arrest every patient] , too. (modified from T&F 2005:232)
- b. A HORSE sat in every corner. A PIG did [ sit in every corner] , too. (where both  $(\exists > \forall)$  and  $(\forall > \exists)$  readings are attested for 71a-b)
- (72) a. [ every patient]  $\lambda x$  [ $_{\alpha}$  a doctor<sub>F</sub> tried to arrest the patient  $x$ ]  
[ every patient]  $\lambda y$  [ $_{\beta}$  a nurse<sub>F</sub> did [<sub>VP</sub> tried to arrest the patient  $y$ ]]
- b. [ every corner]  $\lambda x$  [ $_{\alpha}$  a horse<sub>F</sub> sat in the corner  $x$ ]  
[ every corner]  $\lambda y$  [ $_{\beta}$  a pig<sub>F</sub> did [<sub>VP</sub> sit in the corner  $y$ ]]

The analysis from §3 correctly predicts that ellipsis is recoverable in (71), as  $\beta$  Contrasts Appropriately with  $\alpha$  and *vice versa* after  $\exists$ -closure applies. The analysis also predicts that

- 
- John kissed someone, but we don't know...
- (i) Narrow syntax: [<sub>FocP</sub> [<sub>TP</sub> John kissed WHO]]
- (ii) LF: [ $_{\beta}$   $\exists f$ . [<sub>TP</sub> John kissed  $f$ (person)]]
- (iii) PF: [<sub>FocP</sub> WHO<sub>1</sub> [<sub>TP</sub> John kissed  $t_1$ ]]

Because it denotes a set of propositions and contains no  $\lambda$ -binders,  $\beta$  in (ii) fits the good ‘elided focus’ schema in (42) and can therefore be used to satisfy Parallelism. Thus, this analysis seems promising for a unified approach to the semantic licensing of ellipsis. Unfortunately, this analysis faces problems elsewhere. Like all ‘one-fell-swoop’ analyses of sluicing (e.g. Fox & Lasnik 2003, Messick & Thoms 2016), it predicts that readings that require scopal reconstruction are absent from sluices (as there are no intermediate copies of *wh*-movement to reconstruct to in (i) above). This prediction is incorrect, as Agüero-Bautista (2007) shows. Because this one-fell-swoop analysis is untenable, I therefore feel justified in maintaining that the English rebinding data lead naturally to the position defended in the main text.

<sup>25</sup>Importantly, inverse scope readings are typically disallowed when the subject is a referential expression, rather than an indefinite (see i). See Asudeh & Crouch (2002) for arguments that this complication is unrelated to the recoverability of ellipsis.

- (i) A HORSE sat in every corner. BOB did [ sit in every corner] , too. \*( $\forall > \exists$ )

no inverse scope reading is available if the QR-chain is fully contained within a deaccented domain. This is borne out:

- (73) a. Mary THINKS that a horse sat in every corner. Sue KNOWS that a horse did  
           [ sit in every corner] . ( $\exists > \forall$ ),  $*(\forall > \exists)$   
       b. Mary THINKS that a doctor tried to arrest every patient. Sue KNOWS that a  
           doctor tried to [ arrest every patient] . ( $\exists > \forall$ ),  $*(\forall > \exists)$

Inverse scope readings for (73a-b) are unattested because ellipsis is unrecoverable. As the LFs in (74) show, the only plausible PDs for these utterances contain  $\lambda$ -binders, and consequently focus semantic values cannot be procured for these phrases. Resultantly, they cannot be PDs. Because no other PDs are available, Parallelism is not achieved.

- (74) a. Mary [ $\alpha$  thinks<sub>F</sub> that [ every patient]  $\lambda x$  a doctor tried to arrest the patient  $x$ ]  
           Sue [ $\beta$  knows<sub>F</sub> that [ every patient]  $\lambda y$  a doctor did [<sub>VP</sub> try to arrest the patient  
            $y$ ]]  
       b. Mary [ $\alpha$  thinks<sub>F</sub> that [ every corner]  $\lambda x$  a horse sat in the corner  $x$ ]  
           Sue [ $\beta$  knows<sub>F</sub> that [ every corner]  $\lambda y$  a horse did [<sub>VP</sub> sit in the corner  $y$ ]]

Based on this small and simple QR dataset, it appears that the analysis from §3 correctly accounts for the availability of inverse scope readings in VP ellipsis environments. Whether or not the analysis can handle an expanded and more complex QR dataset must remain an issue for future research, however.

## 5.2 Rebound Variable Pronouns

The observation that a sloppy interpretation is available for (75) shows that elided VPs may contain rebound variable pronouns.

- (75) [ Every PRISONER]<sub>i</sub> misses her<sub>i</sub> children and [ every WARDEN]<sub>k</sub> does [ miss her<sub>k</sub>  
           children] , too.

If rebound variable pronouns are  $\lambda$ -bound (as is commonly assumed), then (75) displays the LF in (76). Seeing as the analysis from §3 prohibits rebinding phrases from having focus semantic values, a question arises about whether or not it can account for the observation that utterances such as (75) are acceptable under a sloppy reading.

- (76) [ Every prisoner<sub>F</sub>]  $\lambda x$  the prisoner<sub>F</sub>  $x$  misses the prisoner  $x$ 's children and [ every  
           warden<sub>F</sub>]  $\lambda y$  the warden<sub>F</sub>  $y$  does [<sub>VP</sub> miss the warden  $y$ 's children]

I suggest that (75) is acceptable because the elided VP itself makes for a suitable PD. If VP

is PD, then the presence of the  $\lambda$ -binder is no obstacle to recovering ellipsis.

A bound variable pronoun can optionally bear focus if its binding phrase contains a focused item and if it has an antecedent pronominal correlate (see 77) (Sauerland 1998, Jacobson 2000). If the semantic correspondent of phonological focus is F-marking (as has been assumed throughout this paper), then it appears that bound variable pronouns can be F-marked in the environment exemplified by (77). Because the analysis in §3 allows ellipsis sites to host F-marked elements at LF, nothing prevents us from assuming that F-marking is optionally borne by the rebound variable pronoun in (75) even when the phonological reflex of F-marking (i.e. a prosodic accent) is suppressed. I wish to make a stronger claim than this here, which is that rebound variable pronouns whose binders are focused are themselves **always** F-marked at LF. According to this claim, the LF for (75) is actually (78), not (76).

(77) [ Every prisoner]<sub>i</sub> misses her<sub>i</sub> children and [ every WARDEN]<sub>k</sub> misses {HER/her}<sub>k</sub> children, too.

(78) [ Every prisoner<sub>F</sub>]  $\lambda x$  the prisoner<sub>F</sub>  $x$  misses the prisoner<sub>F</sub>  $x$ 's children and [ every warden<sub>F</sub>]  $\lambda y$  the warden  $y$  does [VP miss the warden<sub>F</sub>  $y$ 's children]

Under this approach, (75) fits both the good 'intervening focus' schema in (42a) and the good 'elided focus' in (42b). Consequently, the analysis from §3 correctly predicts that ellipsis is recoverable in (75).

This explanation only applies to configurations in which the rebound variable pronoun and its binding phrase can be F-marked. As mentioned above, if an element in its binding phrase cannot be focused, a bound pronoun cannot be F-marked (79). Problematically, ellipsis is also licensed in such constructions as (79), as (80) shows.

(79) The new warden SUSPECTS that every prisoner will miss her children. The old warden KNOWS that [ every {prisoner / \* PRISONER}] will miss {her / \* HER} children.

(80) The new warden SUSPECTS that every prisoner will miss her children. The old warden KNOWS *that* [ every prisoner] will [ miss her children] .

Notice that (80) necessarily receives a strict interpretation, however. Also notice that there is a preference to pronominalize the second token of *every prisoner* to *she*, in accordance with DOAP (see §2.2.4). From these observations, one may posit that the second sentences in (79) and (80) do not contain rebound variable pronouns after all: instead these are referential E-type pronouns (Evans 1980). If treated similarly to standard referential pronouns for the sake of recoverability (i.e. as free variables under an assignment function, as Merchant 2001:207 does), then Parallelism is straightforwardly satisfied in (80).

Recourse to E-type pronouns can also capture an additional observation related to sloppy readings. To see what this observation is, first consider the utterance in (81), which only has a strict reading.

- (81) I know what MARY bought the teacher that John admires, and also what<sub>1</sub> BILL did [ buy [ [ the teacher]<sub>2</sub> that John admires  $t_2$ ]  $t_1$  ] .

The analysis from §3 appears to predict that ellipsis is unacceptable in (81), contrary to observation. To see why, consider the LF for (81) in (82) (where the import of restrictors is ignored for clarity's sake). The most plausible candidate for PD here is the TP labelled ' $\beta$ '. Problematically,  $\beta$  contains a phrase whose ordinary semantic value was built using Predicate Abstraction: this is the elided relative clause *the teacher that John admires*. This means that no focus semantic value can be procured for  $\beta$ , and so  $\beta$  cannot Contrast Appropriately with  $\alpha$ . Resultantly, ellipsis should not be licensed in (81) according to the current analysis.

- (82) I know what  $\lambda v$  [ $\alpha$  Mary<sub>F</sub> bought [ the teacher that John  $\lambda x$  admires  $x$ ]  $v$ ], and what  $\lambda y$  [ $\beta$  Bill<sub>F</sub> did [<sub>VP</sub> buy [ the teacher  $\lambda z$  that John admires  $z$ ]  $y$ ]]

This apparent problem is circumvented if the purported relative clause in the ellipsis site in (81) is actually an E-type pronoun (see 83). Parallelism is satisfied in (83) (as I allow the reader to confirm), and therefore the current analysis correctly predicts that (81/83) is acceptable.

- (83) I know what MARY bought [ the teacher that John admires]<sub>i</sub>, and also what<sub>1</sub> BILL did [ buy her<sub>i</sub>  $t_1$  ] .

When a relative clause cannot be substituted for an E-type pronoun in utterances similar to (81), the current analysis indeed does predict that unacceptability will arise. This prediction is borne out, as the example in (84) demonstrates. A strict reading of this utterance is available (as an E-type pronoun can be used), whereas a sloppy reading is not.

- (84) I know what MARY bought the teacher that she admires, and also what BILL did.  
 Strict reading: *also what Bill bought the teacher that Mary admires* Sloppy  
 reading: # *also what Bill<sub>i</sub> bought the teacher that he<sub>i</sub> admires*

The relative clause must be retained in order to obtain the sloppy reading of (84), as (85) shows. The relative clause's presence prevents the most plausible candidate PD  $\beta$  from receiving a focus semantic value, and this therefore prevents ellipsis from being recovered. This precludes a sloppy reading for (84).

- (85) I know what  $\lambda v$  [ $_{\alpha}$  Mary<sub>i</sub> bought [ the teacher  $\lambda x$  that she<sub>i</sub> admires  $x$ ]  $v$ ], and also what  $\lambda y$  [ $_{\beta}$  Bill<sub>k</sub> did [ $_{VP}$  buy [ the teacher  $\lambda z$  that he<sub>k</sub> admires  $z$ ]  $y$ ]]

To summarize: based on the small dataset discussed in this subsection, it appears that the analysis from §3 correctly accounts for the availability of sloppy readings that arise in VP ellipsis environments due to the presence of rebound variable pronouns. It also appears that, once Grodzinsky and Reinhart’s (1993) Rule I and Fox’s (2000:115) Rule H are adopted (or an alternative economy condition on binding, see Reuland 2011:131-136), the analysis can also capture Dahl’s (1973; 1974) famous dataset (see Crnič 2017 for details). The analysis also handles Merchant’s (2001) ‘inmate/lifer’ cases, in the same manner that Erlewine (2014) does.

### 5.3 String-vacuous movement

At first glance it appears that the strengthened Parallelism condition in (52) undergenerates the utterance in (86a). This is because, for Parallelism to be satisfied, the ellipsis site must contain, or be contained in a phrase that includes, an F-marked item (see 8c). Furthermore, this phrase cannot include a  $\lambda$ -binder derived from  $\bar{A}$ -movement (as per the  $\lambda$ -intervention condition). Because no such phrase is observed in (86a) (as its LF in 86b shows), ellipsis is incorrectly predicted to be unrecoverable. Precisely the same problem arises with the *wh*-adverbial clause in (87a) (this example is modified from Schuyler 2001; I treat the *wh*-adverbial phrase in 87a as base-generated as a TP-modifier, following Hartman 2011).

- (86) a. Someone kissed Jóhn, but we don’t know WHO<sub>1</sub>  $t_1$  *did* [ kiss John] .  
 b. ... [ who<sub>F</sub> person  $\lambda y$  the person  $y$  did [ $_{VP}$  kiss John]]
- (87) a. Mary kissed Jóhn. We just don’t know WHEN<sub>1</sub>  $t_1$  *she did* [ kiss John] .  
 b. ... [ when<sub>F</sub> time  $\lambda y$  the time  $y$  she did [ $_{VP}$  steal the money]]

Utterances such as (86a) and (87a) are only problematic for the current analysis if the *wh*-phrase undergoes string-vacuous  $\bar{A}$ -movement, as assumed in (86) and (87). I suggest that no such  $\bar{A}$ -movement occurs, and that the correct representations for these utterances are actually (88a) and (89a), respectively. Because no  $\bar{A}$ -movement occurs, no  $\lambda$ -expression is created at LF (see 88b and 89b).

- (88) a. Someone kissed Jóhn, but we don’t know WHO *did* [ kiss John] .  
 b. [ $_{\alpha}$  Someone kissed John], but we don’t know [ $_{\beta}$  who<sub>F</sub> did [ $_{VP}$  kiss John]]
- (89) a. Mary kissed Jóhn. We just don’t know WHEN *she did* [ kiss John] .  
 b. [ $_{\alpha}$  Mary kissed John]. We don’t know [ $_{\beta}$  when<sub>F</sub> she did [ $_{VP}$  kiss John]]

With no  $\lambda$ -intervention, the TP labelled ‘ $\beta$ ’ in (88b) and (89b) is free to satisfy Parallelism.

Furthermore,  $\beta$  Contrasts Appropriately with its antecedent  $\alpha$ , as their ordinary semantic values differ ( $\beta$  denotes a set of propositions, while  $\alpha$  does not).

Evidence for the lack of  $\bar{A}$ -movement in (86-87) comes from the observation that the *wh*-phrases in these utterances cannot host *wh*-the-hell expressions (see 90). These expressions may only attach to overtly  $\bar{A}$ -moved *wh*-phrases (Brame 1978), as (91) shows. The fact that the *wh*-subject may host a *wh*-the-hell phrase in (91) indicates that, unless prohibited by an independent factor (such as satisfying the Parallelism condition on recovering ellipsis), string-vacuous  $\bar{A}$ -movement is optional.<sup>26</sup>

- (90) a. Someone kissed Jóhn, but we don't know [WHO (\* the hell)] *did*.  
 b. Mary kissed Jóhn. We just don't know [WHEN (\* the hell)] *she did*.
- (91) [ Who (the hell)]<sub>1</sub> *t*<sub>1</sub> gave [ WHAT (\* the hell)] to Sue?

## 6 Conclusion

Takahashi & Fox's (2005) Parallelism condition on ellipsis recoverability cannot account for the distribution of acceptability in rebinding utterances without additional assumptions in place. In an attempt to capture the rebinding dataset, Takahashi & Fox adopt Merchant's (2008) MaxElide condition, an exogenous constraint on ellipsis. I demonstrated that Takahashi & Fox's MaxElide analysis is empirically inadequate, both ruling out acceptable rebinding utterances and ruling in unacceptable ones. By doing this, I also showed that all MaxElide analyses (or theoretical reductions thereof) are untenable.

Having dismissed MaxElide, I argued that the distribution of acceptability across the rebinding dataset can be captured by a strengthened Parallelism condition founded on Rooth's (1992b) notion of Appropriate Contrast. In other words, I argued that unacceptable rebinding utterances are unrecoverable (i.e. not semantically licensed). I also claimed that rebinding phrases (i.e. phrases that contain rebound variables and their  $\lambda$ -binders) never satisfy this strengthened Parallelism condition. This is because focus semantic values cannot be procured for rebinding phrases, due to there being no tenable Predicate Abstraction rule in Hamblin-style alternative semantics (Shan 2004) that can concatenate the  $\lambda$ -binder and

<sup>26</sup>Unlike in (89a) in the main text, the *wh*-adverbial in (i) below (taken from Hartman 2011:378) clearly undergoes  $\bar{A}$ -movement from a position adjoined to TP to Spec, CP (as evidenced by T-to-C movement). Because this  $\bar{A}$ -movement yields a  $\lambda$ -expression, which in turn yields an LF that fits the bad 'superordinate focus' schema (see ii), the unacceptability of (i) is explained under the current approach: no focus semantic value can be procured for  $\beta$  in (ii). See Hartman (2011) for an alternative analysis of the difference in acceptability between (89a) and (i).

- (i) \* I know Anna is going to resign. This question is: WHEN *is she* [going to resign] ?  
 (ii) ... [ $\beta$  when<sub>F</sub> time  $\lambda y$  the time *y* she is [<sub>VP</sub> going to resign]]

its sister. I demonstrated that this analysis straightforwardly captures the distribution of acceptability in those rebinding constructions that display non-clausal ellipsis.

The an important implication of this analysis was that clausal ellipsis (e.g. sluicing, fragment answers) and non-clausal ellipsis are subject to distinct recoverability conditions. I provided empirical support for this view from TP and VP ellipsis in exceptive questions. Although the purview of my analysis was rebinding configurations derived from overt  $\bar{A}$ -movement, I also showed how the analysis can be extended to rebinding configurations derived from other syntactic dependencies, including QR and rebound variable pronouns. If it withstands future scrutiny, this paper provides new evidence that (i) Max-Elide does not exist (Messick & Thoms 2016), (ii)  $\lambda$ -binders created via Trace Conversion (Fox 2000) are *focus-interveners* (Kotek 2016), and (iii) clausal and non-ellipsis are subject to distinct recoverability conditions (Weir 2017).

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