## Untangling *Tanglewood* using covert focus movement

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We argue for the existence of covert focus movement in English focus association. Primary evidence comes from *Tanglewood* configurations of the form in Kratzer (1991). We show that Tanglewood configurations are island-sensitive, which is unpredicted by Kratzer's focus-index proposal. We propose that Tanglewood configurations always involve covert movement of the overt focus—possibly with pied-piping (Drubig, 1994; Krifka, 2006; Wagner, 2006; Erlewine and Kotek, 2014)—to bind a bound variable in the ellipsis site. We show that covert focus movement is different from QR and can be long-distance.

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**Summary:** We argue for the existence of <u>covert focus movement</u> in English focus association. Primary evidence comes from *Tanglewood* configurations of the form in Kratzer (1991). We show that <u>Tanglewood configurations are island-sensitive</u>, which is unpredicted by Kratzer's focus-index proposal. Kratzer's arguments against covert focus movement for Tanglewood are overcome by the availability of <u>covert pied-piping</u>. We show that covert focus movement is different from QR and can be long-distance. We present two additional arguments in favor of covert focus movement from binding and parasitic gap licensing.

**Background:** Kratzer (1991) presents examples such as (1) as an argument against the unselective Alternative Semantics of Rooth (1985, a.o.). Its meaning, paraphrased in (2), requires the focus alternatives considered to covary in the pronounced position of *Tanglewood* and the corresponding position in the elided VP,  $\triangle =$  "go to [Tanglewood]<sub>F</sub>."

- (1) <u>Context:</u> You accuse me of being a copy cat. "You went to Block Island because I did. You went to Elk Lake Lodge because I did. And you went to Tanglewood because I did." I reply:  $\sqrt[]{TW}$  I only went to [Tanglewood]<sub>F</sub> because you did  $\triangle$ . (Kratzer, 1991, p. 830)
- (2) <u>Paraphrase:</u> Tanglewood is the only place *x* such that I went to *x* because you went to *x*.

(We use  $\sqrt{TW}$  to indicate the availability of such a *Tanglewood* reading with covarying alternatives.)

Kratzer claims that such data motivates the use of *focus-indices* on focused constituents rather than the simpler F-marking: both VPs will be of the form "go to [Tanglewood]<sub>F2</sub>" at LF, with focus alternatives computed using different distinguished assignments for the focus-index F2.

**Proposal:** We propose that *Tanglewood* configurations as in (1) always involve covert movement of the overt focus—possibly with pied-piping—to bind a bound variable in the ellipsis site:

(3) <u>LF for (1)</u>: I PAST **only** [ [Tanglewood]<sub>F</sub>  $\lambda x$  [ [<sub>VP</sub> go to x] [because you PAST [<sub>VP</sub> go to x]] ]]

Kratzer (1991) briefly considers such a covert focus movement approach, but dismisses it because the focused constituent in *Tanglewood* configurations can be inside syntactic islands—see example (4) below from Kratzer (p. 831). We adopt the idea that covert focus movement can pied-pipe an island containing the focus (Drubig, 1994; Krifka, 2006; Wagner, 2006; Erlewine and Kotek, 2014), which resolves this issue. Concretely, we propose an LF as in (5) for example (4).

- (4) <u>Context:</u> "You always contact every responsible person before me." I reply:  $\sqrt[]{TW}$  I only contacted [the person who chairs [the Zoning Board]<sub>F</sub>] before you did  $\triangle$ . (p. 831)
- (5) LF for (4): I PAST **only** [ [the person who chairs [the Zoning Board]<sub>F</sub>]  $\lambda x$

[ [<sub>VP</sub> contact x] [because you PAST [<sub>VP</sub> contact x]] ]]

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**Up next:** This demonstration in (3/5) shows how covert focus movement *can* derive Tanglewood readings. We now present evidence that Tanglewood configurations *require* covert focus movement, and therefore Kratzer's focus-index mechanism must not be available in grammar.

(Wold (1996) presents independent evidence for the use of focus-indices, but see Beaver and Clark (2008, p. 107 note 13) and Tomioka (2012) for alternative approaches to Wold's data.

**Tanglewood is island-sensitive:** Tanglewood readings are unavailable if the intended ellipsis antecedent is *contained inside* an island (6), rather than containing an island (4/5).

(6) <u>Context:</u> Our son speaks Spanish, French, and Mandarin. At one point we hired a tutor that happened to speak French, but that wasn't why we hired her. Another time we hired a tutor that spoke Mandarin, but that too was a coincidence... \*<sup>TW</sup> We **only** hired [a tutor that speaks [Spanish]<sub>F</sub>] because our son does  $\triangle$ . <u>Intended Tanglewood reading:</u> Spanish is the only language *x* such that we hired [a tutor that speaks *x*] because our son speaks *x*. ( $\triangle$  = "speak [Spanish]<sub>F</sub>")

In contrast, Tanglewood readings are possible with the ellipsis site embedded inside an island:

- (7) <u>Context:</u> I speak Spanish, French, and Mandarin. I also have many friends that speak these languages, but for the most part that's not why I studied these languages...  $\sqrt{TW}$  I only speak [Spanish]<sub>F</sub> because I have [a friend who does  $\triangle$ ].
- (8) <u>LF for (7)</u>: I only [ [Spanish]<sub>F</sub>  $\lambda x$  [ [<sub>VP</sub> speak x] [b/c I have [a friend that [<sub>VP</sub> speak x]]] ]]

Our proposal above predicts precisely such an asymmetry: the overt focus must move covertly to bind the variable in the ellipsis site—this covert movement is island-sensitive, but variable binding is not. The Tanglewood reading is unavailable in (6) because movement of *Spanish* would violate the relative clause island, and movement of the island *a tutor that speaks Spanish* then cannot bind the variable in the ellipsis site with the intended *Spanish* interpretation.

Tanglewood readings are similarly unavailable with the overt focus in one conjunct and the ellipsis site in another conjunct (9). This is explained by the fact that covert movement is subject to the Coordinate Structure Constraint (see e.g. Bošković and Franks, 2000). Additional examples using other island structures will also be presented.

(9) <u>Context:</u> I am under investigation by the Real Estate Board. John and Mary claim that I advised them both to bid on many of the same houses, to raise their prices. I reply: \*<sup>TW</sup> I **only** advised John to bid on [the Elm St. house]<sub>F</sub> and (told) Mary to  $\triangle$  as well. <u>Intended Tanglewood reading:</u> The Elm St. house is the only house *x* such that I advised John to bid on *x* and (told) Mary to bid on *x* as well.

In contrast, the Kratzer (1991) focus-index proposal predicts that Tanglewood readings should be possible as long as both the overt focus and ellipsis site are within the scope of *only*. The unavailability of the Tanglewood reading in (6) and (9) shows that <u>focus indices cannot be an option</u>. The dynamic semantics proposal sketched in Beaver and Clark (2008) §4.6 must similarly be dismissed, as it also predicts no island-sensitivity.

**Tanglewood with overt bound variables:** Our approach predicts that Tanglewood readings are not dependent on ellipsis and are possible using overt bound pronouns. Such examples can be constructed; see e.g. (10). The context in (10) highlights the availability of the Tanglewood reading.

(10) <u>Context:</u> We're interviewing witnesses in our murder investigation. You're concerned that the interviews you're getting have been affected by the witnesses talking to me first. <u>My interviews:</u> <u>Bill</u> John Steve Sam time

Your interviews:	Steve	Sam	John	Dave time
$\sqrt{TW}$ I only talked to [John] <sub>F,i</sub> before you talked to him <sub>i</sub> .		(TW: judged true in context)		

The nature of covert focus movement: Covert focus movement can be long-distance, and is not clause-bound. Consider example (11) below, where a Tanglewood reading is available. The LF we propose for (11) is in (12): here the overt focus covertly moves to only across a finite clausal embedding. This example provides an important baseline, highlighting the importance of the island examples discussed earlier in this abstract.

(11) Context: John, the first year grad student, doesn't quite understand the field yet. He seems to think that everyone works on focus, on ellipsis, and on binding. Some people think he is just extrapolating from what his advisor works on. But actually...

 $\sqrt{TW}$  He only thinks [that everyone works on [focus]<sub>F</sub>] because his advisor does  $\triangle$ .

(12) <u>LF for (11)</u>: He **only** [ [focus]<sub>F</sub>  $\lambda x$  [ thinks [<sub>CP</sub> that everyone [<sub>VP</sub> works on x]] ]  $\hat{z}$  [because his advisor [<sub>VP</sub> works on x]] ]

Furthermore, QR of a quantifier such as *exactly one topic* in the parallel configuration in (13) does not yield the bound variable Tanglewood reading. This shows that covert focus movement is longer-distance and specifically due to association with the higher focus operator, not simply QR.

\*<sup>TW</sup> He only thinks [that everyone works on exactly one topic] because his advisor does  $\triangle$ . (13)

Additional evidence from binding: Nissenbaum (2000) shows that covert wh-movement of in-situ wh in English multiple questions can feed reflexive binding. Such an effect is observed with focus association as well, in example (15). This too follows from the availability of covert focus movement, schematized in (16).

- (14) Baseline: \*I want the museum to display a picture of myself.
- (15) Context: I commissioned many paintings and pictures of myself. The museum is interested in displaying both a painting and a picture that I have commissioned, but in fact,  $\sqrt{I}$  I only want the museum to display [a [picture]<sub>F</sub> of myself].
- <u>LF for (15)</u>: I only [ [a [picture]<sub> $\uparrow$ </sub> of myself]  $\lambda x$  [ want the museum to display x ]] (16)

Additional evidence from parasitic gap licensing: Nissenbaum (2000) shows that the in-situ wh in an English multiple question licenses a secondary parasitic gap (17), which is not simply licensed by the presence of a non-wh antecedent in the same position (18). Nissenbaum argues that this is due to the covert wh-movement of which drug in (17), and the unavailability of covert movement in the case of definite descriptions such as *the placebo* in (18). Focus association with *only* in (19) also licenses this secondary parasitic gap.

- ? Which patients, did the doctors assign  $t_i$  to which drug, [after showing the families of  $pg_i$ ] (17)how to administer  $pg_i$ ]?
- (18)\* Which patients<sub>i</sub> did the doctors assign  $t_i$  to the placebo<sub>i</sub> [after showing the families of  $pg_i$ how to administer  $pg_i$ ]?
- Context: Following FDA regulations, patients' families were shown how to administer (19) all the drugs that might be associated with the trial. After some patients began exhibiting unexpected symptoms, the families wrote the FDA and demanded to know:
  - ? Which patients<sub>i</sub> did the doctors only assign  $t_i$  to the [placebo]<sub>Fi</sub> [after showing the families of  $pg_i$  how to administer  $pg_i$ ?

The contrast between (19) and the baseline (18) indicates that focus association licenses covert movement of the overt focus to *only*, which, in turn, is able to license the parasitic gap.

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**No additional submissions:** The material in this abstract has not been presented at or submitted to any other conference or journal at this time.