

Fake Indexicals in focus
Itai Bassi & Nicholas Longenbaugh (MIT)

Overview: We present a new theory of Fake Indexicality (FI) in focus constructions (*only I did my homework*) based on the special mechanism of *Focus Binding* proposed originally in Kratzer (1991) to capture co-variation under focus. The empirical motivation for our proposal is a novel class of cases involving non-standard binding dependencies that are problematic for current theories of FI, but that follow straightforwardly on our analysis, in which FI results from the special Focus Binding mechanism. We then turn our attention to Erlewine & Kotek’s (to appear) recent claim that Focus Binding does not exist in the grammar, contra Kratzer (1991). We show their arguments are confounded, and that their alternative analysis undergenerates desirable structures in a way that the Focus Binding theory doesn’t, supporting the existence of Focus Binding.

Fake Indexicals: “Fake Indexicality” (FI) refers to the phenomenon where 1st/2nd person pronouns appear to function as bound pronouns, e.g. in (1). The challenge is to explain the seeming semantic ‘inertness’ of the person features on the bound pronoun (we limit the cases of FI we look at in this work to focus constructions).

- (1) Only I did **my** homework

\rightsquigarrow *bound reading* : I am the only x such that x did x ’s homework

$\not\rightarrow$ *bound reading* + *1st*: I am the only x such that x did x : **x is the speaker**’s homework

On one popular approach (Kratzer 1998, Heim 2008, a.o.), the φ -features on the bound *my* are not interpreted at all but rather transmitted at PF from the binder (as reflex of agreement). This approach presupposes that FI is a special case of normal binding and hence subject to the same constraints. This assumption seems empirically false (see also Safir 2014: fn. 8): like focus dependencies more generally, FI configurations are much less restricted than normal binding, as can be seen in the contrasts between [a] and [b-c] examples in (2)-(3). We adopt the standard assumption that island-insensitive focus movement is not an option for [b-c].

- (2) *Embedded object position* (cf. Büring 2004: ex.(20b) for a structurally similar [b] example)

a. The woman who is dating each _{i} student introduced him _{$*i$} to her parents.

b. Only the woman who is dating ED_F introduced **him** to her parents. (✓ *bound*)

c. Only the woman who is dating ME_F introduced **me** to her parents. (✓ *bound*)

- (3) *Antecedents of conditionals* (cf. Tomioka 1999:219, 238 for a structurally similar [b] example)

a. If every student _{i} misbehaves, the teacher calls his _{$*i$} parents.

b. Only if SUE_F misbehaves does the teacher call **her** parents. (✓ *bound*)

c. Only if I_F misbehaves does the teacher call **my** parents. (✓ *bound*)

The [b] examples are well known in the literature, and can be straightforwardly analyzed on E-type approaches (Tomioka 1999, Elbourne 2001, Büring 2004), which hold that e.g. *him* in (2b) is a spell out of the concealed definite description *the person x is dating*, where x is bound by the subject. But such analyses run into serious problems with the fake indexicals in the [c] examples: it is mysterious why the 1st person features from the focused pronoun must surface on the e-type pronoun (and **only** on e-type pronouns; note the *her* in (2c), which is formally bound by the subject and doesn’t inherit the 1st person feature from the focused pronoun).

Proposal: We propose that FI in focus constructions arises because the φ -features on bound pronouns are not interpreted at the focus semantic value of the expression, although they *are* interpreted at the regular semantic value (see also Jacobson 2012; Sauerland 2013). Our system to derive this is based on Wold (1996)’s extension to Kratzer’s (1991) theory of focus interpretation. In Wold’s system, association with focus is variable binding: Focus Sensitive Operators (FSO) are coindexed with their foci and bind them (4,5).

- (4) LF of *only JOHN danced*: **only**₁ [**John**₁ danced] (see (9) below for the interpretation of indices)

- (5) $\llbracket \text{only}_i \varphi \rrbracket^{g,h} = \llbracket \varphi \rrbracket^{g,h} \wedge \forall p \in \{ \llbracket \varphi \rrbracket^{g, h \cup \{ \langle i, x \rangle \}} : x \in D_{\tau_i} \} : p \neq \llbracket \varphi \rrbracket^{g,h} \rightarrow \neg p$ (where $i \notin \text{dom}(h)$)

We propose that FSOs can bind not only their focus, but also any subsequent co-referential pronouns (6). The result is that such pronouns are treated semantically just like their antecedent: their φ -features contribute meaning only at the level of the regular semantic value, as desired (7).

(6) LF of (1): **only**₁ [TP I₁ did my₁ HW]

(7) $\llbracket (6) \rrbracket^{g,h} = \llbracket I_1 \text{ did my}_1 \text{ HW} \rrbracket^{g,h} \wedge \forall p \in \{ \llbracket I_1 \text{ did my}_1 \text{ HW} \rrbracket^{g, h \cup \{ \langle 1, x \rangle \}} : x \in D_e \}$
 $\llbracket (p \neq \llbracket I_1 \text{ did my}_1 \text{ HW} \rrbracket^{g,h}) \rightarrow \neg p \rrbracket$ (see (9), (10) for definition of $\llbracket \rrbracket^{g,h}$)
 $= \text{speaker}_c \text{ did speaker}_c \text{'s HW} \wedge \forall x \neq \text{speaker}_c : \neg x \text{ did } x \text{'s HW}$

We make two additional assumptions to ensure the right result. First, we adopt the standard assumption that the structure of pronouns is as in (8), where PERS, NUM, GEN are presuppositional identity functions that modify a referential index. Crucially, we posit that the internal index percolates to the maximal projection of the pronoun. Second, we conjecture that indices are interpreted differently when they are attached to XPs (9) compared to when they appear bare within a pronoun (10). Regarding prosody, we attribute the fact that focus-bound pronouns (such as *my* in (1)) don't bear any prosodic prominence to a requirement that only the leftmost member of two coindexed elements is assigned prominence. In the talk we present a way to derive this based on considerations of Givenness (Schwarzchild 1999).

(8) Structure of pronouns: [PERS [NUM [GEN I]]]₁ (the index percolates to the maximal projection)

(9) $\llbracket \alpha_i \rrbracket^{g,h} = \begin{cases} h(i), & \text{if } i \in \text{dom}(h); \\ \llbracket \alpha \rrbracket^{g,h}, & \text{otherwise} \end{cases}$ (10) $\llbracket i \rrbracket^{g,h} = \begin{cases} h(i), & \text{if } i \in \text{dom}(h) \\ g(i), & \text{otherwise} \end{cases}$

Thus, on our analysis what binds the FI is not its antecedent but the FSO that associates with its antecedent. This readily explains (2c) and (3c) without any complications, because the FSO is in the right structural configuration to bind the FI, although the focused pronoun isn't (11). It moreover predicts, correctly, that FI configurations will not be allowed if the FSO is embedded in a position from which it cannot bind the FI (12).

- (11) a. Only₁ [the woman [who is dating ME₁] introduced me₁ to her parents]. (✓ bound)
 b. Only₁ [[if SUE₁ misbehaves] does the teacher call her₁ parents]. (✓ bound)
- (12) a. The woman [who is dating only₁ ME₁] introduced me₁ to her parents. (✗ bound)
 b. [If only₁ I₁ misbehave] (does) the teacher call(s) my₁ parents. (✗ bound)

The upshot of our proposal is that the grammar has a special mechanism - *Focus Binding* - to represent co-variation between a focused XP and a pronoun, which is separate from normal binding.

Focus Binding exists: Kratzer's (1991) original motivation for positing a special focus coindexation mechanism came from so-called *Tanglewood* sentences (13) which show covariation between an F-marked XP and a corresponding phrase in an elided VP. Kratzer uses coindexation, as in (13a), to capture the relevant reading. Recently, Erlewine and Kotek (E&K, to appear) have argued that focus coindexation does not exist, and that *Tanglewood* sentences involve ordinary binding fed by covert movement to *only*, in (13b).

- (13) I only went to *TANGLEWOOD* because you did.
 a. **Kratzer 1991:** I only [_{VP} went to *TANGLEWOOD*₁] because you did [_{VP} went to *Tanglewood*₁]
 b. **E&K:** only(*Tanglewood*_F)(λx I went to x because you [_{VP} went to x])

If E&K are right about (13), this poses a problem for our approach to FI, which relies on a similar mechanism to Kratzer (1991). In the remainder of the talk we therefore critically evaluate E&K's arguments, and demonstrate that they are confounded by various factors. We moreover show that their proposal under-generates in many cases, such as (14). Here, the F-marked NP, *Aspects*, cannot covertly move to *only* because it is inside a relative-clause island. E&K therefore predict the co-variation reading should be impossible here (even with focus-pied-piping), contra to fact. Focus coindexation easily captures these data, as in (16). For an elaborate discussion, see Bassi & Longenbaugh (2017).

- (14) I only said that the man [_{RC} who bought *ASPECTS*] couldn't afford to.
 =Aspects is the only *x* s.t. I said [the man who bought *x*] couldn't afford to buy *x*.
- (15) **E&K:** only(*ASPECTS*_F)(λx I said the man [who bought *x*] couldn't afford to buy *x*) (✗ RC-island)
- (16) **Focus binding:** only [I said the man [who bought *Aspects*₁] couldn't afford to buy *Aspects*₁] (✓)

Selected References: Bassi & Longenbaugh. 2017. Against 'Tanglewood' by Focus Movement: A Reply to Erlewine and Kotek. Ms. MIT (LINK). Erlewine, MY & H Kotek. To appear. Covert focus movement with pied-piping: Evidence from Tanglewood *LL*. (LINK). Heim, I. 2008. Features on bound pronouns. (LINK). Kratzer, A. 1991. The representation of focus. (LINK). Wold, D. 1996. Long distance selective binding: The case of focus. (LINK)