## Low Focus, Free Inversion, and Phase Heads in Bolognese Edward J. Rubin, University of Utah

Analyses of the agreement with postverbal subjects (S) in Romance free-inversion structures like (1b) usually involve an expletive *pro* (*expl*) in subject position. In minimalist terms, Agree works identically in (1a) and (1b), valuing  $\varphi$  on T (inherited from C) and the Case of the external argument (EA) *le ragazze*. EA raises to SpecT (EPP) only in (1a), while in (1b), *expl* occupies SpecT to satisfy the EPP, and the EA remains as an S. The same analysis cannot extend without complication to grammars like Fi(orentino) (Brandi & Cordin 1989) or Bo(lognese) (2), where agreement with the EA only appears when it is preverbal (2a):

(1) a. Le ragazze hanno parlato . (Italian)	(2) a. Äl ragâzi äli=an dscåurs . (Bo)
the girls have.3PL spoken	the girls SCL.3FPL=have.3PL spoken
b. Hanno parlato le ragazze .	b. Ai=à dscåurs äl ragâzi .
have.3PL spoken the girls	AI=have.3SG spoke the girls

We reject as a restatement of the problem that  $Agree(T_{\varphi}, EA)$  holds in all examples in (1-2) but has a default form in (2b), asking why this should be so. We also reject the complicating assertion that Agree with *expl* determines overt agreement but Agree with EA Case-licenses it, since these normally must go together. Instead, building on Belletti 2001, 2004, 2005, we show that a phase head in (2b) below  $T_{\varphi}$  (and above  $v^*$ , if present) blocks  $Agree(T_{\varphi},S)$ , and that agreement and Case-licensing of S are realized in the lower phase.

The essential mechanism we adopt is Chomsky's 2008a:149 treatment of phase heads and probing by their EF and  $\varphi$ . Consider his (10b), shown in (3a): a wh-DP is simultaneously and separately probed by inherited  $\varphi$  on T and by EF on C. For (1-2), we extend (3a) by adopting Belletti's proposed Foc(us) head (her others are ignored here for expository simplicity), which is above v(\*)/V and below T, and parallel in nature to the one in Rizzi 1997. She does not discuss the phasal status of Foc; we propose that it can vary in whether it is a phase head (2b) or not (1b), based on whether or not it contains  $\varphi$  (Chomsky 2008a:154 "the size of phases is in part determined by uninterpretable features"). (3b) and (3c) show possible structures for (2b), without or with inheritance of the  $\varphi$  on Foc (as discussed below).

(3) a.		[ Who <sub>i</sub> C <sub>EF</sub>	$[ who_j T_{\varphi}  [_{v^*P}]$	who <sub>k</sub> v* [see John]]]	] 'Who saw John?'
b. [	С[ <i>expl</i> Т	$[S_{i+j} Foc_{EF}]$	/φ [ <sub>V</sub> <sup>(*)</sup> /\	$_{P} S_k ]]]]$	if $\varphi$ stays on Foc
c. [	С[ <i>expl</i> Т	$[S_i Foc_{EF}]$	$[S_j Subj^0_{\varphi}]_{v^{(*)}/V}$	$_{P} S_{k} \dots ]]]]] if $	nheritance of $\varphi$ from Foc
d. [	C [ <i>expl</i> T	[S <sub>i</sub> Foc	[v <sup>(*)</sup> /\	$_{P} S_k ]]]]$	no φ on Foc

Our proposal for Italian (1), like Belletti's, permits a standard approach using Agree( $T_{\varphi}$ , EA). In (1a), Foc is not present (the EA is not interpreted as "new information focus" Belletti 2004:21), T can probe EA in its  $\theta$ -position, and EA raises to SpecT to satisfy EPP. In (1b), Foc is present but, lacking  $\varphi$ , it is not a phase head (3d), so T can probe EA in its  $\theta$ -position (agreement, Case). EA (= S, here) raises to SpecFoc and acquires the interpretation of that position (Belletti 2004:25). *Expl* (only) satisfies EPP in SpecT.

For Bo (and Fi, etc), however, we propose that Foc is, in fact, a phase head, containing  $\varphi$ , just like C or  $v^*$ . For (2a), which lacks Foc, the same analysis applies as in (1a). For (2b), however, the phase head Foc $_{\varphi}$  blocks  $T_{\varphi}$  from probing S, since its  $\theta$ -position is in Foc's domain (PIC). Agree( $T_{\varphi}$ , expl) now explains agreement on T and EPP without complication, while Case-licensing of S derives from the very  $\varphi$  of Foc that makes it a phase head: it is this  $\varphi$  that can, and does, Case-license S in its domain. Like  $\varphi$  on  $v^*$  (in English, Italian, Bo, etc),  $\varphi$  on Foc isn't

realized overtly. As in (3a), EF and  $\varphi$  of Foc probe S in its  $\theta$ -position. For our data, there are two possibilities: If there is no head related to Foc as T is related to C in (3a), then the equivalents of *who<sub>i</sub>* and *who<sub>j</sub>* in our data are a single S in SpecFoc (S<sub>i+j</sub> in (3b)); alternatively, there is a head related to Foc as T is related to C (possibly, e.g., a lower instance of Rizzi & Shlonsky's 2008:118 Subj<sup>0</sup>, which "determines the subject-predicate articulation"), and it inherits  $\varphi$  from Foc. In this analysis (3c), three copies of S occur, like those of *who* in (3a): S<sub>i</sub> is attracted by EF of Foc, and S<sub>j</sub> is attracted by inherited  $\varphi$  on Subj<sup>0</sup>, valuing its Case. The nature of phases supports the latter: Chomsky 2008b:19 argues that "the uninterpretable features of C must be 'inherited' by T. If they remain at C, the derivation will crash at the next phase" since  $\varphi$  would then be indistinguishable from interpretable features, and thus not deletable. The same holds of Foc, when it is a phase head with  $\varphi$ , so we adopt (3c) over (3b).

Two further sets of facts support the analysis in (3c) for (2b). First, consider the Bo clitic *ai* in (2b). Brandi & Cordin 1988:124 (and Roberts 2010:113) treat the equivalent (expletive *gli*) in Fi as a subject clitic (SCL), but *ai* and *gli* contrast with real SCLs, which invert in questions (4), while *ai* and *gli* don't (5) (not noted previously). Simply analyzing them as SCLs is thus impossible (as is analyzing them as C-clitics (Poletto 2000), since they don't display the appropriate properties).

(4) a. La=i=à vèsst.	b. I=è=la vèsst?	(5) Ai=à dscåurs äl ragâzi?
SCL=OCL=has seen	OCL=has=SCL seen	AI=has spoken [the girls].FPL
'She saw them.'	'Did she see them?'	'(Was it) the girls (that) spoke?'

Ai instead behaves (5) like the lower object clitics, which don't invert in questions (4b). From its position higher than those with which it can co-occur, we conclude that it cliticizes above v but below T, i.e. in Belletti's VP-periphery, as an overt marker of the special phasal status of Foc. Foc's lack of inversion and intermediate position thus supports the specifics of our structure in (3c).

Wh-movement of EA also supports our analysis: Foc (with *ai* and φ) renders wh-movement of EA to C impossible (6); it can only occur when they, and thus the phase they create, are absent, and agreement (along with the typical Bo SCL) is instead present (7), as in (1a) and (2a):
(6) \*Quanti ragâzi ai=à dscåurs tîg ? (7) Quanti ragâzi èn=i dscåurs tîg?
?#.FPL girls AI=has.3SG spoken you.with ?#.FPL girls have3PL=SCL3PL spoken you.with

with ?#.FPL girls have3PL=SCL3PL spoken you.with 'How many girls spoke with you?'

Extending (3a), and following Chomsky 2008a:155 ("In a probe-goal relation, the goal can be spelled out only in situ (under long-distance Agree) or at the probe (under internal Merge)"), we argue that (6) is out because the  $\theta$ -position of EA is within the domain of the phase head Foc, which forbids a wh-phrase from transiting through its edge. This restriction is related to the competition between wh-phrases and focused phrases for SpecFoc, noted in Rizzi 1997:291 for Italian, and a reflection of Rizzi & Shlonsky's 2008 'Criterial Freezing', which forbids a phrase satisfying a Criterion (e.g. Foc) from further movement. If the low phase head Foc in Bo requires a focused phrase in its edge, we correctly predict both that it only appears in Bo (indicated by *ai*) with a low focused S, and that wh-extraction of S from Foc's domain is impossible. Only when the Foc phase is absent (7) can an EA wh-phrase in situ be probed by matrix C.

This paper shows that we can explain variation in agreement patterns like (1-2) without stipulating default agreement and without severing agreement from Case-licensing. Instead, we can extend broad and independently motivated conclusions about phase heads and apply them to independently motivated functional heads (Belletti's Foc). In grammars like Bo, Foc has  $\varphi$  and behaves as a phase head, thus blocking agreement with an S (among other consequences). In grammars like Italian, it doesn't, so the well-known pattern of long-distance agreement with S emerges.