# On 'focus movement' in Italian

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In this paper I discuss optional movement of focus constituents to the left periphery of the clause in Italian. Restricting my discussion to corrective exchanges – where focus occurs in a reply that denies the preceding assertion – I show that the fronted position and the 'low' position are not completely equivalent, in that certain contexts disallow the former, but allow the latter. I sketch out a characterization of two distinct interpretations for the focus structure: a truly corrective interpretation, and a merely contrastive one. Finally, I briefly consider the consequences of these findings for the general view of the syntax–semantics interface.

### 1. Introduction

In Italian, as in English, a focussed element can appear either *in situ* (1B) or in a fronted position (1B'):

(1) A: Gianni ha invitato Lucia.
John has invited Lucy
'John invited Lucy.'
B: Ha invitato [Marina]<sub>F</sub>.
(he) has invited Marina
'He invited Marina.'
B': [Marina]<sub>F</sub> ha invitato \_ .
Marina (he) has invited
'Marina he invited.'

Since Jackendoff (1972) and Chomsky (1976), it has been assumed that focus itself is the factor triggering movement of the direct object in sentences like (1B'), and that this movement may be delayed to the covert part of the derivation (post-S-structure, or post-Spellout) in cases like (1B). However, the alternation between (1B) and (1B') raises a serious problem for the more recent feature-driven approach to movement: it is unclear why the [focus] feature would trigger overt movement only in a subset of cases. Apparently, the best we can do is to stipulate that the functional head attracting [focus] is only optionally associated with an EPP feature – which is merely a less transparent restatement of the problem.

(ii) LF: \* JOHN<sub>i</sub> [his<sub>i</sub> wife loves  $t_i$ ]

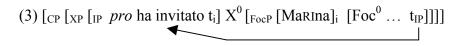
<sup>&</sup>lt;sup>1</sup> One motivation for covert focus movement was the observation that focus *in situ* gives rise to the Weak Crossover effect (Chomsky 1976):

<sup>(</sup>i) \* His; wife loves JOHNi.

This problem is particularly acute in the cartographic approach, according to which various aspects of interpretation are read off a specific syntactic configuration. According to this approach, a constituent bearing the [focus] feature must move to the specifier of a dedicated Focus projection, thus satisfying the Focus Criterion: in the resulting structure, the moved constituent constitutes the focus, and the complement of the Focus head constitutes the background/ presupposition (Rizzi 1997). The Focus projection thus implements a proper focus/background partition, which can be directly interpreted along the lines of the structured meaning approach (e.g. Krifka 2006; see section 3.1 below for more discussion). The structure of (1B') would be as in (2):

(2) 
$$[FocP [Marina]_i [Foc^0 [IP pro ha invitato t_i]]]$$
  
FOCUS BACKGROUND

In particular, Belletti (2004), Rizzi (2006) and Bocci (to appear) argue that the IP-external focus position can only host constituents that are *contrastively* focussed as in (1B') – i.e., contrasted with at least one distinct and contextually salient alternative –, but not constituents bearing new information focus (as determined most clearly by question–answer congruence). The most restrictive hypothesis that one can adopt is that the association is bi-directional: whenever a constituent is contrastively focussed, it must be licensed in the IP-external position; this yields a fully transparent mapping at the interface ('one position – one interpretation'). Pursuing this view, Belletti (2004: 29) proposes that in cases like (1B), the 'right-hand' focus constituent is only apparently *in situ*: actually, it has raised to the high Focus projection, much as in (2), but this movement is masked by remnant movement of IP to the left of the fronted focus, as shown in (3):<sup>3</sup>



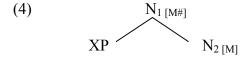
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This distinction is reminiscent of Kiss's (1998) distinction between identificational and information focus. In Belletti's (2004) analysis, new information focus instead targets a low Focus projection in the periphery of the vP phase. Bocci (to appear) investigates the prosodic properties of contrastive focus in the fronted and 'low' position in the Tuscan variety of Italian, and argues that it consistently associates with the same pitch accent in both positions, namely L+H\*, which is distinct from the pitch accents associating with new information focus (H+L\* and marginally H\*). This prosodic evidence supports the distinction between contrastive and new information focus.

<sup>&</sup>lt;sup>3</sup> The movement of IP into a left-peripheral position has been independently proposed by other authors, e.g. in Frascarelli's (2000) analysis of right-hand Topics.

Since the material in IP is non-focal, the target position is assumed to be topical. Note however that, according to Rizzi's original proposal, the Foc<sup>0</sup> head in (2) is able to identify its syntactic complement as the background; therefore, the landing site of remnant IP movement is not independently motivated. As a matter of fact, in order to allow for (1B') remnant IP movement itself must remain optional, even though within the cartographic framework, it too should be triggered by some interpretively relevant feature.5

From a different perspective, Neeleman & van de Koot (2008) address the optionality problem by proposing a non-feature driven approach to optional A'-scrambling of focus constituents in Dutch. In their view, this movement does not target a dedicated position, but it is simply adjunction:<sup>6</sup> its effect is to create a structure like (4), to which the templatic mapping rule (5b) can apply, so as to identify the adjunction host N<sub>2</sub> as the background (or the Domain of Contrast, Neeleman et al. 2007):7



- a. Comment Mapping Rule (5) If XP in [4] is interpreted as topic, interpret N<sub>2</sub> as comment.
  - b. Background Mapping Rule If XP in [4] is interpreted as focus, interpret N<sub>2</sub> as background. (Neeleman & van de Koot 2008: 6)

This feature-free movement is thus triggered by an interface requirement (cf. Reinhart 2006); like the cartographic Focus projection, it determines a transparent mapping between syntactic structure and information structure. But crucially, this is not the only way to arrive at a proper interpretation: the focus constituent may remain in situ, and in this case the background or domain of contrast does not correspond to a surface constituent, but it is construed freely, on the basis of contextual clues. As Neeleman and

<sup>4</sup> Possibly corresponding to Poletto & Pollock's (2004) Ground Phrase.

<sup>&</sup>lt;sup>5</sup> An almost symmetric solution has been proposed by Samek-Lodovici (2005, 2006), according to whom (1B') is derived by right-dislocation of the remnant IP. The author provides very interesting evidence for the rightdislocated status of the post-focal material; however, right dislocation of IP is obtained by a combination of remnant movements which raises the same question as (3) does. For reasons of space, I cannot thoroughly discuss this proposal here. I return to the remnant movement derivation in § 5.1.

<sup>(4)</sup> is an adjunction configuration, in which [M] is a SLASH-type feature encoding a movement dependency: i.e., XP has moved from within N<sub>2</sub>.

Neeleman et al. (2007: 6) propose that the adjunction configuration identifies the remnant constituent as the Domain of Contrast, namely «the material relevant to calculating the set of alternatives on which the contrast operates»; contrast is defined for both topics and focus constituents.

colleagues stress, even if one assumed some covert mechanism equivalent to LF movement, the point still holds that overt movement does not enable the interpretation of focus, but rather, it *disambiguates* the intended mapping.<sup>8</sup>

As for Italian, a somewhat similar position is entertained by Brunetti (2009), who adopts the alternative semantics framework. On her view, syntactic movement is not needed in order to interpret focus, but it simply has the effect of blocking focus projection, which is instead possible when the focus constituent remain *in situ*, as in (6B); thus, fronting in (6B') unambiguously identifying the focussed constituent.

(6)B. Gianni ha invitato Marina.

John has invited Marina

- a) Gianni ha invitato [MaRIna]<sub>F</sub>. (object focus)
- b) Gianni ha [invitato MarIna]<sub>F</sub>. (VP-focus)
- c) [Gianni ha invitato MaRIna]<sub>F</sub>. (broad focus)
- B'. [Marina]<sub>F</sub> pro ha invitato \_ .  $\rightarrow$  only (a)

Marina (he) has invited

Note that these approaches are not aimed at eliminating optionality. The choice between overt marking vs. underspecification of the mapping to information structure is left to the speaker; therefore, overt movement is not forced by the grammar.<sup>9</sup>

It is important to stress that the debate about optional focus movement rests on the assumption that the two focus positions in (1B) and (1B') are equivalent from the interpretive viewpoint. In the following section, I provide evidence that this assumption is not warranted, and that the fronted focus position is actually more constrained than the 'low' position. I will make my case by restricting attention to one specific use of contrastive focus, namely, the *corrective* use.<sup>10</sup>

A non-feature-driven approach is also entertained by Horvath (2010), according to whom there are no formal features encoding pure discourse-notions, such as Focus (Strong modularity hypothesis for discourse features). It follows that optional focus movement, as in Italian, is interface-driven; on the other hand, *obligatory* 'focus movement' (as in Hungarian) is actually not driven by focus, but by a different trigger, i.e. an Exhaustivity operator (cf. Kiss 1998 for the observation that moved foci in Hungarian are necessarily exhaustive.).

<sup>&</sup>lt;sup>9</sup> In this respect, this interface-driven movement differs from Reinhart's (2006) original conception, according to which syntactically untriggered movement is licensed only if it makes possible a certain interpretation, which could otherwise not be obtained from the output LF.

<sup>&</sup>lt;sup>10</sup> Fronted focus also allows for other interpretations; see Brunetti (2009) for a detailed corpus study.

## 2. Four asymmetries

Let us consider again the exchange in (1), repeated and slightly elaborated here:

(1)A: Gianni ha invitato Lucia. John has invited Lucy 'John invited Lucy.'

B: Ha invitato [MaRIna]<sub>F</sub> (non Lucia) (he) has invited Marina (not Lucy) 'He invited *Marina* (not Lucy).'

B': [Marina]<sub>F</sub> ha invitato \_ (non Lucia).

Marina (he) has invited (not Lucy)

'Marina he invited (not Lucy).'

The replies (1B) and (1B') convey a correction of speaker A's assertion. This is a complex conversational move, involving the rejection of the previous assertion (cf. van Leusen 2004); part of speaker A's statement can be explicitly denied in the optional negative tag.<sup>11</sup>

Although in cases like (1) fronted focus and 'low' focus seem to perform exactly the same corrective function, we can see that in a number of contexts, the two focus positions are not equally felicitous; in all cases, the fronted position turns out to be more constrained than the 'low' position.<sup>12</sup> First, in the answer to a yes-no question like (7A) or (8A), 'low' focus is possible (B), whereas fronted focus is inappropriate (B').<sup>13</sup>

(7)A: Gianni è andato a Londra? Gianni is gone.M.SG. to London 'Did Gianni go to London?'

I will return to the semantics of correction in § 3. This intuitive characterization is sufficient for the moment.

<sup>&</sup>lt;sup>12</sup> Before considering the data, a methodological proviso is in order. The contrasts discussed in this section are mostly based on judgements of contextual felicity; since this type of judgement is felt as intrinsically less stable and clearcut than the grammaticality judgement, one could question its reliability and methodological acceptability. My answer to this objection is that in the domain of information structure phenomena, we can use no 'better' data in order to grasp certain relevant distinctions; once a distinction has been drawn, it is possible to support it with experimental evidence (cf. Bianchi & Bocci 2011).

<sup>&</sup>lt;sup>13</sup> S. Cruschina (p.c.) suggests that the extension of focus in the yes-no question may affect the acceptability of focus fronting in the answer. This potential factor (as well as possible interferences from different dialectal or regional backgrounds) must be left for future research: I refer to Cruschina (2012, chapter 5) for relevant discussion. What is crucial for my current purposes is that the acceptability of focus fronting in an answer like (8B') is definitely less stable than in the reply to a previous assertion.

B: No, è andato a Berlino (non a Londra). No, (he) is gone.M.SG. to Berlin (not to London) 'No, he went to *Berlin* (not to London).'

B': # No, a BerLino è andato (non a Londra). No, to Berlin (he) is gone.M.SG. (not to London) 'No, to *Berlin* he went (not to London).'

(8)A: Hai comprato una macchina? have.2.SG. (you) bought a car 'Did you buy a car?'

B: No, ho comprato una Moto (non una macchina). no, (I) have 1.SG bought a motorbike (not a car) 'No, I bought a *motorcycle* (not a car).'

B': # No, una Moto ho comprato (non una macchina). no, a motorbike (I) have.1.SG bought (not a car) 'No, a *motorcycle* I bought (not a car).'

This is not to say that corrective fronted focus can never occur in an answer: This is possible if the preceding question presupposes the proposition that is the target of correction. An example is a question with a matrix factive verb (Giuliano Bocci, p.c.):

(9)A: Ti sorprende che Gianni sia andato a Londra?2.SG surprise.3.SG that John be.SG.SUBJ gone.M.SG. to London 'Are you surprised that Gianni went to London?'

B: E' andato a BerLino (non a Londra). (he) is gone.M.SG. to Berlin (not to London) 'He went to *Berlin* (not to London)'.

B': A BerLino è andato (non a Londra). to Berlin (he) is gone.M.SG. (not to London) 'To *Berlin* he went (not to London).'

The crucial factor, then, is whether the proposition that gets corrected has been previously introduced in the conversational common ground (by assertion or by accommodation): if this is not the case, fronted focus is inappropriate.

A second asymmetry emerges in conversational exchanges where the denied alternative in the corrective claim does not coincide with (part of) the focus of the previous assertion, but is linked to it by an inferential relation. In (10), for instance, the focus alternative in the negative tag of B's answer (JAPANESE.COOKING) is linked by an inferential relation to the parallel element in A's assertion, namely SUSHI. (Similarly, an inferential relation is involved in the exchange in (11).) In these contexts, 'low' contrastive focus is possible (B), but fronted focus is again inappropriate (B'):

(10)A: Gianni adora i sushi.

John adores the sushi

'John likes sushi a lot.'

- B: No, (lui) adora la cucina cinese, non quella giapponese. no, (he) adores the cooking Chinese, not the-one Japanese 'No, he likes *Chinese* cooking, not Japanese cooking.'
- B': # (No,) la cucina cinese adora, non quella giapponese. (no,) the cooking Chinese (he) adores, not the-one Japanese
- (11)A: Gianni ha studiato Rembrandt.

  John has studied Rembrandt.
  - B: No, ha studiato la pittura itaLIAna, non quella fiamminga. no, (he) has studied the painting Italian, not the-one Flemish 'No, he studied Italian painting, not Flemish painting.'
  - B': # (No,) la pittura itaLIAna ha studiato, non quella fiamminga. no, the painting Italian (he) has studied, not the-one Flemish

A third difference between 'low' and fronted focus concerns the status of the background. As shown in (12), the background of fronted focus cannot contain additional material w.r.t. the corrected proposition (e.g. *classical dance* in (12C') w.r.t. (12B)). With 'low' focus, instead, the corrective claim may contain additional material w.r.t. the corrected proposition, cf. (12C).

- (12)A: Dove studia Gianni ora? where study.3.SG John now 'Where does John study now?'
  - B: Studia all'SOAS di Londra.
    (he) study.3.SG at-the SOAS of London
    'He studies at the SOAS in London.'
  - C: No, studia (danza classica) alla Royal Ballet SCHOOL. no, (he) study.3.SG (dance classical) at-the Royal Ballet School 'No, he studies (classical dance) at the Royal Ballet School.'
  - C': No, alla Royal Ballet SCHOOL studia (# danza classica). no, at-the Royal Ballet School (he) study.3.SG (dance classical)

Finally, a fourth difference concerns the interaction with a matrix negation. 'Low' focus in a complement clause can be interpreted in the scope of a matrix clause negation, as in (13), whereas a fronted focus in the scope of a matrix negation is quite marginal and, for some speakers, unacceptable (14):<sup>14</sup>

(13) A: Il vocabolario, hai detto che lo darai a Gianni.

The dictionary, have 2.SG said that it.CL give.FUT.2.SG to John
'You said that you'll give the dictionary to John.'

<sup>14</sup> Note that without a matrix clause negation, fronted focus is acceptable in the periphery of this kind of complement clause:

<sup>(</sup>i) (?) Ho detto [che a GIANni lo darò t]! have 1.SG said that to John (I) it.CL give.FUT.1.SG 'I have said that to *John* I will give it!'

- B: Non ho detto [che lo darò a GIANni] (ma a Lucia)! not have.1.SG said that it.CL give.FUT.1.SG to John (but to Lucy) 'I have not said that I will give it to *John* (but to Lucy).'
- (14) A: Il vocabolario, hai detto che lo darai a Gianni. the dictionary, have.2.SG said that it.CL give.FUT.2.SG to John 'You said that you'll give the dictionary to John.'
  - B: ??/\* Non ho detto [che a GIANni lo darò] (ma a Lucia)! not have.1.SG said that to John it.CL give.FUT.1.SG (but to Lucy)

It is convenient to summarize this evidence in four generalisations, which I will refer back to in the following discussion:

In corrective contexts,

- a. fronted focus is inappropriate when correction targets a proposition that is not already entailed by the common ground;
- b. fronted focus is inappropriate when the denied alternative in the corrective claim does not coincide with (part of) the focus of the corrected assertion;
- c. the background of fronted focus cannot contain additional material w.r.t. the background of the corrected assertion;
- d. fronted focus, when syntactically embedded, cannot be in the scope of a matrix clause negation.

## 3. The corrective move

The generalisations (a)-(d) show that in corrective contexts, fronted focus is systematically more constrained than 'low' focus. In this section I suggest that fronted focus can directly implement a corrective conversational move, thus qualifying as *corrective focus*; I then show that the constraints (a)-(d) follow from the semantics of correction. As a starting point, I briefly summarize the analysis of correction proposed by van Leusen (2004), though re-stating it in a stalnakerian framework for context update.

According to Stalnaker (1978), one central aim of conversation is to distinguish among the possible ways that the world might be. The interlocutors share a common ground of information, which is tacitly taken to be accepted by all of them for the purposes of the conversation. Technically, the common ground is a set of propositions, which characterizes a context set of possible worlds – those worlds that are compatible with all the shared information. By adding information to the common ground in the course of the conversation, the interlocutors discard certain alternative ways that the world may be, and the context set gets more and more reduced. This is achieved whenever a speaker asserts a proposition, and that proposition is accepted by all the interlocutors, thus becoming part of the common ground from that moment on, and discarding from the context set all the worlds in which the proposition is not true. In this way, assertion constitutes a monotonic update of the common ground.

On the other hand, correction constitutes a non-monotonic update (van Leusen 2004): It requires that the interlocutors retract from the common ground some proposition that had been previously introduced – this is what van Leusen calls the 'antecedent proposition'. Thus, the first felicity condition for correction is that the common ground entail (directly, or by pragmatic strenghtening) an antecedent proposition, which is the target of the corrective move. <sup>15</sup>

A second, crucial felicity condition is the incompatibility condition: For a correction to be felicitous, the context updated by the corrective claim must entail the denial of the antecedent proposition; thus, the antecedent proposition and the corrective claim are inconsistent in the context of interpretation. As van Leusen (2004, (4)) notes, in virtue of the incompatibility condition the corrective claim need not contain any explicit marker of denial; this is indeed the case in an exchange like (1) above (see Bianchi & Bocci 2011 for experimental evidence).

Since correction always involves – implicity or explicitly – the denial of the antecedent proposition, this denial in turn triggers the retraction of the antecedent proposition from the common ground, in order to preserve consistency. <sup>16</sup> As a result, we have a complex move which updates the common ground by (a) forcing the retraction of the antecedent proposition and (b) asserting a distinct proposition.

Consider now the constraint (a): Fronted focus cannot occur in the answer to a genuine yes-no question questioning precisely the proposition that is the target of correction in the answer, as in (7) and (8). Note that, if the question itself was felicitous, the common ground of the input context<sup>17</sup> did not entail either the relevant proposition or its negation (otherwise, asking the question would have been a vacuous move): therefore, the antecedent condition for correction is not fulfilled. The inappropriateness of (7B') and (8B') will then follow from the hypothesis that in these contexts, fronted

B: No, she ate a salad.

The antecedent proposition asserted by A and the corrective claim by B are incompatible in that they constitute mutually eclusive descriptions of the *same* topic situation: this is what van Leusen calls the 'locality condition'. In addition, correction is subject to the general felicity condition for any update, namely informativity and consistency (on which see note 16).

<sup>16</sup> This is due to two more general felicity conditions, which hold for any updating move: the consistency condition requires that the input context and the updated context are both logically consistent; the informativity condition requires that the semantic content of the update is not already entailed by the input context.

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<sup>&</sup>lt;sup>15</sup> Furthermore, the antecedent proposition and the corrective claim must be about the same topic situation (or situation type); this is crucial to correctly calculate incompatibility. Consider the following exchange:

<sup>(</sup>i) A: Anna ate spaghetti.

<sup>&</sup>lt;sup>17</sup> A question updates a distinct component of the context, the Question Under Discussion stack (cf. Roberts 1996).

focus necessarily implements a corrective move.<sup>18</sup>

Consider also the constraint (d), whereby fronted focus cannot be in the scope of a matrix clause negation, as shown in (14B), repeated here:

L. Rizzi (p.c.) suggests that the deviance of (14B) could be due to criterial freezing (in the sense of Rizzi 2006): Once the focus constituent has been moved to the specifier of the Focus projection in the periphery of the embedded clause, satisfying the Focus Criterion, it is stuck in place, and it cannot move covertly to a position immediately below the matrix clause negation, so as to yield a proper focus/background partition:

(14) \* [ [NegP non .... [CP che [FocP a TE<sub>I</sub> [Foc°[IP pro l'avrei dato 
$$t_i$$
]]]]]]

Note that this line of reasoning implies that 'low' focus in (13) cannot have equally raised to the Focus projection of the embedded clause, followed by remnant IP movement, as shown in (15):

Non ... [che [
$$_{GP}[_{IP} pro lo avrei dato t_i]$$
  $G^0$  [ $_{FocP}[a TE]_i$  [Foc $^0$   $t_{IP}$ ]]]]

If this were the case, the focus constituent should be unable to move covertly to associate with the matrix clause negation, much as in (14). Although this is a viable solution, I would like to sketch a different view of the deviance of (14), which is more directly linked to the semantics of

correction. At a purely observational level, (14) suggests that fronted focus, even when syntactically embedded, must have root scope; this property too can be derived from the idea that fronted focus implements a corrective move.

In general, a conversational move (assertion, question, denial, etc.) is achieved by a non-reported speech act endowed with intrinsic illocutive force; syntactically, a non-reported speech act corresponds to a root clause (cf. Bianchi & Frascarelli 2010). Thus, if fronted focus implements a corrective move, we expect it to occur in root clauses, as is overwhelmingly the case.

However, certain embedded clauses can exceptionally have autonomous update potential w.r.t. the matrix clause: this was already pointed out by Hooper & Thompson (1973), who characterized those embedded clauses allowing 'root transformations' as being endowed with assertive force; more recently, Dayal & Grimshaw (2009) have characterized such clauses as having an update potential w.r.t. the discourse context (*quasi-subordinate* clauses; see also Bianchi & Frascarelli 2010, § 6 for relevant discussion). Suppose now that the complement clause hosting fronted focus in (14) is a

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 $<sup>^{18}</sup>$  Note that these replies are infelicitous whether or not we realize the negative particle no.

quasi-subordinate clause: then, the proposition that it expresses conveys an autonomous update with respect to the matrix clause. It follows that at the interface the matrix clause, negation – a focus sensitive operator – does not find any suitable focus element lying in its scope to which it can associate.<sup>19</sup>

# 3.1. *The role of focus*

In order to tackle the remaining constraints (ii)-(iii), it is necessary to take into account the role of information structure. Van Leusen (2004: § 5) notes:

The information structure of the corrective claim induces a 'parallelism constraint' relative to the antecedent in the context of interpretation. The background of the corrective claim must in a certain sense be 'shared' by the antecedent, and the focus must be contrastive to the parallel element in the antecedent.

A crucial observation is that focus in the corrective claim is *contrastive*, i.e., it involves reference to at least two alternatives: the alternative asserted in the corrective claim and the alternative asserted in the antecedent proposition, which, as discussed above, are presupposed to be incompatible.<sup>20</sup>

(i) A: Chi hanno invitato dei tuoi cugini? who have.3.PL. invited of-the your cousins? 'Who among your cousins was invited?'

B. Hanno invitato Simone. have.3.PL. invited Simon

'They invited Simon.'

C: [GIAcomo] hanno invitato \_, e inoltre anche Giovanni. James have 3.PL. invited, and then also John '*James* they invited, and also John.'

<sup>&</sup>lt;sup>19</sup> Note that the embedded clause in (i) of note 14 must be quasi-subordinate as well. Hooper & Thompson (1973) also noted that a matrix negation is incompatible with the 'assertive force' of the subordinate clause. (I return below to the status of (13)).

Van Leusen (2004: § 5) suggests that the incompatibility condition may be reduced to the exhaustivity of the focus in the corrective claim: e.g., in (1B') the only person that John invited (in the relevant topic situation) is Marina. This view is appealing, because exhaustivity has been independently argued to be the real trigger of 'focus movement' in Hungarian (Horvath 2010; cf. note 8). However, according to Brunetti (2004) fronted focus in Italian is not exhaustive. There may be some idiolectal variation in this respect, but to my ear, the exchange in (i) – involving fronted focus in (i.C) plus an *as well* coda – is acceptable, whereas the exchange (ii) – involving *only*+focus in the answer (ii.B) plus an *as well* coda – is deviant. (Suppose in both exchanges the relevant set of speaker B's cousins involves four individuals; Simon, Francis, John and James).

In the syntactic literature, contrastive focus is routinely exemplified by means of corrective exchanges like (1). However, it is easy to devise instances of purely contrastive focus without any corrective import, such as (16B) or (17):<sup>21</sup>

(16)A: Vi saluto, devo tornare a casa.
2.PL.CL greet.1.SG., have-to.1.SG go-back.INF. to home 'Good bye, I have to go back home.'

- B: A quest'ora, ti conviene prendere il TAXI, non la metro. At this hour, 2.SG.CL suits take.INF. the taxi, not the underground 'At this time of day, you'd better take a taxi, not the underground.'
- (17) [Said by A to B while preparing to lift together a fragile object:]

  A: Bisogna sollevarlo pIAno, non con forza.

  need.3.SG. lift. 3.SG.CL gently, not violently

  'One must lift it gently, not violently.'

In contexts like (16) or (17), focus fronting is actually infelicitous (Bianchi & Bocci 2011 provide experimental evidence to this effect).

At an intuitive level, we can see that in (16) and (17), the two contrasting alternatives are introduced in one and the same utterance. In corrective cases like (1), instead, the (implicitly or explicitly) denied alternative is part of a previous speech act, so that contrast operates *across utterances*. This, I submit, is due to incompatibility condition. We can then define corrective focus as a subtype of contrastive focus carrying an incompatibility presupposition.

Van Leusen (2004) characterised incompatibility as a 'global' property of the whole proposition: in fact, inconsistency is a property of propositions, so it must be calculated at this compositional level. However, if we take a closer look at the information structure of the corrective claim, we can see that in a sense, not all of it is incompatible with the antecedent proposition – only the focus part is; the background, instead, is fully parallel to a subpart of the antecedent proposition.

(ii) A: Chi hanno invitato dei tuoi cugini?

who have.3.PL. invited of-the your cousins?

'Who among your cousins was invited?'

B: # Hanno invitato solo GIAcomo, e inoltre anche Giovanni. have 3.PL. invited only James, and then also John 'They invited only James, and also John.'

Fronted focus in (i.C) does not seem to be truly exhaustive; thus, at least in

Italian, incompatibility cannot be reduced to exhaustivity.

According to a standard understanding, 'constituents that are contrastive are understood to belong to a contextually given set out of which they are selected to the exclusion of at least some other members of the set.' (Neeleman *et al.* 2007: 3).

(18) A: John invited Lucy. (antecedent proposition) 
$$B\left[ \begin{array}{c} [Marina]_F \\ INCOMPATIBLE \end{array} \right] \left[ \begin{array}{c} [he invited \ t] \\ COMPATIBLE \end{array} \right]$$
 (corrective claim)

This insight can be expressed by adopting a structured meaning representation of focus, along the lines of Krifka (2006). (18B) will have the following partition:

(18) B:  $\langle MARINA, [\lambda y.INVITED(y)(JOHN)] \rangle$   $\langle focus phrase, background \rangle$ 

If we now assume a parallel partition of the antecedent proposition:

(18) A:  $\langle LUCY, [\lambda y.INVITED(y)(JOHN)] \rangle$ 

we can see that the two foci of (18A) and (18B) are incompatible in that, when combined with the *same* background, they yield two propositions that are inconsistent in the context of interpretation (i.e., propositions that are interpreted as incompatible descriptions of one and the same event).

In Krifka's (2006) approach, the focus is associated with a contextually relevant set of alternatives (ALT). Corrective focus can then be characterized as carrying the presupposition that one member of the set of alternatives is incompatible with the focus itself, in the sense just defined.<sup>22</sup> The presupposed incompatible alternative corresponds, in fact, to the denotation of the parallel focus of the antecedent proposition: hence, the latter must be a member of the set of focus alternatives of the corrective claim. The incompatible alternative can be overtly denied in a negative tag. On the other hand, note that, since incompatibility of the foci is calculated with w.r.t. the same background, the background of the corrective claim actually *validates* that of the antecedent proposition.

This approach predicts a 'parallelism effect' of the kind noted by van Leusen, but actually, in too strong a form. As a matter of fact, focus in the antecedent proposition need not be parallel to that of the corrective claim. In the exchange (1), A's statement may well be an out-of-the-blue assertion with broad focus over the entire clause, whereas B's corrective claim has narrow focus on the direct object only. An even clearer example is the conversational exchange in (19): (19B) has narrow focus on the verb only, whereas the correction in (19C) has narrow focus on the direct object.

(19) A: Cosa ne ha fatto Gianni della sua Ferrari? what of-it.CL has done John of-the his Ferrari 'What did John do with his Ferrari car?'

- incompatible  $(\alpha, \gamma, B, C) \Leftrightarrow C = B(\gamma) \land C + B(\alpha) = \neg B(\gamma)$ .

<sup>&</sup>lt;sup>22</sup> A tentative formalization of the incompatibility presupposition could be as follows: ∃y∈ALT (incompatible(FP, y, B, C)), where

<sup>-</sup>ALT = a set of salient alternatives to the focus phrase

<sup>–</sup> C is the context of interpretation

```
B: pro<sub>k</sub> la<sub>i</sub> ha [venDUta]<sub>F</sub>.
3.F.SG. has sold.F.SG.
'He sold it.'
C: No, [la BuGATti]<sub>F</sub> pro<sub>k</sub> ha venduto.
no, the Bugatti has sold.M.SG.
'No, he sold the Bugatti.'
```

We see that a parallel focus—background partition is not warranted in corrective exchanges, contrary to question—answer exchanges. Hence, the interpretation of corrective focus may require a radical revision of the original partition of the antecedent proposition. This is admittedly a drawback of the structured meaning implementation, which remains as an open problem.<sup>23</sup>

To sum up, I have suggested that corrective focus conveys a partial correction, breaking up the proposition into an incompatible part and a validating part:

- 1. it induces a parallel focus-background partition of the antecedent proposition;
- 2. the focus phrase of the corrective claim is marked as incompatible with the focus phrase of the antecedent (structured) proposition w.r.t. the same background;
- 3. the background of the corrective claim instead validates that of the antecedent proposition: the latter constitutes relevant and undisputed information, which must not be retracted.

Although this is just an informal sketch, it is sufficient to account for the observed constraints (b)-(c) on fronted focus.

### 3.2. *The focus related constraints*

The hypothesis of contrast across utterances accounts for the infelicity of fronted focus in (10B'), repeated here:

```
(10)A: Gianni adora i sushi.
    John adores the sushi
    'John likes sushi a lot.'
B': # (No,) la cucina cinese adora, non quella giapponese.
    (no,) the cooking Chinese (he) adores, not the-one Japanese
A: ⟨SUSHI, [λy.LIKE(y)(JOHN)]⟩; ALT(SUSHI) = { ...}
B: ⟨CHIN.COOKING, [λy.LIKE(y)(JOHN)]⟩;
    ALT(CHIN.COOKING) = {JAP.COOKING}
```

Recall that the incompatibility condition presupposes that the common ground supports an antecedent proposition containing an incompatible alternative to the focus of the corrective claim; the incompatible alternative

<sup>23</sup> An implementation in terms of alternative semantics, which avoids this problem, is provided in Bianchi & Bocci (2011).

can be overtly denied in an optional negative tag. However, in (10B') the negative tag denies a focus alternative (JAPANESE.COOKING) of the focussed direct object (CHINESE.COOKING) which does not correspond to the parallel element in the antecedent proposition (10A), i.e. SUSHI (similarly in (11B') in § 2 above): therefore, (10B') cannot constitute a felicitous correction of (10A). This follows from the fact that, by contrast across utterances, the negative tag in the correction must convey the denial of the antecedent proposition. Note that if we omit the negative tag in (10B'), the reply becomes a felicitous correction of (10A) by conveying that SUSHI is a member of the set of contextually salient alternatives (ALT) of CHINESE.COOKING.

Finally, the analysis sketched above also accounts for the constraint (c), whereby the background of the corrective claim cannot contain additional material with respect to the antecedent proposition, as exemplified in (12C'), repeated here:

(12)A: Dove studia Gianni ora? where study.3.SG John now 'Where does John study now?'

B: Studia all'SOAS di Londra. (he) study.3.SG at-the SOAS of London 'He studies at the SOAS in London.'

C': (No), alla Royal Ballet SCHOOL studia (# danza classica). (no), at-the Royal Ballet School study.3.SG (# dance classical)

Because of the additional material in (12C') w.r.t. the antecedent proposition (12B) (classical dance), the two backgrounds are not identical, and therefore, we cannot calculate the incompatibility of the two foci w.r.t. the same background. As a matter of fact, the reply in (12C') can only constitute the correction of a previous assertion to the effect that John studies classical dance at some place other than the Royal Ballet School. (Obviously, (12C') becomes a felicitous correction if the additional material is omitted.)

To sum up, in this section I have shown that the constraints in (a)-(d) follow rather naturally from the assumption that in the relevant contexts, fronted focus implements a corrective move. Elaborating on van Leusen (2004), I have suggested that her incompatibility condition does not concern the whole corrective claim, but only its focus (in a structured meaning approach).

# 4. Another look at 'low' focus

Turning to 'low' focus, the preceding line of reasoning leads to the following hypothesis: Since 'low' focus is not subject to the constraints (a)-(d), in the problematic contexts (7)-(13) it cannot convey corrective focus in the sense defined here. I suggest that it realizes instead a merely contrastive focus, like that exemplified in (16)-(17) above, with no inherent

incompatibility presupposition. Consider from this perspective (7B), repeated here:

(7)A: Gianni è andato a Londra?
Gianni is gone.M.SG. to London
'Did Gianni go to London?'
B: No, è andato a BerLino (non a Londra).
No, (he) is gone.M.SG. to Berlin (not to London)
'No, he went to *Berlin* (not to London).'

We have seen that in this answering context, corrective fronted focus as in (7B') is infelicitous. On the other hand, the reply in (7B) does not convey a correction: the negative particle *no* provides an answer to the preceding yesno question; the following focus structure then contrasts the focus (BERLIN) with another alternative (LONDON), providing relevant information that goes beyond the complete answer to A's question. The perceived 'corrective flavour' arises from the fact that the alternative in the negative tag of (7B) corresponds to a proper part of speaker A's question; but crucially, this alternative is *not* part of an antecedent proposition already supported by the conversational common ground. <sup>24</sup>

The situation in (10B) is slightly different:

(10)A: Gianni adora i sushi. John adores the sushi 'John likes sushi a lot.'

B: No, (lui) adora la cucina cinese, non quella giapponese. no, (he) adores the cooking Chinese, not the-one Japanese 'No, he likes *Chinese* cooking, not Japanese cooking.'

Here the negative discourse particle *no* denies speaker A's assertion; however, the focussed constituent does not directly replace the parallel focus in A's assertion: there is instead an inferential link between the contrasting alternative in B's negative tag (JAPANESE.COOKING) and the parallel element in A's statement (SUSHI), which justifies the corrective flavour of B's reply. Once again, we can clearly see that the negative tag in this 'low' focus structure does not have the same function as in the case of corrective focus — i.e., that of explicitly denying the non-validated part of the antecedent proposition.

Recall also that in the case of 'low' focus, the proposition may contain additional material with respect to the preceding assertion. Consider the exchange in (12) once again:

<sup>24</sup> The hypothesis that in (7B) focus is not corrective predicts that here, contrary to e.g. (1B), the negative particle *no* cannot be omitted. Although this felicity judgement is admittedly delicate, the omission seems to induce

a degradation; this prediction too will have to be tested experimentally.

- (12)A: Dove studia Gianni ora? where study.3.SG John now 'Where does John study now?'
  - B: Studia all'SOAS di Londra. (he) study.3.SG at-the SOAS of London 'He studies at the SOAS in London.'
  - C: No, studia (danza classica) alla Royal Ballet SCHOOL. no, (he) study.3.SG (dance classical) at-the Royal Ballet School 'No, he studies (classical dance) at the Royal Ballet School.'
  - C': (No), alla Royal Ballet SCHOOL studia (# danza classica). (no), at-the Royal Ballet School study.3.SG (dance classical)

Notice that in (12C) the additional material (classical dance) is not marked as part of the background (contrary to (12C'), where it occurs in post-focal position): this suggests that the focus in (12C) is wider than in (12B), and corresponds presumably to the whole predicate (since it includes both the direct object and the locative PP). This is possible because a 'low' focus in clause-final position allows for focus projection (cf. (6) above), whereas in the case of fronted focus (12C') the additional material, being post-focal, must be part of the background.

Recall that the focus of the corrective claim need not be congruent to the focus of the preceding assertion (cf. the discussion around (19) above); thus, (12C) may involve a corrective focus targeting the whole predicate (the incompatible alternative would be the predicate of (12B), under a parallel partition of the latter).<sup>25</sup>

Finally, recall that 'low' focus in an embedded clause can be interpreted in the scope of a matrix clause negation, as in (13B), repeated here:

(13) A: Il vocabolario, hai detto che lo darai a Gianni.

The dictionary, have.2.SG said that it.CL give.FUT.2.SG to John
'You said that you'll give the dictionary to John.'

B: Non ho detto [che lo darò a GIANni] (ma a Lucia)! not have.1.SG said that it.CL give.FUT.1.SG to John (but to Lucy) 'I have not said that I will give it to *John* (but to Lucy).'

(13B) consists in a contrastive focus structure, in which the focussed indirect object associates with the matrix negation;<sup>26</sup> it is this association

Alternatively, (12C) could convey a direct denial of (12B) by means of the negative particle no, followed by a clause with plain new information focus. This is probably a more natural interpretation of the sentence, since to my ear, the omission of the negative particle in (12C) is quite marked, though there is no firm evidence that it is actually infelicitous.

<sup>26</sup> Cf. e.g. the semantics proposed by Krifka (2006: (49)):  $[didn't \text{ [FP B]]} = \lambda x.[\neg \text{[B]]} (\text{[FP])}(x)] \& \text{ presupposed: } \exists Y \in \text{[FP]]}^{ALT} [\text{[B]}(Y)(x)]].$ 

This analysis requires that the focus phrase move covertly to a position immediately below the matrix clause negation (cf. the discussion around

that conveys a denial of (13A), and no incompatibility presupposition is at stake.

### 5. Overt movement

The preceding discussion supports the conclusion that in the problematic contexts excluding fronted (corrective) focus, the 'low' position conveys a merely contrastive focus. In this respect, the two focus positions are not completely equivalent.

However, it is important to stress that the evidence provided here fails to support a deterministic mapping 'one position-one interpretation', whereby only a fronted focus would carry an incompatibility presupposition. As a matter of fact, nothing excludes that in unproblematic contexts like (1) the 'low' position too carries such presupposition. The only conclusion that can be safely reached at this point is that, in the relevant contexts, overt movement restricts the possible interpretations of focus, by imposing the incompatibility presupposition, and the parallelism effects that it induces. Let us now reconsider the problem of optional focus movement in the light of this conclusions.

# 5.1. Evidence against remnant IP movement

As discussed in § 1, the syntax of 'low' contrastive focus is controversial: according to some authors (Frascarelli 2000, a.o.), it is an instance of focus in situ; according to Belletti (2004), it is an instance of fronted focus masked by the subsequent movement of the remnant IP constituent to the left of focus, as shown in (20):

$$(20) \ \left[ {_{CP}} \left[ {_{XP}} \left[ {_{IP}} \right. \underbrace{ t_i } \right] X^0 \left[ {_{FocP}} \right. DP_i \left[ Foc^0 \ldots t_{IP} \right] \right] \right]$$

This derivation is consistent with the hypothesis that contrastive focus is structurally licensed in a unique left-peripheral position.

However, we have seen that fronted focus is subject to the restrictions (a)-(d) which, instead, do not affect 'low' focus. In the light of this observation, a derivation like (20) is problematic: it is entirely unclear how remnant IP movement could neutralize these restrictions. On the contrary, from a cartographic perspective one would expect a structure derived by remnant IP movement to be even more constrained than fronted focus, because the extra remnant movement step should be triggered by some interpretively relevant 'left-peripheral' feature.<sup>27</sup> This consideration adds to the well known argument against remnant IP movement based on negative concord

(14) in section 3). <sup>27</sup> If the trigger of remnant IP movement is assumed to be semantically vacuous, the remnant movement analysis becomes virtually unfalsifiable. This is a serious methodological point, which should not be underestimated.

facts, <sup>28</sup> which can be replicated in corrective contexts:

(21)A: Lo hai detto alla mamma. 3.M.SG. have.2.SG. said to-the mother 'You said it to mother.'

B: No, non l'ho detto a nessuno! no, not 3.M.SG. have 1.SG. said to noboty 'No, I didn't say it to anybody!'

B': [A nessuno] l'ho detto \_! to nobody 3.M.SG. have.1.SG. said 'To nobody I said it!'

In (21B), the negative quantifier (a) nessuno in the 'low' focus position cooccurs with the preverbal negative marker non; in (21B'), instead, the fronted negative quantifier precedes the verb and no negative marker occurs (if realized, it would convey a double negation meaning). (21B) is an instance of negative concord, given its single negation reading. Under standard assumptions, negative concord consists in a licensing relation between negation and a 'concord item' lying in its c-command domain. But if (21B) is derived by remnant IP movement, such a licensing relation cannot obtain: as shown in (22), the concord item a nessuno would have raised out of the scope of negation, which is buried within the remnant IP; we would thus expect a double negation reading, contrary to fact.<sup>29</sup>

(22)  $[CP [XP [IP pro non l'ho detto t_i] [FocP a nessuno_i [Foc^o t_{IP}]]]]$ 

I wish to stress that this evidence does not rule out remnant IP movement in general; however, it shows that this cannot be a general solution for all instances of 'low' contrastive focus.

## 6. Concluding remarks

In this paper I have empirically motivated a distinction between merely contrastive focus and corrective focus: The latter is a subtype of contrastive focus carrying an incompatibility presupposition, which conveys a specific conversational move.

In the light of this distinction, I argued that Italian focus movement displays a *restricted optionality* in the relevant contexts:

- 1. the 'low' position can convey both a merely contrastive and a corrective interpretation;
- 2. the fronted position only conveys the corrective interpretation.

<sup>28</sup> Cardinaletti (2002), Samek-Lodovici (2006), a.o.; see Belletti (2004: note 42) for a reply.

On the other hand, the negative concord facts would be compatible with a remnant movement derivation applying at a compositional level below negation (à la Kayne 1998).

The less restricted interpretation of the 'low' focus position casts doubt on the idea that the latter involves fronting to the left periphery plus remnant IP movement. We are thus forced to abandon the ideal bi-directional 'one position—one interpretation' mapping, and we are confronted, once again, with real (though restricted) optionality.

Nevertheless, the observed one-way correlation tells us something important: in the contexts examined here, the necessary condition for focus fronting relates not to the contrastive import *per se*, but rather, to the *corrective* import which establishes a contrast across utterances. As discussed in § 3 above, this type of contrast is inherently linked to the conversational dynamics. From this perspective, we can hypothesize that what triggers focus fronting is not the need to enable, or disambiguate, the focus/background partition (as per (2) and (5)), but rather, the requirement that any Information Structure phenomenon that has an impact on the conversational dynamics be licensed in the left periphery of a root or quasi-subordinate clause, as argued in Bianchi & Frascarelli (2010). An account along these lines is developed in Bianchi & Bocci (2011), which constitutes the continuation of the research presented here, and where an analysis of optionality is proposed in terms of the alternative spell-out of the left-peripheral vs. the lowest link of a movement chain.

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