# Focused topics, focused questions, focused heads, and other challenges

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Abstract – This paper examines several aspects of the distribution of contrastive focalization in Italian that are not captured by current analyses maintaining that contrastive foci must raise to a fixed left-peripheral FocP focus projection. From an empirical perspective, it shows that contrastive focalization successfully applies to constituent classes seldom discussed in the focalization literature and inherently unable to move to FocP, such as hanging topics (particularly interesting because requiring clitic doubling even when focused), interrogative clauses, and verbal heads. The paper also examines multiple foci, nested foci, and the co-occurrence of focus and wh-phrases that are incompatible with the assumed uniqueness of FocP. Based on these data, the paper argues that focalization in situ for unmoved foci, together with focus evacuation for fronted foci, provide a better model of the full distribution of contrastive focalization in Italian.

**Key terms -** contrastive focus, corrective focus, left-periphery, hanging topics, familiar topics, CLLD, left-peripheral focus, fronting, interrogative clauses, questions

#### 1 Introduction

Understanding "what the right structural maps are for the different zones of the syntactic tree" (Rizzi 2018) is a fundamental goal of syntactic research. This paper concerns a specific aspect of syntactic trees: the 'FocP' focus projection proposed in Rizzi (1997) for left-peripheral foci.

From a semantic perspective, focalization does not need FocP. Rooth's alternative semantics model successfully calculates the focus value of focused constituents even if they remain in-situ (Rooth 1992, Wagner 2020: section 3.16). We thus need to examine whether there is sufficient syntactic evidence for positing FocP, or whether focalization should be modelled as occurring insitu by default, with focus fronting only when other factors force it to.

This paper argues that a rigorous map of the left-periphery must exclude FocP and that whenever possible focalization does indeed occur in-situ. It supports this claim by examining several constituent classes that successfully acquire a contrastive focus interpretation even though they are structurally unable to move to FocP. Under focalization in-situ, this is expected, since movement anywhere becomes irrelevant to focalization. Under the FocP hypothesis, where covert/overt movement to FocP is necessary to identify a constituent as focused (Rizzi 2017:335-336, 2018:150-152), the same constituent classes are incorrectly predicted to be unable to focalize.

The paper thus adds new evidence to the problematic aspects of FocP identified elsewhere (e.g. Abels 2012, 2017, this volume, Berghoff 2017, Botha and Oosthuizen 2009, Craenenbroeck 2009, Cheng-Downing 2012, Costa 2009, Kempchinsky 2013, Neeleman and Van de Koot 2008,

Neeleman et al 2009, Neeleman and Szendröi 2004, Samek-Lodovici 2015, 2016, Szendröi 2001, 2017, Titov 2013, Wagner 2009). Nevertheless, its position relative to cartography remains neutral. From an empirical perspective, the projections above FocP are not affected by the arguments provided here. From a theoretical perspective, the paper shows that the distribution of focus does not support the claim that the left-periphery is organized in such a way as to offer "transparent and uniform hierarchical configurations that are interpreted by simple interpretive routines in the interface systems" (Rizzi & Cinque 2016), but it has no implications for the roles assigned to other cartographic projections. My hope is that even researchers strongly persuaded of the merits of FocP will engage with the challenging data examined here.

The next section introduces all major assumptions. Section 3 examines constituents structurally unable to move to FocP because too high, too large, or inappropriately syntactically typed, including focused hanging topics, focused interrogative clauses, and focused verbal heads. Section 4 considers constituents structurally unable to move to FocP because its specifier is occupied, examining clauses with co-occurring wh-phrases and foci, multiple foci, and nested foci. Section 5 examines fronted foci, showing how FocP makes some significant incorrect predictions even with respect to this class of foci.

## 2 Assumptions

This paper concerns contrastive focalization in Italian. Following Neeleman and Vermeulen (2012), contrastive focalization is assumed to involve the denial of at least one of the alternative propositions evoked by focalization. This definition covers both exhaustive and non-exhaustive instances of corrective focalization. Exhaustive focalization excludes all alternative propositions (Kiss 1998). For example, to someone saying 'John drinks wine', I may reply 'John drinks WATER<sub>F</sub>' intending to communicate that water is the only drink John drinks (the subscript 'F' marks focus, main stress is in capitals). But I might also choose a non-exhaustive interpretation by replying 'John drinks WATER<sub>F</sub>. He also drinks LEMONADE<sub>F</sub>. And COKE<sub>F</sub>. But not wine.', in which case the proposition 'John drinks wine' is likely to be the only one being negated.

Throughout the paper, the term 'contrastive focus' – and often just 'focus' – will refer to corrective focalization under the definition just described. The interpretation of 'contrastive' thus diverges from Bianchi and Bocci's (2012) and Bianchi's (2013) interpretation, where it refers to a distinct class of allegedly non-frontable foci (but see Samek-Lodovici 2019). Since even Bianchi and Bocci maintain that corrective foci can front, this terminological divergence does not affect the discussion and results of this paper.

I will also favour the term 'fronted foci' over 'left-peripheral foci' because the latter is too closely associated with the FocP analysis and the proposed comparison with in-situ focalization requires a more neutral standpoint. Furthermore, the term 'left-peripheral foci' is not synonymous with 'fronted foci' because it may include foci generated in the left-periphery – such as the focused hanging topics discussed in the next session – rather than moved there.

The term 'FocP' will refer to the left-peripheral focus projection of Rizzi (1997). Today, we understand that 'FocP' is a misnomer, since Rooth's focalization applies to contrastive foci claimed to target FocP as well as non-contrastive foci claimed to target lower focus projections (Belletti 2004). More precise characterizations of the features relevant to focus fronting are

beginning to emerge (e.g. Bianchi et al. 2015, 2016, Neeleman and Vermelen 2012). Since these distinctions are not relevant to the arguments in this paper, I will keep referring to Rizzi's projection as 'FocP'.

Within the cartographic tradition, there is some variation in the analysis of FocP. Most analyses maintain that in-situ contrastive foci must covertly move to FocP, but Bianchi (2019) maintains that movement to FocP has always occurred but the copy in specFocP is left unuttered. Similarly, most analyses allow for only one left-peripheral focus projection, but Beninca and Poletto (2004) allow for more than one, albeit for different focus types.

In this paper, FocP has the properties proposed in Rizzi (1997) and assumed in much subsequent literature. Namely, FocP is unique. It is dominates FinP but is dominated by ForceP and the projections for hanging and CLLD topics. Most importantly, its specifier identifies which constituent is interpreted as contrastively focused; wh-phrases compete with contrastive foci for the specifier of FocP; and in-situ contrastive foci must move to specFocP to be identified as focused (Rizzi 2017, 2018). Whether movement to specFocP occurs at LF or earlier on as per Bianchi (2019) need not be decided, as the discussion will be orthogonal to this factor.

As the paper will show, these assumptions lead to incorrect predictions. When considered in its entirety, the distribution of contrastive focus is better accounted for by the hypothesis that the default position for focalization is in-situ.

# 3 Focalization cases structurally unable to occur in FocP

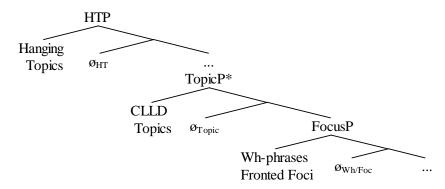
Under the focus in-situ hypothesis, focalization may apply to any syntactic item, no matter its position, size, or phrasal vs head status. Under the FocP hypothesis, the set of focusable items is instead restricted because any item unable to move to specFocP for whatever reason is excluded.

The empirical data discussed in this section support focalization in-situ. Hanging topics generated above FocP, root interrogative clauses containing FocP, and post-auxiliary verbal heads unable to move to FocP should all be unfocusable because they cannot reach specFocP. Instead, they all allow for contrastive focalization, consistently with focalization in-situ. These cases are particularly problematic for the FocP hypothesis because it is hard to imagine what additional assumptions could make them consistent with the key requirement that all foci move to specFocP.

## 3.1 Focused hanging topics

Hanging topics (HTs) precede fronted foci across several languages. Under cartographic analyses, they are generated in a dedicated projection above FocP as in (1) (Benincà 2001, Benincà & Poletto 2004, Giorgi 2015). HTs are thus too high to move to FocP. Therefore, contrastively focused HTs are predicted impossible under the FocP hypothesis. By contrast, they remain possible under focalization in-situ.

(1) HTs are generated above FocP.



The examples below show that HTs can be contrastively focused. A striking property is the systematic presence of clitic-doubling. To the best of my knowledge, this is the first time a class of constituents is systematically shown to focalize while still requiring clitic-doubling (see also the few cases in Benincà 2001:7 and Wagner 2009:72-73). This surprising property shows that the assumption that focalization disallows clitic resumption needs revising and that the presence/absence of clitic-doubling might be unrelated to the quantificational nature of focus as proposed in Rizzi (1997). I leave these questions to further research, since they are not relevant to the argument developed in this paper. What matters here is that HTs do contrastively focus despite their high position.

Each example below is a dialogue. Sentence A sets the context. Sentence B begins with a contrastively focused HT. Emphatic stress on the HT is shown in capitals, default nuclear stress in small caps. Clitic-doubling is obligatory throughout, with clitics glossed as 'cl'. Omitting the clitic is severely ungrammatical, see B' in (2).

- (2) A: Tu non parli abbastanza con tuo FIGLIO. You not speak enough with your son 'You do not speak enough with your son.'
  - B: Mio MARITO<sub>HT,F</sub>, non ci parlo abbastanza! Non mio figlio. My husband, (I) not cl speak enough! Not my son 'I do not speak enough with my HUSBAND. Not my son.'
  - $B': \ *\ Mio\ MARITO_{HT,F},\ non\ parlo\ abbastanza!\ Non\ mio\ figlio.$
- (3) A: A Marco<sub>CLLD</sub>, gli esaminatori gli hanno chiesto di TUTTO. To Mark, the examiners cl have asked of everything 'Mark, the examiners asked him all kind of questions.'

<sup>&</sup>lt;sup>1</sup> That HTs require clitic-doubling even when focused is expected if HTs are extra-clausal or almost extra-clausal as in Shaer & Frey (2004), Shaer (2009), and Giorgi (2018), where the clitic is the correlate of the extra-clausal topic and it is obligatorily present for theta marking and Case assignment considerations. Adopting these analyses does not affect the argument developed in this section, since extra-clausal HTs remain unable to reach FocP for focalization purposes.

- B: FRANCO<sub>HT,F</sub>, <u>gli</u> hanno chiesto di tutto! Marco<sub>HT</sub>, gli hanno chiesto cose FACILI. Frank, (they) cl have asked of all! Mark, (they) cl have asked things easy. 'They asked all kind of questions to FRANK! Mark, they asked him EASY questions.'
- (4) A: Vediamo... Milano<sub>HT</sub>, ci hai vissuto per tre ANNI... Giusto? (We) see... Milan, (you) cl have lived for three years... Right? 'Let's see... Milan, you lived there for three years...'
  - B: ROMA<sub>F</sub>, ci ho vissuto per tre anni! Non Milano. ROME, (I) cl have lived for three years! Not Milan 'I lived for three years in ROME! Not Milan'

The above foci display the prototypical properties of HTs: they require clitic-doubling, they involve nominal phrases, and they drop the preposition normally associated with the corresponding argument (namely, 'con' in (2), 'a' in (3), and 'a' in (4)). They lack the typical properties of fronted foci, namely the absence of clitic-doubling and the inability to drop prepositions. They also lack the properties of CLLD topics, where clitic-doubling is optional, and prepositions cannot be dropped.

## 3.1.1 The position of focused hanging topics

Focused HTs share the same position of their unfocused counterparts; they are not generated in FocP. To prove this point, I apply to them the positional tests developed for unfocused HTs (Cinque 1990; Benincà 2001; Beninca & Poletto 2004; Shaer & Frey 2004; Alexiadou 2006; López 2016; Westbury 2016). Since focused HTs behave like unfocused HTs across all tests, they share the same position.

The first test exploits the observation that unfocused HTs precede unfocused CLLD topics, which, in turn, precede Rizzi's fronted foci. This strict order supports the structural layout in (1) above. The order HT>>CLLD for unfocused HTs is illustrated in (5), whereas (6) shows that the same order applies to focused HTs. To trigger the necessary contrastive interpretation, read (6) as a reply to (5).

- (5) a. Gianni<sub>HT,i</sub>, [di soldi]<sub>CLLD,k</sub>, gli<sub>i</sub>-e-ne<sub>k</sub> hai dati POCHI. John, of money, (you) cl=prt=cl have given little 'John, you did not give him much money.'
  - b. \* [Di soldi]<sub>CLLD,k</sub>, Gianni<sub>HT,i</sub>, gli<sub>i</sub>-e-ne<sub>k</sub> hai dati POCHI.
- (6) a. (No.) MARCO<sub>HT,F,i</sub>, [di soldi]<sub>CLLD,k</sub>, gli<sub>i</sub>-e-ne<sub>k</sub> ho dati pochi. (No.) Mark, of money, (I) cl=prt=cl have given little 'No. MARK, I often speak about my troubles to.'
  - b. \* [Di soldi]<sub>CLLD,k</sub>, MARCO<sub>HT,i</sub>, gli<sub>i</sub>-e-ne<sub>k</sub> ho dati pochi.

Unfocused HTs also precede wh-phrases, see (7). Focused HTs precede wh-phrases as well,

see (8), uttered as a reply to (7). Incidentally, note that the focused HT in (8) co-occurs with a wh-phrase and, therefore, it could not occur in specFocP, since that position is occupied by the wh-phrase. Sentences like (8) are predicted impossible under the FocP hypothesis. They are instead unproblematic if focalization occurs in-situ, since focus remains able to apply to HTs even when wh-phrases are present. Further cases involving focus/wh-phrase co-occurrences are discussed in section 4.1 and 5.3.

- (7) a. Gianni<sub>HT</sub>, cosa<sub>WH</sub> gli avete DETTO? John, what (you)cl have told 'John, what did you tell thim?'
  - b. \* Cosawh, Gianni<sub>HT</sub>, gli avete DETTO?
- (8) a. Anzi, MARCO<sub>HT,F</sub>, cosa<sub>wh</sub> gli avete detto. Rather, MARK, what (you) cl have told 'Or rather, what did you tell MARK?'
  - b. \* Anzi, cosawh, MARCO<sub>HT,F</sub>, gli avete detto.

An interesting and to the best of my knowledge yet undescribed property of HTs is that they can be focused but they cannot be replaced by wh-phrases. See (9)-(11) where the focused HTs in (2)-(4) are replaced with their wh-counterparts, giving rise to questions with wh-phrases not introduced by the necessary prepositions. When interpreted as genuine, non-echo, questions, these sentences are ungrammatical independently from the presence/absence of clitic-doubling.

- (9) \*Chi non (ci) parli ABBASTANZA?
  whom (you) not (cl) speak enough
  Intended meaning: 'Who you do not speak enough with?'
- (10) \*Chi (gli) hanno chiesto di TUTTO?
  Who (they)(cl) have asked of all
  Intended meaning: 'Who they asked all kind of questions to?'
- (11) \*Quale città (ci) hai vissuto per tre ANNI?
  which city (you) (cl) has lived for three years?
  Intended meaning: 'which city did you live in for three years?'

Under in-situ focalization, these data follow straightforwardly. HTs and wh-phrases must satisfy different positional constraints. Wh-phrases must occur in what could be called Wh-P (i.e. FocP stripped of any focus function), whereas HTs must occur in their projection. These requirements cannot be simultaneously satisfied, making interrogative HTs impossible. Focalization, instead, occurs in-situ, and may thus successfully apply to hanging topics located in their projections, explaining why focused HTs remain possible.

The analysis is strengthened by the observation that (9)-(11) become more acceptable under an echo interpretation. For example, (9) constitutes a grammatical echo question when uttered in

reply to the sentence "Marco<sub>HT</sub>, non ci<sub>CL</sub> parlo abbastanza" (*Mark, I don't talk enough to him*). How is that possible? Unlike non-echo wh-phrases, echo wh-phrases may occur in-situ, and thus may occur in the position of HTs. Since they are no longer required to occur in Wh-P, the issue affecting non-echo wh-phrases is absent, making the above sentences grammatical under this interpretation.

Note how this analysis keeps some cartographic assumptions while shedding others. HTs and wh-phrases are still required to occur in their dedicated projections. But the requirement that contrastive focalization requires movement to FocP is abandoned.

## 3.1.2. Other properties of focused hanging topics

The structural similarity of focused and unfocused HTs extends to their island insensitivity and lack of reconstruction effects, further supporting the claim that the above focused HTs are genuine HTs and, therefore, located too high to focalize in FocP.

Island sensitivity tests for the presence of movement. Moved phrases, such as CLLD topics, wh-phrases, and fronted foci cannot extract from a complex NP-island, see (12)-(14).

- (12) \* [Con mio figlio]<sub>CLLD</sub>, conosco l'insegnante che non (ci) parla MAI. With my son, (I) know the-teacher that not (cl) speaks ever
- (13) \* Con chiwh, conosci l'insegnante che non (ci) parla MAI? With whom, (you) know the-teacher that not (cl) speaks ever
- (14) \* [Con mio FIGLIO<sub>F</sub>], conosco l'insegnante che non (ci) parla mai. Non con mia figlia. With my son, (I) know the-teacher that not (cl) speaks ever. Not with my daughter

Unfocused HTs, instead, are island insensitive because they are generated in their position rather than moved, see (15). Crucially, focused HTs behave like unfocused HTs, see (16) when uttered as a reply to (15). It follows that focalization applies to HTs directly in their position, with no movement to, or through, FocP.

- $\begin{array}{lll} \hbox{(15)} & \hbox{[Mia figlia]$_{HT}$,} & \hbox{conosco l'insegnante che non ci parla MAI.} \\ & \hbox{My daughter, (I) know} & \hbox{the-teacher that not cl speaks ever} \\ \hbox{`My son, I know the teacher who never speaks with him.'} \end{array}$
- (16) [Mio  $FIGLIO_F]_{HT}$ , conosco l'insegnante che non ci parla mai. Non mia figlia. My son, (I) know the-teacher that not cl speaks ever. Not my daughter. 'My SON, I know the teacher who never speak with him. Not my daughter.'

The presence of movement is also testable through reconstruction effects. These are present with CLLD topics, wh-phrases, and fronted foci, but not with unfocused and focused HTs, confirming their unmoved status.

Here, I consider two effects. The first concerns pronominal subjects, which cannot co-refer with an R-expression in a CLLD topic, wh-phrase, or fronted focus, because they c-command the lower copy of these phrases, thus violating condition C. See (17)-(19), which are ungrammatical with or without clitic-doubling the fronted constituent. The same sentences are grammatical

when coreference is absent, showing that the size and content of the moved constituent is not an issue (clitic-doubling remains optional in (17), and marginally acceptable in (18)-(19)).

- (17) \* [Agli amici di Gianni<sub>i</sub>] $_{CLLD,k}$ , lui<sub>i</sub> ( $\underline{ci}$ ) può parlare  $t_k$  per ORE. to-the friends of John, he (cl) can to-speak for hours
- (18) \* [A quale<sub>WH</sub> amico di Gianni<sub>i</sub>]<sub>k</sub>, lui<sub>i</sub> ( $\underline{ci}$ ) può parlare  $t_k$  per ORE? to-the which friend of John, he (cl) can to-speak for hours
- (19) \* [Al FIGLIO<sub>F</sub> di Gianni<sub>i</sub>]<sub>k</sub>, lui<sub>i</sub> (<u>ci</u>) può parlare t<sub>k</sub> per ore. Non alla figlia. to-the son of John, he (cl) can to-speak for hours.Not to-the daughter

Focused and unfocused HTs, instead, always allow for coreference, showing that they lack a lower copy, and hence have not moved. See (20)-(21), where (21) is uttered as a reply to (20).

- (20) [La figlia di Gianni<sub>i</sub>]<sub>HT</sub>, lui<sub>i</sub> <u>ci</u> può parlare per ORE. the daughter of John, he cl can to-speak for hours 'John's daughter, he can speak with them for hours.'
- (21) [Il FIGLIO<sub>F</sub> di Gianni<sub>i</sub>]<sub>HT</sub>, lui<sub>I</sub> <u>ci</u> può parlare per ore. Non la figlia. the son of John, he cl can to-speak for hours. Not the daughter 'John's SON, he can speak with him for hours. Not his daughter.'

The second test concerns quantifier binding. Possessive pronouns inside CLLD topics, whphrases, and fronted foci can be bound by a quantifying subject c-commanding their lower copy, see (22)-(24). Focused and unfocused HTs, instead, disallow a bound interpretation because they lack a lower copy. See (25) and (26), with (26) uttered in reply to (25).

- (22) [Al  $suo_i maestro]_{CLLD,k}$ , [ogni alunno] $_i$  (gli) ha portato un FIORE  $t_k$ . To-the his teacher, each pupil (cl) has brought a flower 'Each pupil brought a flower to his teacher.'
- (23) [A quale dei suoi, maestri] $_k$ , [ogni alunno] $_i$  ha portato un FIORE  $t_k$ ? To which of-the his teacher, each pupil has brought a flower 'To which teacher of his/hers did each pupil bring a flower?'
- (24) [Alla sua<sub>i</sub> MAESTRA<sub>F</sub>]<sub>k</sub>,[ogni alunno]<sub>i</sub> ha portato un fiore  $t_k$ . Non al maestro. To-the his teacher.<sub>Fem</sub> each pupil has brought a flower. Not to-the teacher<sub>Masc</sub> 'Each pupil brought a flower to his FEMALE teacher. Not the male one.'
- (25) \* [il suo<sub>i</sub> maestro]<sub>HT</sub>, [ogni alunno]<sub>i</sub> gli ha portato un FIORE. The his teacher, each pupil cl has brought a flower 'Each pupil brought a flower to his teacher.'

(26) \* [la suai MAESTRAF]HT, [ogni alunno]i le ha portato un fiore. NON il (suo) maestro. The his teacherFem, each pupil cl has brought a flower. Not the (his) teacherMasc 'Each pupil brought a flower to his FEMALE teacher. Not to his male one.'

# **3.1.3 Summary**

HTs are too high to focalize in FocP, yet they can be contrastively focused. This section showed that they focus in their base-generated position, consistently with the in-situ focalization hypothesis.

The analysis followed mainstream cartographic assumptions about the position of HTs. Other analyses, however, treat HTs as extra clausal, whether as an orphan constituent not integrated with the following clause (Shaer & Frey 2004, Shaer 2009, Haegemann 1991), or as a phrase disallowing for syntactic manipulation (Giorgi 2018). The argument provided here remains valid even under these analyses because they effectively analyse HTs as outside clausal boundaries and, therefore, inherently unable to move to FocP. By contrast, even under these analyses, focused HTs remain compatible with focalization in-situ, provided that focalization is allowed to apply to extra-clausal items.

# 3.2 Focused interrogative clauses

The FocP hypothesis predicts that in root clauses any constituent large enough to contain FocP, such as questions, will be unable to focalize, since that would require that these constituents move to a position inside themselves. By contrast, focusing them in-situ remains possible, allowing for their existence.

That questions can be contrastively focused is shown by the examples below, chosen from several similar ones found across internet blogs. The initial sentence "the right question is..." leaves no doubt that these bloggers are contrasting the following question against a set of contextually salient alternative questions.<sup>2</sup>

- (27) La domanda giusta è: cosa serve all'Italia? (Galazzo 2018)
  The question right is: what serves to-the=Italy?
  'The right question is: what does Italy need?'
- (28) La domanda giusta è: "come posso aiutare i miei clienti target ad ottenere The question right is: how (I) can to-help the my clients target to to-obtain quello che realmente vogliono?" (Prevato 2018: slide 14) what that (they) really want?

  'The right question is: how can I help my target clients to get what they really want?'

<sup>&</sup>lt;sup>2</sup> As far as I am aware, the semantic denotation of focused questions has not yet been examined in the focalization literature. The ordinary denotation of a question is the set of propositions corresponding to its potential answers (Hamblin 1973, but see Beck's 2006 claim that this is a focus value and that questions lack an ordinary value). Their focus value would thus involve sets of sets of propositions. I leave a full characterization to further research but note that instances of focalization contrasting alternative sets of propositions have already been proposed for contrastive topics in Büring (1997) and Rooth (2016).

Root questions can be focused too. This is particularly clear in the exchange below involving alternating utterances across two speakers (Il Cavaliere etc., 2020). The final question is contrastively focused against a set of inferior alternatives. Under FocP, the entire question would have to move to specFocP, even though FocP is included in the question structure (and hosting a yes/no operator). The blog concerned cinematographic citations; therefore, the example might be a translation from English. Nevertheless, it sounds perfectly natural to a native ear, so it still raises the issue of where the final question is focalized.

(29) "Non avevo risposte perché mi facevo le domande sbagliate". "Tu devi farti la domanda giusta.". "E qual'è?" "Tutto quello che hai fatto ti ha reso la vita migliore?" "I did not have answers because I asked myself the wrong questions". "You must ask yourself the right question". "Which is which?" "All that you have done, did it improve your life?" "

Examples involving correction focus can also be easily constructed. For example, during legal cross examinations many questions are inadmissible because inconsistent with the conduct of a fair trial. Inadmissible questions include those presupposing facts that have not yet been admitted as evidence. A lawyer cross-examining a witness might therefore quickly replace a first inadmissible question with a second one; see (30) where (a) and (b) are uttered by the same speaker.

- (30) a. Chi ha portato la cocaina in ITALIA? Who has brought the cocaine to Italy? 'Who brought the cocaine to Italy?'
  - b. Anzi, [per quale ragione l'imputato è arrivato a Roma il 3 luglio 2019]<sub>F</sub>? Rather, for which reason the=defendant is arrived in Rome the 3 July 2019? 'Or rather, for what reason the defendant came to Rome on the 3<sup>rd</sup> of July 2019?

Similarly, a lecturer assigning an essay on a specific research question may decide to replace a first question with a second one considered superior.

- (31) a. Quale potenze straniere hanno interferito nelle elezioni ITALIANE? Which powers foreign have interfered in-the elections Italian 'Which foreign powers interfered with the Italian elections?'
  - b. Anzi. [Cosa ha fatto l'Italia per difender-si dalle interferenze RUSSE?]<sub>F</sub> Rather. What have done the=Italy to to-defend-self from-theinterferences Russian? 'Or rather. What did Italy do to defend itself from Russian interferences?'

In both examples, the second question corrects and replaces the first one, which is cancelled and no longer needs answering. These cancellations constitute the typical effect of corrective focus. Both questions are focused in their entirety, as signalled by the absence of any shared background across them.

The issue is where the questions in (30) and (31) get focalized. Under the FocP hypothesis,

they would have to move to the specifier of FocP, which is doubly impossible because FocP is contained in the structures for these questions, and the specifier of FocP is already occupied by the wh-phrase 'per quale ragione' in (30) and 'cosa' in (31).

Under focalization in-situ, instead, these questions are focalized as any other constituent: their root node is assigned a focus feature with no movement involved. For example, question (b) in (31) would correspond to a WhP or equivalent projection with the wh-phrase 'cosa' in its specifier. The WhP phrase would also be marked as focused through the necessary focus feature, with no need to move anywhere.

## 3.3 Focused verbal heads

Any syntactic analysis of contrastive focus must also account for focused verbal heads like 'CHIAMATO' in (32) below. Under Rooth (1992), focalization applies to the verb alone. The focus value of (32)(b) thus contains only contextually salient propositions of the form 'Mark X-ed Mary' with X a transitive predicate, as in 'Mark met Mary', 'Mark wrote to Mary', etc.

(32) A: Marco ha incontrato MARIA. *Mark has met Mary.*'Mark met Mary.'

B: No. Marco ha CHIAMATO<sub>F</sub> Maria. Non l'HA incontrata. No. Mark has called Mary. (He) not cl=has met. 'No. Mark CALLED Mary. He did not meet her.'

Under in-situ focalization, these cases are straightforward. The verb is focused in V and then moves where required, like any other verb. For example, in (32) the verbal root 'CHIAM-' (call) focuses in V and then moves to the head of the aspectual projection headed by the past-participle suffix '-ato'. More refined analyses splitting '-ato' in its morphological components – the thematic vowel '-a', past-participle suffix '-t', and default agreement suffix '-o' – would follow the same logic, with the focused verbal head moving through the relevant projections as its unfocused counterpart.

The FocP analysis, on the other hand, runs into several difficulties because it was originally developed for phrases and does not adapt well to heads. This is immediately visible when considering the requirement that focus move to the specifier of FocP, a phrasal position unavailable to heads. At first, this problem might appear easily solved by assuming that focused heads move to the head of FocP. But as the structure for (32)(b) in (33) shows, the auxiliary 'ha' in T blocks upward head-movement.

(33) [FocP ØFoc [TP Marco hat [AspectP [CHIAMF-ATOAspect]Aspect [VP < Marco > < chiamF > Maria]]].

We might consider, instead, whether the entire aspectual phrase might move to specFocP. This phrase, however, also contains the object 'Mary'. If the specifier of FocP identifies what is focused, as required by cartographic claims that FocP exists to facilitate the interfacing with sound and meaning, then the entire aspectual phrase 'CHIAMATO Maria' (called Mary) would

count as focused. Under Rooth (1992), this determines the wrong focus value for (32)(b), which would now include propositions replacing the entire predicate rather than just the verb, thus including propositions like 'Mark ran' or 'Mark ate chicken' that are not part of the focus value of (32)(b).

We could decide to cancel the assumption that the specifier of FocP identifies the focused phrase and mark the verb as focused through a non-percolating focus feature, thus allowing the entire AspectP to move to FocusP. This might work, but it eliminates the main reason for positing FocP. FocP is supposed to facilitate the interface with other language modules by identifying what phrase is focused. If the phrase is in specFocP is no longer identified as focused, and focus identification exploits a focus feature or another device unrelated to FocP, then FocP has no focalization function, since focus features may also apply in-situ.

# 3.4 Summary

This section showed that focused hanging topics, focused root interrogative clauses, and focused verbal heads cannot be accounted for under the FocP hypothesis, highlighting its structural inability to address the full distribution of contrastive focalization. Hanging topics are too high, and root interrogative clauses too large, to move to FocP, while verbal heads are prevented from moving to FocP's head by intervening heads and cannot move to FocP's specifier because they are non-phrasal. All three constituent classes are instead consistent with focalization in-situ, which thus emerges as a better match for the actual distribution of contrastive focus.

## 4 Foci in sentences with a filled specFocP

Under the FocP hypothesis, specFocP hosts at most one phrase. Therefore, whenever specFocP is occupied by a focus or a wh-phrase, focalization elsewhere in the clause is predicted impossible. Under focalization in-situ, instead, focalization is unrelated to FocP and focalization elsewhere remains possible. The data in this section show that contrastive foci in root clauses may co-occur with wh-phrases, other foci, and nested inside other foci, thus supporting focalization in-situ.

## 4.1 In-situ foci co-occurring with wh-phrases

It is easy to create perfectly natural questions containing in-situ contrastive foci, see the second sentence in the examples below. Their grammaticality is expected if focus occurs in-situ, and unexpected if focus must raise to specFocP because specFocP is filled by the wh-phrase.

- Tutti conoscevano la VITTIMA. Ma chi<sub>wh</sub> conosceva l'ASSASSINO<sub>F</sub>? All knew the victim. But who knew the-murderer? 'Everybody knew the victim. But who knew the MURDERER?'
- (35) So cosa<sub>wh</sub> pensi TU<sub>F</sub>, del vostro rapporto. Ma cosa<sub>wh</sub> pensa tua MOGLIE<sub>F</sub>? (I) knowwhat think you, of-the your relation. But what thinks your wife? 'I know what YOU think of your relation. But what does your WIFE think?'

(36) Va bene, Anna parla OGGI. Ma quandowh parla PINO<sub>F</sub>? Goes well, Ann speaks today. But when speaks Pino? 'Ok, Ann speaks today. But when will PINO speak?'

Another example where focus is undoubtedly corrective is provided in (37), where A is a doctor visiting a child with a tummy ache and B the child's father. Question A1 does not involve contrastive focus; the doctor only wants to know when the child ate an egg, as eggs can cause tummy aches. The father, while going through his recollections, answers a different question, namely when the child ate pasta. Therefore, the doctor asks his initial question again, but this time with contrastive focus on the object. The intonation of A2 lacks the typical terminal rise of questions (D'imperio 2002), hence the absence of a question mark. Yet, A2 is a genuine question, as confirmed by the fact that the most natural continuation of the dialogue would be for B to answer A2.

Focus in A2 is corrective, as confirmed by the optional availability of negation at the start of the question. The focus value for A2 contains all questions of the type 'When did the child eat X', with X ranging over the foods the child might have eaten. This allows the doctor to imply that the implicit question 'When did the child eat the pasta?' answered in B must be rejected and replaced with A2. By contrast, A1, lacking contrastive focalization, does not evoke any alternative questions.

- (37) A1: Quando<sub>wh</sub> ha mangiato L'UOVO, il bambino? When has eaten the-egg, the child 'When did the child eat the egg?'
  - B: La pasta l'ha mangiata ALL'UNA. The pasta, (he) cl=has eaten at-the-one 'He ate the pasta at one o' clock.'
  - A2: (No). Quando<sub>wh</sub> ha mangiato l'UOVO. (Non la pasta). (No). When (he) has eaten the-egg (Not the pasta) '(No). When did he eat the EGG. (Not the pasta.)'

Similar examples can be created at will, provided the A2 questions always lack a final rise; see (38) and (39) which parallel (37). As before, the A2 questions should be ungrammatical under the FocP hypothesis, since specFocP is occupied by a wh-phrase, whereas their grammaticality is expected if the focalization occurs in-situ.

- (38) A1: Chi hai visto a MILANO? Who (you) have seen in Milan 'Who did you meet in Milan?'
  - B: A Roma ho visto MARCO. In Rome (I) have seen Mark 'In Rome, I met Mark.'
  - A2: (No). Chi<sub>wh</sub> hai visto a MILANO<sub>F</sub>. (Non a Roma). (No). Who (you) have seen in Milan (Not in Rome) '(No). Who did you meet in MILAN. (Not Rome.)'
- (39) A1: Dove li hai COMPRATI, questi bicchieri? Where (you) cl have bought, these glasses 'Where did you buy these glasses?'
  - B: Quelli li ho comprati a MILANO. Those (I) cl have bought in Milan 'Those, I bought them in Milan.'
  - A2: (No). Dove<sub>wh</sub> hai comprato QUESTI<sub>F</sub>. (Non quelli). (No). Where (you) have bought these (Not those) '(No). Where did you buy THESE. (Not those.)'

Before concluding, let me return to the removal of question marks in all A2 questions. Question marks strongly suggest the presence of the terminal rise typically associated with non-discourse-given questions like A1. Under that intonation, A2 questions become ungrammatical. The intonation of A2 questions is closer to that of declarative sentences, even though from a pragmatic/semantic perspective they remain questions. The replacement of question marks with periods and, in section 5.3, exclamation marks, is meant to help readers avoid the terminal rise intonation.

I return to this issue in section 5.3, where I discuss questions involving wh-phrases and fronted foci and also Bocci et al's (2018) related experiment. For now, let me simply conclude that under the appropriate contexts contrastive focalization in-situ remains possible even when focus identification via specFocP is unavailable, supporting the in-situ focalization hypothesis. By contrast, the FocP hypothesis incorrectly predicts all above examples to be ungrammatical.

## 4.2 Multiple foci

Most FocP analyses consider FocP unique, thus excluding the possibility of multiple contrastive foci inside a single clause.

Multiple foci are certainly possible with overt focus operators (Krifka 1991, Beck & Vasishth 2009, Wagner 2009, 2020). For example, imagine two teachers caring for a group of small children. They want each child to have multiple playmates. At the end of one session, one teacher utters (40) with main stress on 'Marco' and secondary stress on 'Marta' (in small caps), meaning

that Mark is the only child who played with only one other child, namely Marta. This is not an instance of second occurrence focus because all constituents are new.

(40) Solo MARCO<sub>F</sub> ha giocato solo con MARTA<sub>F</sub>.

Only Mark has played only with Marta

'Only MARK played only with Marta.'

Under the right circumstances, it is possible to contrastively focus the subject using stress alone. For example, consider again the context just described. At the end of the session, one teacher, clearly satisfied with himself, remarks that the session went well because all children played with two or more playmates. The other teacher, more attentive, corrects the first teacher's assessment by uttering (41).

(41) MARCO<sub>F</sub>ha giocato solo con MARTA<sub>F</sub>.

Mark has played only with Marta

'MARK played only with Marta.'

The issue here is how focalization by overt focus operators, here on 'Marta', is analysed under the FocP hypothesis (see also Wagner 2009). If these foci need to move to specFocP, then the above sentences are incorrectly predicted to be ungrammatical because specFocP cannot host both foci. If movement to FocP is unnecessary, then both sentences remain possible, but at the cost of allowing for focalization outside FocP. This can be stipulated to be restricted to constituents in the scope of overt focus operators, but it still weakens the claim that FocP is key to the interface with pragmatics/semantics as far as contrastive focalization is concerned. If constituents in the scope of 'only' can be focalized in-situ and interpreted contrastively when the semantic import of 'only' is processed, there is no reason why the same could not hold for focused phrases lacking overt focus operators, such as the focused object in (42).

(42) Ho giocato con MARTA<sub>F</sub>. (Non Pietro.)
(I) have played with Marta. (Not Peter.)
'I played with MARTA. Not PIETRO.'

The existence of multiple contrastive foci refutes the claim that clauses allow for at most one focus – an assumption encoded through the uniqueness of FocP – and also the claim that interface mapping requires all contrastive foci to pass through specFocP in order to be interpreted.

### 4.3 Nested foci

Neeleman and Szendrői (2004) argue that the FocP hypothesis cannot handle sentences involving nested foci like (43) (slightly adapted). The mother's answer contains two contrastive foci nested within one another: 'Superman' contrasts with 'decent book', and the VP 'reading Superman' contrasts with 'doing his homework'. The entire sentence is also non-contrastively focused.

An Italian example involving two nested contrastive foci is provided in (44). 'Nutella'

contrasts with 'carote' (carrots), and 'mangiando la Nutella' (eating Nutella) contrasts with 'fatto i compiti' (doing his homework).

(43) Father: What happened?

Mother: You know how I think our children should read decent books.

Well, when I came home, rather than doing his homework, Johnny was [reading SUPERMAN<sub>F</sub>]<sub>F</sub>.

- (44) A: Gianni ha fatto i compiti e mangiato le carote come ha detto il DOTTORE?

  John has made the works and eaten the carrots as has said the doctor?

  'Did John do his homework and ate the carrots as the doctor recommended?'
  - B: È lì che [mangia NUTELLA<sub>F</sub>]<sub>F</sub>! (Altro che le CAROTE!O fare i COMPITI!) (He) is there that eats Nutella. (Other that the carrots! Or to-do the works!) 'He is there eating NUTELLA. Not eating the carrots! Or doing his homework.'

Neeleman and Szendrői (2004: 154-156) examine the contradiction that ensues from maintaining that focused phrases are identified through the percolation of focus features. They show that the identification of the two foci in (43) would require the feature assigned to 'Superman' to both percolate all the way to the VP and not percolate beyond the DP.

Here, I add the more general point that the existence of nested foci is incompatible with the assumption that contrastive foci must move to specFocP in order to be identified as focused at the interface with pragmatics/semantics. In the above examples, it is not possible for both foci to independently move to the same specifier position. Moving only the focused VP while leaving the focused DP nested in it is not a solution. It would cancel the assumption that movement to specFocP is necessary for appropriately identifying a phrase as focused. Whatever mechanism could be proposed to ensure that the nested DP is also identified as focused could be immediately invoked for other foci located elsewhere, making movement to specFocP unnecessary.

These problems are absent under focalization in-situ. As described in Wagner (2020), provided that Rooth's squiggle operator '~' intervenes between the DP and the VP foci, the relevant set of alternatives for each focus would be successfully identified. The necessary configuration is shown in (45), with the squiggle operators carrying indices only to facilitate discussion. Squiggle-2 focuses 'Nutella', seeking salient alternatives of the type 'eating X', with 'eating carrots' qualifying as one such alternative. Squiggle-1 seeks salient propositions of the type 'Y(John)', with Y a predicate, and finds 'John has done his homework' as one such alternative.

(45)  $\sim_1$  [John is [ $\sim_2$ [ eating Nutella<sub>F</sub>]<sub>F</sub>].

Nested foci thus provide a third focus configuration expected under focalization in-situ and

<sup>&</sup>lt;sup>3</sup> Rooth's (2016:26-28) squiggle operator '~' applies to a focused syntactic phrase  $\varphi$  and an index k pointing to a focus antecedent. It requires that the semantic denotation of the antecedent pointed by k be an element of  $[[\varphi]]^f$  distinct from the ordinary semantic value  $[[\varphi]]^o$ , or a subset of the focus value  $[[\varphi]]^f$  containing the ordinary semantic value  $[[\varphi]]^o$  and at least one other alternative; see also Rooth (1992) and Wagner (2020).

intractable under the FocP hypothesis.

# 4.4 Summary

This section examined a second aspect of the distribution of contrastive focus consistent with focalization in-situ and unaccounted for by the FocP hypothesis. Whenever a focus co-occurs with another focus, as with multiple and nested foci, or with a wh-phrase, the assumption that all focused phrases obligatorily move to specFocP cannot be satisfied, predicting all these cases impossible. Instead, they are grammatical, as predicted by focalization in-situ.

### 5 Fronted foci

The FocP hypothesis makes incorrect predictions even in relation to fronted foci. Space limits only allow me to consider three properties and to only compare the FocP analysis against the focus evacuation analysis in Samek-Lodovici (2015) where these properties are accounted for.

Alternative analyses of fronted foci, positing neither FocP nor evacuation, also exist. For example, Abels (2012) shows that Rizzi's relativized minimality is sufficient to account for the fixed order of fronted foci relative to other left-peripheral phrases, while Neeleman and van de Koot (2008, 2010) and Neeleman et al (2009) see focus fronting as overtly marking the domain of contrast. Like Samek-Lodovici's, these analyses, too, show that key properties of the FocP analysis may follow from alternative assumptions. Since they do not concern the properties discussed in this section, I will not examine them any further.

## 5.1 The unexpected distribution of familiar topics

FocP is dominated by the projections for hanging and CLLD topics and dominates those for left-peripheral familiar topics (Benincà 2001, Benincà and Poletto 2004, Frascarelli and Hinterhölzl 2007, Rizzi and Cinque 2016, Rizzi and Bocci 2017).

The resulting hierarchy, leaving Int and Mod aside, is provided below. Crucially, it predicts that familiar topics should be able to occur independently from the presence of fronted foci in FocP. As this section will show, this is not the case.

(46) [Force [HangingTopic [CLLD-Topic\* [Foc [FamiliarTopic\* [Fin [TP ...

To prove this point, we need to be able to distinguish HTs and CLLD topics from left-peripheral familiar topics even when fronted foci are absent. Clitic-doubling provides the necessary tool because it is obligatory with object HTs and CLLD topics but only optional with left-peripheral familiar topics. This is shown in (47) where the three topic classes can still be identified by their position relative to the fronted focus 'a MARIA'. Sentence A sets the context. Reply B1 shows that the clitic can be absent with familiar topics. Reply B2 shows that it is instead obligatory with hanging/CLLD object topics, since the initial object is ambiguous

between a HT and CLLD analysis.<sup>4</sup> Commas represent the potential pauses following left-peripheral foci and topics.

- (47) A. Dobbiamo mandare il progetto ad ANNA. (we) must to-send the project to Ann 'We must send the project to Ann.'
  - B1: A MARIA<sub>F</sub>, il progetto<sub>Familiar</sub>, dovete mandare. Non ad Anna. ToMary, the project, (you) must to-send. Not to Ann. 'You must send the project to MARY. Not Ann.'
  - B2. Il progetto<sub>HT/CLLD</sub>, a MARIA<sub>F</sub>, \*(lo) dovete mandare. Non ad Anna. The project, to Mary, (you) cl must to-send. Not to Ann. 'As for the project, you must send it to MARY. Not Ann'

As mentioned, the hierarchy in (46) predicts that familiar topics should be able to occur independently from the presence of fronted foci. Reply B1 should thus remain grammatical even when the focus remains in-situ. As (48) shows, this is not the case. B1, the only reply unambiguously involving a familiar topic, is severely ungrammatical, showing that familiar topics outside focus fronting constructions are impossible.

Furthermore, in reply B2, where clitic-doubling is present, the initial object shows the typical B-accent intonation and contrastive interpretation associated with contrastive hanging and CLLD topics (Büring 2003) and absent from familiar topics (Frascarelli and Hinterhölzl 2007), strongly suggesting that even in B2 the object is not a familiar topic.

- (48) A. Dobbiamo mandare il progetto ad ANNA. (We) must to-send the project to Ann 'We must send the project to Ann.'
  - B1: \* Il progetto<sub>Familiar</sub>, dovete mandare A MARIA<sub>F</sub>. Non ad Anna. The project, (you) must to-send to Mary. Not toAnn. 'You must send the project to MARY. Not Ann.'
  - B2: Il progetto<sub>HT/CLLD</sub>, <u>lo</u> dovete mandare AMARIA<sub>F</sub>. Non ad Anna.

Familiar topics remain impossible even when contrastive focalization is absent, see (49). Question A, provided with and without clitic-doubling, ensures that the object 'il libro' is discourse-given, as is necessary for licensing its later occurrence as a familiar topic. Yet, mentioning the object in B1 as a clitic-less, hence unambiguous, familiar topic is severely

. .

<sup>&</sup>lt;sup>4</sup> Nothing simultaneously distinguishes HTs, CLLD, and familiar topics from each other when fronted foci are absent. Indirect-object HTs differ from indirect-object CLLD and familiar topics because the associated preposition drops with the former but not the latter. Clitic-doubling distinguishes object HTs and CLLD topics from object familiar topics because it is obligatory only with the former. Finally, clitic-doubling distinguishes indirect-object HTs from indirect-object CLLD and familiar topics because it remains obligatory with HTs but optional with the latter.

ungrammatical (stress falls on the verb; stress on 'libro' incorrectly focuses the object). The initial object can only occur as a hanging or CLLD topic with the associated clitic-doubling, B-accent intonation, and contrastive interpretation; see B2.

- (49) A. Hai LETTO, il libro? / L'hai LETTO, il libro? (You) have read, the book? (You) cl=have read, the book? 'Did you read the book?'
  - B1: \* Il libro<sub>Familiar</sub>, ho LETTO.

    The book, (I) have read.

    'I read the book.'

B2: Il libro<sub>HT/CLLD</sub>, <u>l</u>'ho LETTO.

Examples like these can be created at will. They show that left-peripheral familiar topics only occur in the presence of fronted foci, as stated in the generalization below. This distribution is unexpected under current cartographic assumptions about FocP. The dependency of familiar topics on focus fronting is left unmodelled.

(50) Generalization – Italian left-peripheral familiar topics are always preceded by a fronted focus.

Generalization (50) is instead accounted for under focus evacuation. Under this analysis, a focus fronts whenever the TP containing it is discourse-given and targeted by right dislocation. Under these circumstances, focus must extract from TP because as a focus it must still be assigned main stress but right-dislocated phrases resist main stress. Fronting ensures that both prosodic requirements are satisfied. The discussion of the supporting evidence and related theoretical issues is too extensive to report here but it can be found in Samek-Lodovici (2015). Note, however, the different perspectives taken by focus evacuation and FocP in relation to the overall distribution of contrastive foci. Under focus evacuation, focalization in-situ remains the default. Fronting only occurs when right dislocation targets a discourse-given TP containing a focus. Under FocP, instead, in-situ and fronted foci share the same fundamental structure with the focus moved to specFocP. The only difference between in-situ and fronted foci concerns whether the focus moves overtly or covertly (or, under Bianchi 2019, which copy is spelled out); the final LF structure remains the same.

How does focus evaluation account for the distribution of familiar topics? Familiar topics are right-dislocated phrases. Their properties perfectly match right-dislocated constituents with respect to discourse-givenness, free ordering, island sensitivity, non-uniqueness, non-contrastivity, lack of epithet resumption, inability to drop associated prepositions, and lack of bare NPs (Samek-Lodovici 2015: 201ff; see also Brunetti 2009, and Frascarelli and Hinterhölzl 2007). As right-dislocated phrases, familiar topics would normally follow TP. Focus fronting, however, involves a right-dislocated TP. Since right-dislocated phrases can be freely ordered, familiar topics become able to precede the dislocated TP. This is shown in B1 below, where the familiar topic 'il progetto' the dislocated TP and follow the fronted focus, giving rise to the order

'Fronted Focus > Familiar Topic(s) > TP' associated with familiar topics. The opposite order, with the dislocated TP preceding the familiar topic, is also possible and shown in B2.

- (51) A. Dobbiamo mandare il progetto ad ANNA. (we) must to-send the project to Ann 'We must send the project to Ann.'
  - B1: A MARIA<sub>F</sub>, [il progetto]<sub>Familiar</sub>, [TP (lo) dovete mandare]. Non ad Anna. ToMary, the project, (you) cl must to-send. Not to Ann. 'You must send the project to MARY. Not Ann.'
  - B2: A MARIAF, [TP (lo) dovete mandare], [il progetto]Familiar. NON ad Anna.

Familiar topics thus only occur in the presence of fronted foci because they are right-dislocated items preceding a TP. When TP is not right-dislocated, for example because not discourse-given, left-peripheral familiar topics are impossible because as right-dislocated items familiar topics can only follow a non-dislocated TP. If a contrastive focus is present, it will necessarily occur in-situ because TP is not dislocated. When TP is right-dislocated, left-peripheral familiar topics become possible, because they can now precede the dislocated TP. If a contrastive focus is present, it will necessarily front because TP is now right-dislocated.

In other words, both fronted foci and left-peripheral familiar topics are triggered by TP right dislocation, which is the reason why their distributions appear related. For more details and supporting evidence see Samek-Lodovici (2015:197ff).

## **5.2** Unexpected c-command failures

FocP analyses also predict that fronted foci c-command TP. The syntax of Italian fronted negative subjects shows that this is not the case.

Italian neg-concord requires that negative words lower than T be licensed by a negative marker in T or a negative subject in specTP (Zanuttini 1991, Longobardi 1992, Acquaviva 1999). Furthermore, licensing cannot occur via reconstruction (Samek-Lodovici 2015: 299).

Licensing by a negative subject is possible when the entire sentence is new-information focus, see (52). When the subject is contrastively focused, the sentence is no longer grammatical, see (53). The violated condition is neg-concord because the sentence becomes grammatical again when neg-concord is repaired by either removing the licensee, in (54), or by adding the negmarker 'non' and determining a double-negative interpretation, see (55).

- (52) [Nessuno ha mangiato NULLA]<sub>NewInfoFocus</sub>. Nobody has eaten anything 'Nobody ate anything.'
- (53) \* NESSUNO<sub>F</sub>, ha mangiato nulla. Nobody, has eaten anything

- (54) NESSUNO<sub>F</sub>, ha mangiato pane. Nobody, has eaten bread 'NOBODY ate bread.'
- (55) NESSUNO<sub>F</sub>, non ha mangiato nulla. Nobody, not has eaten anything 'NOBODY has eaten nothing.' (i.e. everybody ate something)

Under a FocP analysis, the ungrammaticality of (53) is unexpected. The negative subject in specFocP c-commands the negative object and should thus license it. Finding plausible explanations for (53) is difficult. For example, assuming that focus interferes with licensing is untenable because neg-concord remains successful with a focused licensee in (56), and across focus in (57) (make sure to read A aloud before assessing B). Licensing from an A'-position is also unproblematic: the postverbal negative subjects in (58) and in (59) are respectively licensed by a covert yes/no interrogative operator and by the complementizer 'se' (if) in IntP, a projection dominating FocP (Rizzi and Cinque, 2016).

- (56) Nessuno ha mangiato NULLA<sub>F</sub>. Nobody has eaten anything 'Nobody ate ANYTHING.'
- (57) A: [Non hai mangiato NULLA]<sub>NewInfoFocus</sub>. (You) not have eaten anything 'You did not eat anything.'
  - B: Non ho BEVUTO<sub>F</sub> nulla. Mangiare, ho mangiato TUTTO. not have drunk anything. To-eat, (I) have eaten everything 'I did not DRINK anything. As for eating, I ate everything.'
- (58) Ha chiamato NESSUNO? Has called anybody 'Did anybody call?'

(59) [Gianni mi ha chiesto se ha chiamato NESSUNO]<sub>NEWINFOFOCUS</sub>. John cl has asked if has called anybody 'John asked me if anybody called'

The ungrammaticality of (53) is instead accounted for under focus evacuation, where fronted foci are followed by a right-dislocated TP (Samek-Lodovici 2015:176ff, 191ff). The subject of (53) is necessarily a fronted focus, because when focalized in-situ it would occur postverbally in specVP. Under focus evacuation, fronted foci do not c-command the right-dislocated TP at their right, explaining why the negative subject fails to license the negative object in (53). The corresponding structure, greatly simplified<sup>5</sup>, is provided in (60).

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<sup>&</sup>lt;sup>5</sup> Structure (60) models focus evacuation as leftward TP-adjunction and right dislocation as rightward TP-adjunction. For a more precise structure see Samek-Lodovici (2015: 89-90, 181).

# (60) $[TP [TP NESSUNO_{F,i} [TP t_k]] [TP ha mangiato t_i nulla]_k]$

The focus evacuation analysis also explains the grammaticality and double-negative interpretation of (55). As (61) shows, the added neg-marker 'non' in the dislocated TP provides a c-commanding licenser for the negative object, restoring neg-concord and grammaticality.

(61)  $[TP [TP NESSUNO_{F,i} [TP t_k]] [TP non ha mangiato t_i nulla]_k]$ 

However, since the focused subject does not c-command the negative items in the dislocated TP, neg-concord remains unavailable, causing the observed double-negative interpretation.

## 5.3 Fronted foci co-occurring with wh-phrases

To fully understand the distribution of contrastive foci in root wh-questions, we need to distinguish three question classes: non discourse-given questions; discourse-given questions unaffected by right dislocation; discourse-given questions undergoing right dislocation.

Class I contains standard questions involving the terminal intonational rise observed by D'Imperio (2002) in Central and Northern Italian varieties, here represented by a final question mark. These questions may contain in-situ foci (see section 4.1), but never fronted foci, as shown by Rizzi's (1997) famous example below.

(62) \* A GIANNI<sub>F</sub> che cosa hai detto (, non a Piero)? To John that what (you) have told (, not to Piero) 'To JOHN what did you tell (, not to Piero)?'

Class II contains discourse-given questions not affected by right dislocation. They lack a final intonational rise but they, too, allow for in-situ foci (see (37) in section 4.1) and disallow fronted foci.

Class III contains discourse-given questions undergoing right dislocation. As (63) shows, questions can be discourse-given and right-dislocated. The right-dislocated status of the subordinate question 'dove andrà' is confirmed by the presence of clitic-doubling and by its intonation, which lacks main stress and follows an intonational break and optional pause.

- (63) A: Dove ANDRÀ, Gianni? Where will-go, John? 'Where will John go?'
  - B: Non lo SAPPIAMO, dove andrà. (We) not cl know, where (he) will-go. 'I do not know where he will go.'

As in declarative clauses, a focus generated inside a question targeted by right dislocation will front in order to remain able to attract stress. With root questions, this creates fronted foci followed by a wh-question, see (64). When A2 is uttered, the question 'cosa avete regalato' is discourse-given and right-dislocated. Its right-dislocated status is signalled by its intonation,

which lacks main stress and involves the initial intonational break and optional pause typical of right dislocation. It also completely lacks the terminal rise associated with Class I questions; a fact here represented by the final exclamation mark. Similar examples are easily construed, see Samek-Lodovici (2015: 224ff, 2016).

- (64) A1: Cosa avete regalato a GIANNA? What (you) have given to Joan? 'What did you give to Joan?'
  - B: A Gianni, abbiamo regalato un LIBRO. To John, (we) have given a book. 'John, we gave him a book.'
  - A2: (No.) A GIANNA<sub>F</sub>, cosa avete regalato! (Non a Gianni.) (No.) To Joan, what (you) have given! (Not to John.) '(No). What did you give to JOAN! (Not John.)'

Even Rizzi's original example becomes grammatical once it is made discourse-given by an appropriate context and uttered with the required right-dislocated intonation, see (65).

- (65) A1: Cosa hai detto a GIANNI? What (you) have told to John? 'What did you tell John?'
  - B: A Gianna, ho raccontato TUTTO.

    To Joan, (I) have told everything.

    'Joan, I told her everything.'
  - A2: (No.) A GIANNI<sub>F</sub>, cosa hai detto! (NoN a Gianna.) (No.) To John, what (you) have told! (Not to Joan.) '(No). What did you tell JOHN! (Not Joan.)'

The distribution of contrastive foci across the three classes of questions is summarised in (66).

(66) Root questions	Class I	Class II	Class III
		(discourse-given)	(discourse-given
			and right-dislocated)
Terminal rise	✓	×	×
Intonational break and	×	*	<b>√</b>
potential pause	*	^	Y
Focus in-situ	✓	✓	×
Focus fronting	×	*	✓

As we have seen, the distribution follows straightforwardly from focalization in situ and focus evacuation. Since focus fronting requires the right dislocation of the containing clause, it only

occurs with Class III questions. Since the other two classes lack right dislocation, they also lack focus fronting. Similarly, focalization in-situ is possible in Class I and II, where right dislocation is absent, but not Class III, where right dislocation forces fronting.

The intonational properties of the three classes also follow. The terminal rise is only possible with the non discourse-given questions of Class I, and the intonational break and potential pause preceding right-dislocated phrases requires the right dislocation of Class III questions.

By contrast, under FocP the absence of fronted foci in Class I questions follows from the impossibility of simultaneously hosting wh-phrases and foci in specFocP. This explanation fails to account for the fronted foci of Class III questions and the in-situ foci in Class I and II.

With this knowledge in hand, we can consider Bocci et al (2018), which reports an experiment concerning the grammaticality of fronted foci in root and embedded questions where foci and wh-phrases vary across objects and indirect objects. What interests us here is the claim that focus fronting with discourse-given root questions is ungrammatical.

The experiment tested 44 participants, recruited via Facebook. They provided acceptability judgements on the last sentence of a set of written dialogues accessed online. The written stimuli concerning fronted foci in discourse-given root questions had the format in (67), copied unaltered from Bocci et al's example (7). The assessed sentence was A's last question "A Paola chi hanno assegnato, non a Marcella?".

(67) A: Anche tu eri presente alla riunione di ieri sull'organizzazione del prossimo semestre.

Mi potresti chiarire un dubbio?

'You were also at yesterday's meeting concerning the organization for next semester.

Could you clear up a doubt I have?'

Chi hanno assegnato a Paola?

'Who did they assign to Paola?'

B: A Marcella, hanno assegnato Emilio.

'To Marcella, they assigned Emilio'.

A: Ti ho chiesto un'altra cosa!

'I asked you something else!'

A Paola chi hanno assegnato, non a Marcella?

to Paola who Aux.3.PL assigned not to Marcella

'Who did they assign to Paola, not to Marcella?'

To appropriately assess this question, the participants needed to assign it the Class III intonation lacking a terminal rise and involving an initial intonational break and potential pause. The stimuli's format, however, discouraged this intonation in several ways.

To begin with, these were written stimuli, leaving participants guessing what intonation was required.

Second, main stress was not typographically marked. Bocci et al explains that this was deliberate because the participants might not understand any stress-marking conventions. Nevertheless, the absence of intonational cues made it less likely that participants assigned main stress on the initial focus as required. After all, the initial focus in A's last question is discourse-given and discourse-given constituents, when unfocused, resist stress. Some participants might thus have assessed the stimuli under an inappropriate intonation.

Third, and most important, A's last question in (67) was presented with a question mark. As

discussed in section 4.1, question marks strongly evoke the final intonational rise of Class I questions, effectively steering the participants away from the intonation they should be assessing. As a result, instead of assessing A's last question under the Class 3 intonation that allows for focus fronting, the participants most probably assessed it under the Class 1 intonation that disallows focus fronting.

In conclusion, while Bocci et al's (2018) attempt to empirically test focus fronting in right-dislocated questions is welcome, the proposed stimuli were excessively open to misunderstanding. Future experiments should provide a more accurate illustration of what intonation is being tested.

#### 6 Conclusions

This paper showed that the actual distribution of Italian contrastive focus is wider than predicted by the FocP hypothesis. It includes focused hanging topics, placed too high for FocP, focused interrogative clauses, which contain FocP, and focused verbal heads, unable to move to FocP. It also includes multiple foci, nested foci, and foci co-occurring with wh-phrases, all of which that are predicted impossible under FocP. Even fronted foci show properties that are unexpected under the FocP hypothesis.

The paper also showed that all examined focalization instances are accounted for if focalization, by default, occurs in-situ, except when right-dislocation forces focus fronting as proposed in Samek-Lodovici (2015).

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