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Mica preposing as focus fronting

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This paper deals with the Italian presuppositional negation marker *mica*. This particle can surface differently in the negative circuit, e.g. either in a clause-initial or a clause-internal position. However, depending on its position, different types of focus and pragmatic requirements are found. We consider the initial *mica* as an instance of corrective focus and the clause-internal one as encoding a more generic contrastive focus. We show that this is in line with the recent findings on focus typology of Italian.

1 Introduction

Italian and Italo-Romance varieties employ a negative reinforcer, *mica* < lat. MĪCA 'crumb' or other similar variants (Zanuttini 1997) which can be added to the standard negation marker *non*, 'not'. Cinque's (1976) foundational work defines *mica* as a 'presuppositional negation' marker, since it conveys the denial of presuppositional content or expectations.

(1) a. Mi   hanno   detto che hai   invitato Marina.
         to-me have.3PL told   that have.2SG invited Marina
         'I have been told that you have invited Marina.'

   b. Non l'ho   mica invitata!
       NEG her-have.1SG mica invited.F.SG
       'I have not invited her at all!'

Note that the same type of denial can be conveyed by the simple preverbal negator *non*, which is why *mica* has been traditionally considered as optional reinforcer.

   Interestingly, some Italo-Romance varieties use *mica* as a compulsory particle to convey the meaning of standard negation (Zanuttini 1997; Pescarini & Penello 2008), sometimes in combination with other negators, for example in Venetan languages, it can co-occur with the final negator *no* (Poletto 2008; 2017).[1]

   However, Italian *mica* only has the special denial function pointed by Cinque.[2] As such, it must meet a specific pragmatic requirement: it cannot appear in brand new contexts, but must involve an active predicate to contrast. In other words, *mica* can scope only over discourse-activated predicates (*cf*. D-linking, Pesetsky 1987). If a denied predicate *p* is not available, *mica* may engender its activation in the discourse. As Cinque reported, example (2) is acceptable when the opposite (i.e. the fact that "it is cold here"), is mentioned, presupposed, or expected. Although the sentence has been uttered in an out-of-the-blue context, it is still acceptable if we

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[1] An anonymous reviewer also pointed that there are some north(east)ern varieties that use sentence-final "no" as an emphatic negator similar to Brazilian Portuguese verb-*não*.

[2] The simple negator *non* does not always convey the denial of old information, it can be used in more informational contexts, as showed in the dialogue reported here.

(i) a. Cosa ti   manca per cucinare la zuppa?
        what to-you misses to   cook   the soup?
        'Which ingredients do you miss for the soup?'

   b. Non ho   comprato la zucca.
      NEG have.1SG bought   the pumpkin
      'I haven't bought the pumpkin.'

In this case, *mica* is not compatible, since no denial of old information is involved. Hence, we consider *mica* to encode specific denial, which is only a subset of all possible functions lexicalized by *non*.

presuppose that the speaker expected the room to be cold. As a result, the denied proposition *p* can be considered as activated.

(2)   *Out-of-the-blue context*
      Non fa   mica freddo qui!
      NEG does mica cold   here
      'It is not cold at all in here!' (expectation: 'it is cold in there') (from Cinque 1976: 109)

Since Cinque's work, several formal approaches tried to define *mica* with regard to Information Structure, instead of considering its presuppositional value. Squartini (2017) decomposed the meaning of *mica* in terms of denial of old/new information, both concerning speaker's and discourse knowledge. Frana & Rawlins (2016) provided a definition of *mica* as a perspectival operator, FALSUM (based upon Repp's 2013 work) indicating the speaker's commitment as to whether a certain predicate should be downgraded as false or not. The FALSUM operator is very similar to what Breitbarth et al. (2013) referred to as Emphatic Polarity, a type of modality which marks the truth-value of a clause, in contrast with contextual and given information.

Under this light, it follows logically that the denied proposition should be activated in the context either by explicit mention or presupposition, world knowledge etc. Because of this informational restriction, when sentence (2) is uttered out-of-the-blue, the hearer will accommodate that its positive counterpart *p* was under discussion or expected by someone (Cinque 1976).

We can now introduce a further complication. Not only can *mica* surface in the discontinuous construction *non + V + mica* (which we call here internal position), but also at the beginning of the sentence without the preceding negator *non*, apparently carrying the same pragmatic meaning ((1) and (4)).[3] Note that is different from the case when *mica* is preposed as constituent negation, where the scope is narrower (3). In this paper, we will focus on *mica* with a sentential scope.

(3)   Mica MARINA abbiamo invitato (ma Giulio)!
      Mica Marina   have.1PL invited (but Giulio)
      'We did not invite MARINA (we invited Giulio)!'

(4)   a. Mi hanno   detto che hai   invitato Marina...
          me have.3PL told   that have.2SG invited Marina
          'I have been told that you have invited Marina.'

      b. Mica l'ho   invitata!
          mica her-have.1SG invited.F.SG
          'I have not invited her at all!'

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[3] A reviewer also remarks, on the basis of Cinque's observations, that some regional Italian varieties in the north allow a construction as 'fa mica freddo qui' in declaratives. We do not provide a formal description of this particular phenomenon, as we are looking at Standard Italian.

However, Cinque reports that initial *mica* cannot appear in out-of-the-blue contexts (5), i.e. speakers cannot accommodate the denied proposition *p*, as it can be neither inferred as previously activated nor expected, in comparison with example (2), where the informational requirement could be met *bona fide* by accommodation. Sentence (6), on the other hand, is grammatical, since accommodation is facilitated by the context sentence and the predicate can be seen as old.

(5)   *Out-of-the-blue context*
        *Mica fa   freddo qui!
        mica does cold   here
        'It is not cold at all in here!'
        (from Cinque 1976:109)

(6)   a. Vado   a prendere una giacca, sto tremando!
            go.1SG to take   a   jacket, am trembling
            'I will go and get a jacket, I am trembling.'

        b. Mica fa   freddo qua
            mica does cold   here
            'It is not cold at all in here.'

A clarification about 'activated *p*' must be made. According to Cinque, preposed *mica* in (5) is acceptable when, for example, the speaker is in the cold room at a butcher's. The assumption 'it is cold here' has not been uttered by anybody, but it is still accessible by the discourse participants (i.e. the proposition can be activated). In this case the proposition can be easily activated, as it belongs to the encyclopedic knowledge of the speaker or hearer.

    Under this light, we assume that a proposition can be made salient or active via different ways: by uttering it explicitly or making it available through a presupposition or an implicature, or because it is part of speakers' world knowledge (cf. the idea of Common Ground reviewed in Allan 2013). Hence, we call the proposition *p* active, it is still inferrable even though it has not been asserted (7).

(7)   Context: a and b went to a party and now it's very late. Speaker b does not want to go home.
        a. Non vai   a letto?
            NEG go.2SG to bed
            'Don't you go to bed?' + > Don't you go sleeping?

        b. No. Mica ho   sonno!
            no   mica have.1SG sleep
            'No, I am not sleepy at all!'

Although the predicate 'to be sleepy' has not been uttered explicitly, preposed *mica* can count on an inferrable predicate. Here, speaker a uses a biased polar question, activating the expectation

that b should go home and sleep because it is late: the denied proposition can be still considered as activated. According to this preliminary data presentation, it seems that initial *mica* works as denial of explicit content, i.e. where the denied proposition is active (6) or can be easily activated, for examples by means of implicatures or presuppositions (7). In out-of-the-blue contexts, where the proposition cannot be easily activated, initial *mica* has been described as ungrammatical, requiring stricter pragmatic licensing (5). Vice versa, clause-internal *mica* can appear in rhematic predicates. In this latter case, the proposition can be accommodated without contextual cues. To give a better idea of Cinque's intuition, we provide two other examples (8) and (9). In both examples, speaker a is eliciting a rhematic answer without implying the predicate *p* that b passed the exam: in (8), the answer is ungrammatical: *mica* is correcting something that was not even mentioned. In (9), the denied proposition *p* is not directly available either, but it can be accommodated in form of b's expectation: the denial with *mica* is acceptable.

(8) a. Perché piangi?
        Why   cry.2SG
        'Why are you crying?'

     b. *Mica ho   passato l'esame.
        mica have.1SG passed   the-exam
        'I have not passed the exam at all.'

(9) a. Perché piangi?
        Why   cry.2SG
        'Why are you crying?'

     b. Non   ho   mica passato l'esame.
        NEG have.1SG mica passed   the-exam.
        'I have not passed the exam at all.'

In our paper, we aim at addressing this specific alternation. First, we will test these observations within an experimental setting and then we will propose a theoretical explanation for both positions. In section 2.1, we will briefly address previous work carried out on the positioning of *mica*. Then, in order to draw a more precise pragmatic distinction, we will show the results from an acceptability judgement experiment in section 3. In section 4, we will present a syntactic explanation which could account for the different semantic imports of the positions. In particular, we will employ a dedicated projection independently proposed by Bianchi et al. (2015) (but see also subsequent work) for focus fronting, which could be insightful also for our current problem. We will also present some syntactic tests to prove this hypothesis, with data from a second acceptability experiment. In section 5, we will try to implement the model with more precise semantic definitions. Some observations about possible causes and consequences of this explanation will also follow in section 6, opening to further research. Section 7 concludes the paper.

2 Mica preposing

2.1 Previous accounts

The position of negative markers in Romance has been examined in several works by Zanuttini (1997), Garzonio (2008 and subs.), Manzini & Savoia (2011), Poletto (2020). In particular, Poletto claims that each type of negative marker (such as minimizers, preverbal negation, indefinites etc.) occupies a specific functional projection inside a 'negative circuit'. These positions depend on the etymological source from which the element originated. In turn, depending on its position in the negative circuit, each negator will show different interpretive and syntactic properties. Lastly, these negative elements can move elsewhere in the clausal spine from their original merging site depending on what other features they carry. *Mica*, for example, is said to originate in a functional projection inside TP, but can optionally move to CP, where it surfaces as clause-initial. We adopt Poletto's label "*Mica* preposing" to describe this phenomenon. Based on prosodic evidence, Poletto shows that fronted *mica* must indeed land in a C-position: *mica* cannot be the direct replacement of *non* which is merged as a clitic in TP; instead, *mica* is a fully-fledged phrasal element, probably projecting its own phrase and not being able to be hosted in the clitic slot. This is also compatible with the fact that both *mica* and *non* can appear simultaneously, yielding a double negation interpretation.[4]

(10) Mica non l'ho   fatto!
     mica NEG it-have.1SG did!
     'It is false that I didn't do it!' $+>$ I did it!

Thaler (2018) presents preposed *mica* as used to convey a stronger emotive involvement. This effect was also described in more formal terms in Squartini (2017), by resorting to the notion of mirativity (Aikhenvald 2012). However, this effect of mirativity and strong emotive involvement might be the consequence of the semantic value of *mica*, which we will define later in the discussion. Pescarini & Penello (2008: 51) point out very interesting semantic differences between the preposed *mica* and the clause-internal one. Based on scalar implicatures, they argue that the two constructions have a different nature.

(11) Mica gli   ho   dato 100 euro.
     mica to-him have.1SG given 100 euros
     'I have not given 100 euros to him.' $+>$ I gave him less than 100 euros: 98, 97, 96…

(12) Non gli   ho   mica dato 100 euro.
     NEG to-him have.1SG mica given 100 euros
     'I have not given 100 euros to him.' $+>$ I gave him less than 100 euros OR I did not give him any money at all (not even 100 euros).

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[4] The sentence was judged acceptable with a double negation meaning by 65 Italian native speakers, see further in the running text on the methodology. Almost 78% found it acceptable.

When we take pragmatic scales like numbers, the denial of a point with internal *mica* can either imply the denial of all smaller elements (in a downward entailing fashion) or simply be the denial of the exact point of the scale. When *mica* is preposed, only the last interpretation is available. They propose that the second alternative implicature is not available in (11), because with preposed *mica* there is an operator in CP which creates a conflict with the denial of the entire scale. This difference is very interesting, but needs further experimental support to confirm it (cf. Panizza et al. 2009). To support the different nature of the two *mica*, they also provide evidence from a northern Italian dialects which displays two morphological variants depending on the position of the negator.

(13) (Carmignano di Brenta (PD), Piazzola sul Brenta (PD))
    a.   Miga ghe gò dà sento euro.
    b.   No ghe gò dà mia sento euro.
    c.   Ghe gò mia dà sento euro.
    d.   No ghe gò mia dà sento euro.

Although this morphological alternation seems convincing, caution is needed, inasmuch as the alternation can also be attributed to prosodic requirements in the metrical structure (cf. Poletto's prosodic point).

Cerruti (2018; 2020) conducted a sociolinguistic study on the distribution of Italian *mica* in the CORIS corpus (Favretti et al. 2002). Among other things, Cerruti notices that the bipartite construction NEG + V + MICA can encode the denial of both discourse-old and discourse-new information (77,8% of all instances), he also included those cases where the preverbal negator could be dropped (18,75%), in sentences like *ho mica fame* 'I am MICA hungry', although he considered these cases as not belonging to spoken and written standard, mainly because they were fixed formulae and constituent negations. What is crucial for the present discussion is that the construction MICA + V (4,17%), i.e. the preposed *mica*, was found only in the denial of discourse-old information, as opposed to the bipartite construction, which can scope over less explicit predicates. This finding is line with Cinque's intuition, where preposed *mica* lexicalizes exclusively the denial of active information. To conclude, previous research has noticed the particular behaviour of preposed *mica*, suggesting that it must be handled as another construction conveying specific meaning. As noticed by Cinque and Cerruti, preposed *mica* is licensed with explicitly old propositions. With this in mind, in next section, we will corroborate such hypothesis and show that preposed *mica* requires indeed stricter pragmatic activation in order to be licensed.

2.2 A note on diatopic variation

Besides semantic and pragmatic distinctions for the alternation between fronted *mica* and the clause-internal one, recent literature has also emphasised the role of diatopic variation. For

example, Ledgeway (2020) shows that northern Italian dialects and northern regional Italian employ *mica* in a post-verbal position, whereas southern varieties prefer to place *mica* at the beginning of the sentence. The intuition behind this divide lies behind the type of verb movement and the grammaticalisation status of the negator. Similarly, Schifano (2018) builds a taxonomy of verb movement in Italo-Romance by deploying *mica* as one diagnostic test (more on this in section 4.1.1). In short, these constructions can be geographically marked. In this paper, we will not focus on these diatopically-marked varieties, and we will show that both preposed *mica* and internal *mica* co-exist within Standard Italian (as Cinque does). In other words, despite regional preferences, which are emerging from vernacular varieties in the process of the formation of regional varieties (Cerruti et al. 2017), we will empirically support the hypothesis that both constructions can be found in Standard Italian (à la Cerruti et al. 2017). To do so, we plan to collect acceptability judgements from various regions and control both the area of informants and their dialectal usage. The fact that both constructions can co-exist can be already appreciated in data from *italiano giornalistico* ('newspaper Italian'), as shown by the following examples.

(14)   Mica possiamo vincere sempre.
        mica can.1PL   win.INF always
        'We cannot always win.' (Corriere della Sera, 19 May 2008, p.3)

(15)   Non possiamo mica attendere il   nuovo codice penale […]
        NEG can.1PL   mica wait.INF   the   new   code   penal
        'We cannot wait for the new Penal code […]' (Corriere della Sera, 03 December 2005, p.25)

Equally, in Cerruti's (2020) data, both constructions were attested by speakers coming from Milan, Florence, Rome, Naples. We can replicate similar results by using other corpora. In the KIParla corpus, containing data from spoken Italian, we find sentences like (16) and (17) (Mauri et al. 2019). Similar results are detectable from the written corpora LIP and CORIS/CODIS (Favretti et al. 2002), which contains written data from press, novels, and essays.

(16)   Mica sono il   tuo   barista […]
        mica am   the   your barista
        'I am not your barista […]' (KIParla, Speaker PTA016, from Piedmont)

(17)   Non siamo   mica stati degli   eroi […]
        NEG are.1PL mica been   some.MPL   heroes
        'We have not been heroes […]' (KIParla, Speaker PTA018, from Piedmont)

Special attention on the possible diatopic variation will be dedicated to the acceptability rating test (section 3), where we take as informants those speakers who declared scarce or null dialectal usage. This methodological choice was driven by the need to limit possible preferences brought

by the dialect and to directly measure the effect of the pragmatic conditions. However, we also included the geographic origin of the speakers in our model, but it failed to show as large effects as the pragmatic condition (see later discussion).

3 Does preposed *mica* need an active *p*? A survey
3.1 Methodology

In order to test the pragmatic licensing of *mica,* we launched an online survey using Psytoolkit (Stoet 2010; 2017). Italian native speakers were asked to judge the acceptability of 50 written dialogues.[5] The experimental design consisted in 20 target dialogues and 30 fillers. The target dialogues were equally distributed according to the position of *mica* in the sentence (preposed or internal) and the activation of the predicate (mentioned or new). Each combination had 5 experimental items (2 positions * 2 types of activation * 5 experimental items = 20 target items). The dialogues were composed of two turns, where a asks something, either by inferring a proposition *p* or not, and b answers by using a sentence with *mica*. We provide here some examples for reference.

(18)   (internal *mica, p* mentioned)

    a. Maria ha mangiato la torta che hai   preparato?
        Maria has eaten   the cake that have.2SG prepared
        'Did Mary eat the cake you had baked?'

    b. Non ho   mica preparato la torta. Non ho   avuto per niente   tempo.
        NEG have.1SG mica prepared the cake. NEG have.1SG had   for nothing time.
        'I hadn't baked the cake at all. I didn't have any time.'

(19)   (internal *mica, p* unmentioned)

    a. Quindi che   farai?
        So   what do.FUT.2SG
        'So, what will you do?'

    b. Non prendo   mica la   macchina. Ho   deciso   di andare a   piedi.
        NEG take.1SG mica the car   Have decided to go.INF on foot
        'I won't drive my car at all. I have decided to go there on foot.'

(20)   (preposed *mica, p* mentioned)

    a. Come è stato vedere le   gondole?
        how   is been see.INF the gondolas
        'What was it like to see the gondolas?'

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[5] Naturally, the task of rating written sentences guides speakers towards a more standardised use of language. This is a desideratum, since the aim here is to unravel the syntactic-pragmatic mechanisms of preposed mica in Standard Italian.

b. Mica ho   visto le   gondole: sono rimasto in albergo.
mica have.1SG seen the gondolas am   stayed   in hotel
'I didn't see the gondolas at all: I stayed at the hotel.'

(21)   (preposed *mica, p* not mentioned)

a. Perché vuoi tornare   a Venezia?
why   want go-back.INF to Venice
'Why do you want to go back to Venice?'

b. Mica ho   visto le   gondole: sono rimasta in albergo.
mica have.1SG seen the gondolas. am   stayed   in hotel
'I didn't see the gondolas at all: I stayed at the hotel.'

The target stimuli and fillers were presented each time in random order.[6] Speakers were asked to judge sentence b, using a Likert scale of 7 points, where 1 was 'completely unacceptable' and 7 'completely acceptable'. Fillers were constructed to include a number of patterns, including some word salads (22) and completely grammatical sentences (23) without *mica*, so as to set the floor and ceiling of the reference scale.

(22)   Word Salad example to set the floor level

a. Com'era il   libro?
how-was the book?
'How was the book?'

b. Ho   preso non lo   libro già.
have.1SG taken NEG the book already
*'I have taken not the book already.'

(23)   Simple declarative example to set the ceiling level

a. Cosa hai   preparato per il   tuo   compleanno?
What have.2SG prepared   for the   your   birthday?
'What did you prepare for your birthday?'

b. Ho   preparato una torta al   limone.
have.1SG prepared a   cake to.the lemon
'I baked a lemon cake.'

The questionnaire was anonymous, but some basic sociolinguistic information was asked (age, gender, region, education, dialectal usage). In total, 96 people completed the survey. After tidying the dataframe from non-native speakers' data or similar complicating factors like incomplete surveys, we obtained a sample of 50 tests from different parts of Italy. The participants were

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[6] Before the "wild-randomization" (Psytoolkit does not allow pseudo-randomization to recover the order of stimuli for each participant), six training items were presented.

aged 30 on average and the majority of them (38 out of 50) declared to use dialect occasionally or never, whereas the remaining 12 declared to use dialect sometimes, speakers with a more frequent dialectal use were excluded. Concerning the provenience of participants, we obtained data from 16 speakers from the Gallo-Italic dialectal area, 18 from the southern one, 4 from the central area (Lazio, Umbria, Marche), 4 from Veneto, 3 from Tuscany, 3 from the extreme South, 2 from Sardinia (see the dataset in appendix).

3.2 Results

We report the raw results from the survey in **Figure 1**, which is a Likert plot made with the R package sjPlot (Lüdecke 2021). The plot displays the rating frequency of each item, distinguished in each row, each colour represents a different acceptability rate. Besides the first and last three rows, the name of experimental items are shortened for ease of graphic representation. In the plot, M and U stand respectively for an item with Mentioned proposition and Unmentioned one. The second letter describes the position of *mica*, whereas I stands for clause-Internal position and P for the Preposed one.
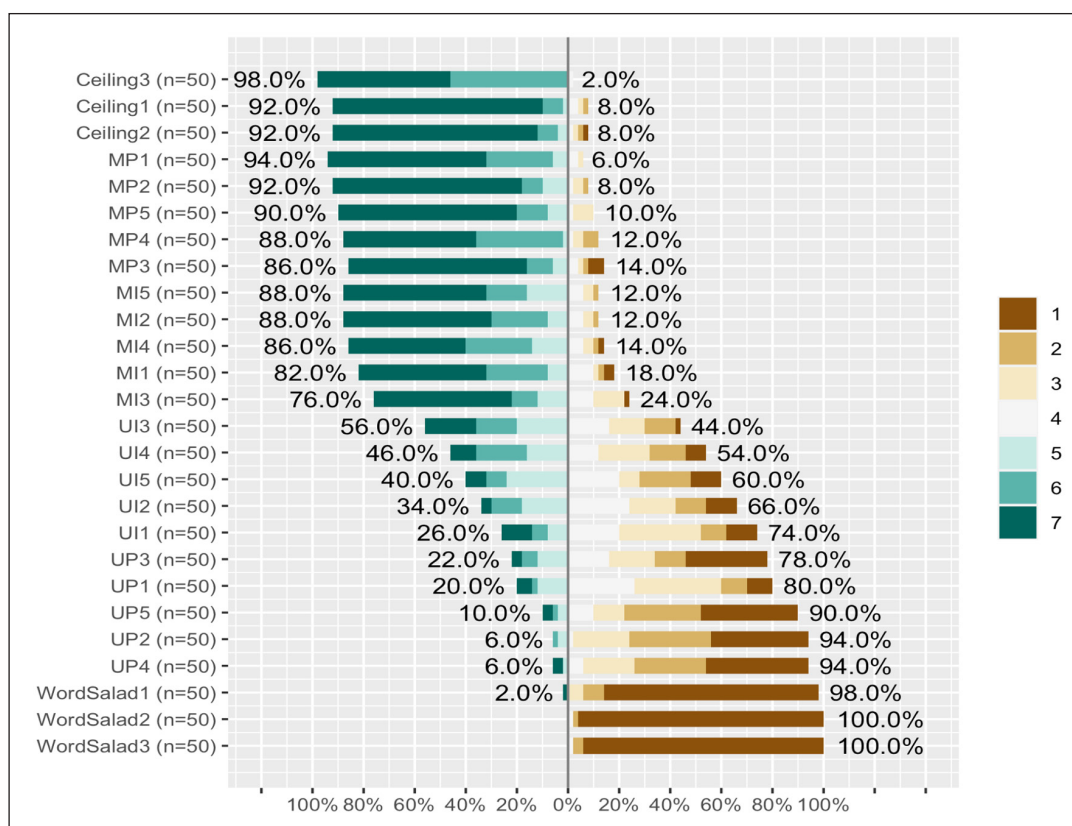

Figure 1: Acceptability of target sentences.

As expected, between 92% and 98% found the ceiling sentences as completely acceptable and assigned an acceptance value of 6 or 7. Vice versa, word salads were found completely unacceptable, obtaining 1 or 2.

Concerning the target dialogues, when *mica* scoped over mentioned propositions, the sentence was rated as acceptable. The situation becomes more complex when looking at the items with the unmentioned propositions. When *mica* is clause-internal the rates are less clear-cut and more medial: the sentences were not judged acceptable as the previous but do not either reach the floor levels of word salads. This fuzzy zone might be the consequence of the optional accommodation that the speaker might attribute to the denial. If the speaker assumes that the proposition *p* was activated in previous turns, other conversations, encyclopedic knowledge etc., then the sentence could be accepted more easily. We will cover this effect later in the discussion. The acceptability dropped down to the floor levels when the proposition was unmentioned and *mica* was fronted, where the majority of speakers (78%–94%) rated the sentences as unacceptable. In order to predict the acceptability of the sentence as a combination of both positions and informational status, we ran a generalised mixed model with the interaction of the two conditions.

An ordinal regression was run in R using the package *ordinal* (Christensen 2019) after checking the parallel regression assumption with the package *brant* (Schlegel & Steenbergen 2020). The model building started with the maximal random effects structure (participants and items) but failed to converge. Hence, different models were computed with a step-wise procedure (see Appendix for the procedure). The best model, decided by taking the lowest Akaike Information Criterion (AIC) with an Anova comparison, was the one comprising the interaction of the predicate activation and position of *mica* as fixed effects, and the participant as random effect (model ← clmm (value ~ Inform*position + (1|participant))).

Interestingly, the model including the dialectal area did not yield any significant improvement in explaining the variance. First, there was no significant difference (p = 0.49) between the model specifying the dialectal area (AIC = 2976,2, Log likelihood = –1472.1) and the one without it (AIC = 2969,6, Log likelihood = –1474.8). Secondly, no specific correlation emerged in the model including the dialectal area.[7]

Within the best fit, the difference between the intercept, set at internal *mica* with mentioned proposition, and the ones with the same position but unmentioned *p* is statistically significant and negative (β = –2,39, Std.Error = 0,18, z = –13,13, 95% CI [–2,75, –2.03], p < .001), showing that with unmentioned propositions, the acceptability rate drops. The effect of the preposed position worsened even more the acceptability of *mica* in unmentioned *p* (β = –2,22, Std.Error =

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[7] It might be argued that no significant effect of the region is appreciable because the diatopic metadata are umbalanced (e.g. few speakers from Sardinia), the same analysis was conducted with a re-sampled predictor (north vs south vs other) and did not yield any difference (see Appendix for the statistical procedure).

0,25, z = –8,79, 95% CI [–2,71, –1,72], p < .001). On the contrary, there is a significant positive correlation between preposed *mica* and mentioned propositions, in comparison to the intercept (β = 0,6, Std.Error = 0,18, z = 3,31, 95% CI [0,24–0,97], p < .001). To sum up, the results reflect the tendencies appreciable in **Figure 1**, when *mica* is clause-internal and scopes over mentioned proposition, the sentence is perfectly acceptable (median = 6,5, standard deviation = 1,58). The acceptance rate increases slightly when *mica* is preposed with active predicates. However, when *mica* is used as negation of unmentioned predicates, the acceptance rate significantly drops, especially with preposed *mica* (median = 2, standard deviation = 1,42).

Our data confirm Cinque's intuition that preposed *mica* requires informational activation of the predicate, whereas internal *mica* has looser information-structure requirements that can be met by accommodation. If the same lexical item has distinct pragmatic requirements in different surface positions, then the difference might be attributed to the syntactic mechanism. With this in mind, we will now turn to the crucial part of the paper: a syntactic analysis of preposed *mica* which could account for this pragmatic alternation.

4 A syntactic analysis of preposed *mica*

4.1 Preposed *mica* as corrective focus

We argue that preposed *mica* is parallel to another syntactic operation available in Standard Italian: focus fronting (Bentley 2010; Cruschina 2012; Bianchi et al. 2015; Cruschina & Remberger 2017). It is commonly accepted that a fronted focus constituent in Standard Italian bears a corrective interpretation (24) (Rizzi 1997), whereas an informational focus must appear postverbally (25) (Cruschina 2021 and references therein). In other words, non-corrective focus constituent cannot undergo focus fronting in Standard Italian, corrective focus is free to surface both internally and fronted.

(24) a. Mi hanno   detto che hai   invitato Giulio.
          me have.3PL told that have.2SG invited Giulio
          'They told me that you invited Giulio'.

      b. (MARINA) ho   invitato (MARINA).
          Marina   have.1SG invited
          'I have invited MARINA.' (adapted from Cruschina 2021)

(25) a. Chi   hai   invitato alla   festa?
          whom have.2SG invited   at-the party
          'Whom did you invited at the party?'

      b. (*Marina) ho   invitato Marina.
          Marina   have.1SG invited
          'I invited Marina.'

The corrective focus in (24) has been defined by Cruschina (2012) (but see also references therein) and Bianchi & Bocci (2012) in pragmatic terms as a correction to a previously asserted proposition. They propose that the focused constituent is not compatible with what has been asserted before and the alternative under focus is the one that should be updated to the Common Ground (instead of the antecedent alternative presented previously in the context, but see also section 5).

Similarly, preposed *mica* can be considered as an instance of corrective focus, as it corrects an active proposition in the discourse, showing that the latter is incompatible with speaker's knowledge and should not belong to the Common Ground. This is in line with Frana & Rawlins's (2016) semantic definition of *mica*, a perspectival FALSUM operator. Note that the same effect can be potentially reached without fronting (as it may happen, in general, with the corrective focus *in situ*). We argue that internal *mica* encodes a broader contrastive focus, which can then be specified in the corrective focus if the appropriate conditions are met, whereas the preposed one is specific for correction. We will return to this dichotomy later in the discussion.

Back to this parallelism, Cruschina (2012) already introduced the idea to extend focus-fronting to other elements, in particular to quantifiers (in his work, *QP-fronting*), also reviewing some other case studies with fronted constituents. For example, Ambar (1999) posits an ad-hoc functional projection for fronted constituents, an Evaluative Phrase, which expresses the speaker's evaluation on a given state of affairs. Similarly, Molnár (2002) proposes a KonstrastP for Finnish. Hence, extending the availability of a higher corrective projection, reachable by various categories like adverbs does not seem so hazardous and we can proceed further.

We will now look at the framework proposed by Bianchi et al. (2015) in more detail and then we will try to apply it to the specific case of *mica*. In particular, for fronted focus, they proposed a cartographic explanation (Rizzi 1997; Samo 2019 for a recent review), employing a dedicated left-peripheral slot, a Focus Associated Implicature Projection (FAIP). A FAI head syntactically encodes a conventionalized implicature (in the sense of Grice 1975) on the type of involved focus. Following the characterization given by Grice, conventionalized implicatures are part of the conventional (lexical) meaning of words (for example, from the only temporal meaning of *since* to the implicature of cause Geis & Zwicky (1971). Bianchi et al. argued that a corrective implicature can also be conventionalized in a syntactic construction, rather than a word.

(26)   Corrective Implicature (Bianchi et al. 2015: 12)
         "There is one alternative proposition, already introduced in the context, which is
         incompatible with the proposition expressed in the corrective reply."

FAIP could be seen as another instance of a syntacticization of discourse, where the association between a linguistic form and its pragmatic effect is encoded in specific syntactic operations. Potts

(2007) reviewed and tried to integrate conventionalized implicatures in syntax (e.g. appositives) and Bianchi et al. based their projection on his work.

FAIP regulates the conventionalization of focus implicatures and, in the case of Italian focus fronting, it holds interpretive and syntactic instructions via a [corr(ective)] feature. For the case of mirative focus, as for another example, FAIP has a [mir] focus feature, which distributes a mirative meaning and will trigger dedicated operations.[8] With corrective implicatures, FAIP will activate a lower FocusP, which is a landing site for the focus movement (Rizzi 1997).

(27)   [ForceP [FAIP FAI°[corr] [YP$_i$ Foc° [TP $\overline{\text{YP}}_T$…]]]]

In sum, in Standard Italian, when an active proposition (or alternative, see section 5) is not compatible with the speaker's knowledge, corrective focus implicature has its own linguistic form, encoded in FAIP. In informational focus, such contrast is not present, inasmuch as the alternatives/propositions are not salient in the discourse: FAIP will not involve the same syntactic mechanism and movement is banned (at least for Italian). Once we set out the main tenet of Bianchi et al.'s framework, we can now return to *mica* and explain the parallelism with focus fronting. First, preposed *mica* seems to encode the same corrective implicature as focus fronting: when a certain proposition *p* is introduced in the context, it indicates that this one is not compatible with the proposition in the corrective reply. With this in mind, it is easy to assume that if Italian FAIP conventionalizes this corrective implicature with fronting, then FAIP can involve *mica* as well, as it carries the same import to information structure. Hence, preposed *mica* can be seen as an instance of focus fronting.

(28)   [ForceP [FAIP FAI°[corr] [mica$_i$ Foc° [TP $\overline{\text{mica}}_T$…]]]]

Focus fronting requires the rejected proposition to be explicitly active in the discourse, and so does preposed *mica*, as shown by our acceptability experiment and the intuition by Cinque. If such kind of contrast is available, then FAI is able to activate the lower FocusP as potential site for the A'-movement of *mica*. This is also in line with Poletto's proposal about the position of preposed *mica* in CP.

4.1.1 The movement of corrective *mica*

The syntactic mechanism that has been outlined here might pose some problems to the theory of adverbs proposed by Cinque (1999). In Cinque's work, *mica* is one of those adverbs which occupy a rigid position, preverbal *mica* is to be attributed to the verb movement instead. When discussing verb movement, he uses *mica* to show that it is the verb that moves, whereas '*mica* does not move at all' Cinque (1999: 50-51). This is clearly at odds with our claim that *mica*,

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[8] Note that the presence of multiple types of foci in CP was already proposed by Benincà & Poletto (2004) for Old Romance.

triggered by FAIP, can move. Cinque's main point is that *mica* cannot precede subjects (29), the verb moves to the head of the AdvP where *mica* stands in the specifier, establishing this precedence relation; the subject is still on top of the entire AdvP, proving that *mica* cannot move. Cinque also adds in a footnote (p. 185) that *mica* can precede the subject only when it works as a narrow focus on the subject, possibly as constituent negation but not as denial of an entire predicate.

(29)   *Mica Gianni gli   telefonerà.   (Cinque 1999: 50)
         Mica Gianni him call.FUT.3SG
         'Gianni won't call him at all.'

(30)   Gianni mica gli telefonerà.
         'Gianni won't call him at all.'

Differently from Cinque, Moscati (2022) illustrates an example where *mica* precedes the subject and still works as denial of the entire clause. We collected new empirical evidence on the possibility of the order *mica* preceding the subject. First, we searched naturally occurring sentences on the internet with this order. We report some of these examples. Then, in order to ascertain whether these sentences are acceptable or only marginal, we ran a second acceptability experiment on Psytoolkit. The employed methodology was the same as the previous experiment, i.e. with a 7-points Likert scale, and ceiling sentences and floor sentences in order to establish references on the employed scale. Besides these sentences, naturally occurring in spontaneous written data, the target sentences of the second acceptability experiment also contained those ones that will be discussed later in the paper (such as syntactic tests and other Cinque's diagnostic tests on *mica*). For this second acceptability survey, there was a total of 16 target sentences and 12 fillers. Among the 150 speakers who took part in the data collection, 65 surveys are usable following the same requirements of the first survey. The final dataset comprised 15 speakers from the Gallo-Italic dialectal area, 12 from the southern one, 12 from extreme southern one, 9 from Veneto, 2 from Rheto-Romance area, 2 from Sardinia (this second dataset is also available in the appendix).

(31)   [9]Mica gli scienziati potevano dire   "la probabilità è 0".
          Mica the scientists could.3PL say.INF the probability is 0
         'The scientists could not say "the probability is 0". '

(32)   [10]Mica Babbo Natale poteva   avere   la carta uguale alla   nostra!
          mica Santa Claus could.3SG have.INF the paper equal to.the ours
         'Santa Claus could not have the same paper as ours.'

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[9] http://bressanini-lescienze.blogautore.espresso.repubblica.it/2008/09/03/il-buco-nero-al-cern-e-la-noce-moscata/comment-page-1/ (last access 26/06/2022).

[10] https://gigilamonja.wordpress.com/category/senza-categoria/ (last access 26/06/2022).

(33)   (context: the speaker is commenting an advertisement of a perfume. In the
       advertisement, the main focus is on the packaging rather than the perfume itself)
       [11]Mica una donna si   spruzza il   packaging.
         mica a   woman REFL sprays   the packaging
       'Women do not spray the packaging.'

As anticipated, we checked the acceptability of these naturally occurring sentences. We illustrate
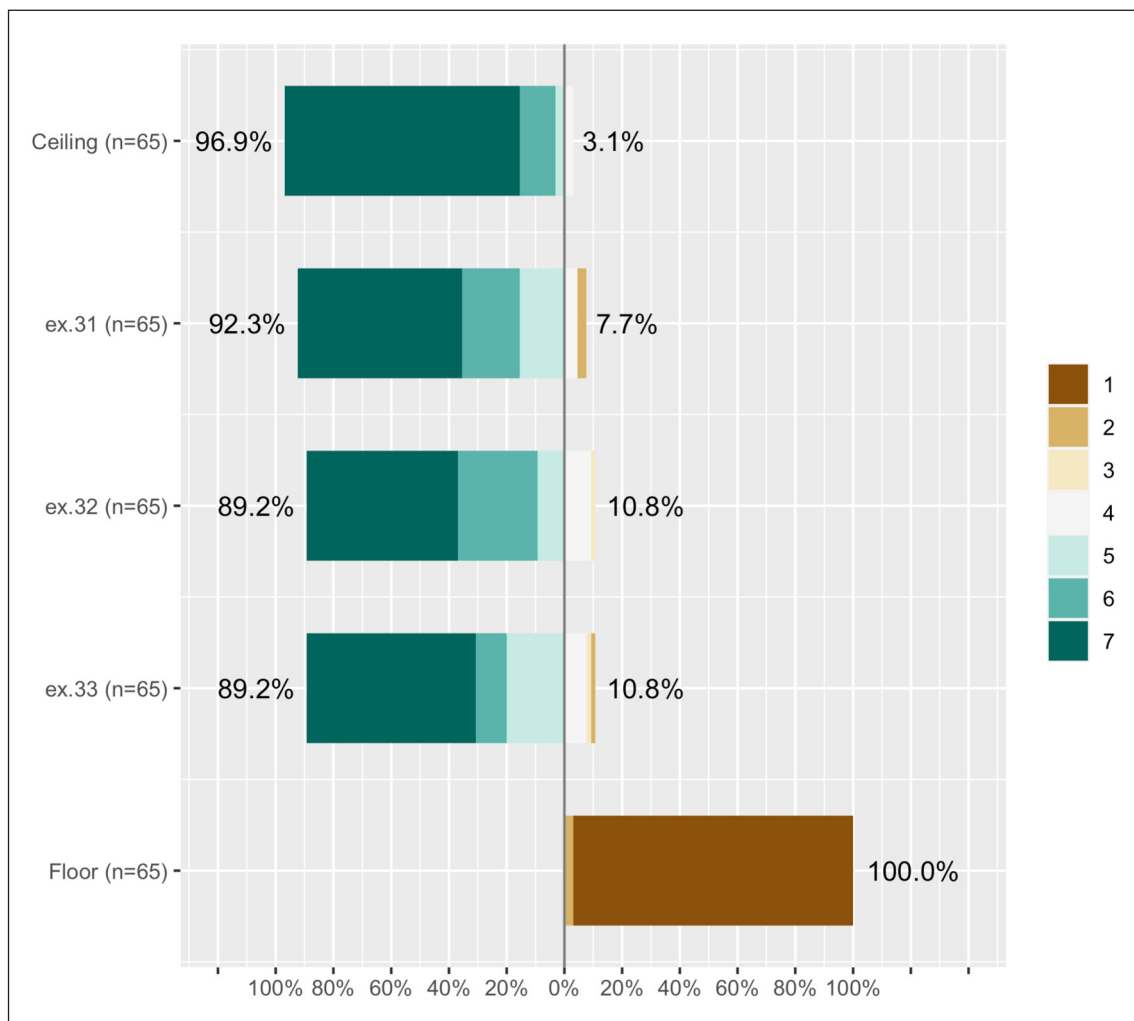the results in **Figure 2**, which shows that the sentences are acceptable.

Figure 2: Acceptability of sentences with preposed *mica* and overt subject.

Note that the acceptability of these sentences was tested with contexts eliciting the denial of entire predicate rather than the constituent denial of the immediately following subject, as exemplified in (34).

One theme that has not yet figured prominently in the discussion is the impact of regional variety onto these latter judgements. The dialectal area from the experiment did not show any difference in the acceptability of preposed *mica* preceding a subject. An ANOVA comparison between two ordinal mixed models was perfomed: one model did not contain the dialectal area and the one had the dialectal area as fixed effect. Again, the model with the lowest AIC (AIC = 424.84, Log Likelihood = –206,42) was the one without the dialectal area specified as fixed effect (model with dialectal area: AIC = 429,84, Log Likelihood = –203.64).

(34)   a.   Persino gli scienziati non sono sicuri di questo nuovo vaccino... Hai
             even   the scientists NEG are   sure   of this   new   vaccine   have.2SG.PRES
             sentito cosa hanno   detto?
             heard   what have.3PL said?
             'Even the scientists are not sure about this new vaccine... Have you heard what they said?'

       b.   Sì, ma mica gli scienziati potevano dire   "la probabilità è 0".
             yes but mica the scientists could.3PL say.INF the probability is 0
             'Yes, but the scientists could not say "the probability is 0".'

Based on the natural data and their acceptability, we have positive evidence that *mica* can be preposed before the subject. Furthermore, *mica* need not to have a narrow scope on the subject, but can deny the entire predicate. This evidence makes the movement of *mica* to CP still tenable.[12] With the data just showed, we do not want to claim that verb movement does not occur. Schifano (2018), for example, uses the impossibility of the order *mica > verb in the Teolese variety (near Padua) to show verb movement behaviour, we agree with Schifano on this point. However, we want to remark that the status of negator is also important when considering such variation. Let us assume that two closely-related Northern Italian varieties display the same type of high verb movement, like Venice and Gazzolo (near Verona). Venetian, differently from Gazzolese, can optionally have preposed *miga*.

(35)   Miga go   visto łe gondołe. (Venetian)
        mica have.1SG seen the gondolas
        'I haven't seen the gondolas at all.'

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[12] The reader could possibly wonder why the order subject > *mica* > verb is still possible, as in example (30) reported by Cinque, which was found equally grammatical. If *mica* can move to the CP field, as we claim, the subject must also be in CP to precede it, as in example (30). Indeed, this is the case: here, we argue that the subject is in a TopicP (cf. the Syntactic Extraposition principle by Cruschina 2010), following the traditional division by Rizzi (1997).

(i)   ForceP [TopicP *Maria* [FocusP *mica* [TopicP [FinP … *prende il treno*]]]]

(36) *Mia go visto le gondole. (Gazzolese)
      'I haven't seen the gondolas.'

If we have the same pattern of verb movement, then the ungrammaticality of (36) must be ascribed to the nature of the negative marker. Indeed, this prediction is borne out: Gazzolese, differently from Venetian, has a more grammaticalized *mica*, which can be used as standard negation instead of the presuppositional one (Magistro et al. 2022).

To sum up, we believe that the verb does move higher or lower in the clause, but *mica* can also be fronted to CP when it is able to convey a specific meaning (see also Bobaljik's 1999 criticism on the position of *mica* and verbs).

The idea that adverbs can move to CP was already proposed by Garzonio & Poletto (2014): they put forth the hypothesis that negative adverbs and some of the aspectual adverbs have a quantificational feature that is matched at the focus position in CP. If we assume a quantificational nature of *mica* (Tubau 2020; Mayer 2021), then the movement is motivated along the lines of Garzonio and Poletto's proposal. The movement of *mica* to a higher position was also proposed in a footnote in Coniglio (2009), but, as landing site the the proposed slot is the one usually occupied by the preverbal negation *non*. Given the data we have just showed, and the points raised by Poletto (2020), we argue that the landing site of preposed *mica* is in the FocusP projection, activated by FAIP. We will also illustrate other syntactic tests in section 4.3

We will now turn to the case where *mica* is clause-internal and does not move.

4.2 Contrastive *mica*

Before we turn to the syntactic mechanisms involved in the internal *mica*, we need to say a few words about its acceptability. *Mica* does involve a contrast with a salient proposition in any case, regardless of its position. However, as we have seen from the first acceptability experiment, when the proposition is not explicitly activated, internal *mica* is more acceptable compared to the preposed one, as already suggested by Cinque.

This result poses two challenges: first, the higher acceptability scores of internal *mica* compared to preposed *mica* call for an explanation. Secondly, we might want to find a reason why internal *mica* in out-of-the-blue did not score extremely high rates, as it happens when it occurs with a proposition explicitly mentioned in the previous context. The problem is crucial in order to go further in the discussion, since sentences judged by the speakers as not completely acceptable might seem to not offer solid grounds for building syntactic hypotheses.

For the case of internal *mica*, the proposition can be retrieved by accommodating it by resorting to world knowledge, or presupposing that the proposition belonged to speaker's expectations, or other repair strategies. We use the term 'accommodation' in the classical sense of Lewis (1979), i.e. as a repair strategy for a missing presupposition. The hearer will accommodate missing

information in order to meet the communication goals (see Beaver & Zeevat 2007 for a formal review). In our case, the hearer can force p to spring into existence using adequate strategies, and rescue the denial meaning of internal *mica*. However, as Beaver and Zeevat remarked for accommodation, "speakers do not accommodate everything destructively" (*sic*), but only with specific discourse/pragmatic requirements. Among these, they listed Gazdar's principle (after Gazdar 1979): "when in conflict, implicatures always prevent global accommodation (i.e. projection) of presuppositions". This principle can be applied to corrective focus. The corrective implicature of focus fronting encodes rejection specifically against an aforementioned proposition, thus the speaker cannot accommodate the missing proposition with repair strategies: an antecedent p must be explicitly available by definition. The corrective implicature and the implicature engendering the missing propositions are then in contrast, and accommodation is prevented, leading to a pragmatic infelicity. The same effect does not hold with the simple contrastive implicature: in this case, the predicate p can indeed be engendered.

Another functional principle proposed by Beaver and Zeevat, which is relevant for the case at stake, is the Discourse Record Implicature. According to this, presuppositions about what is in the discourse record may not be accommodated. Accordingly, the accommodation may or may not happen, depending on the kind of the context reconstructed by the speaker. Such differences in the accommodation of the discourse record might explain why the sentences with internal *mica* and unactivated p scored more medial values instead of being judged as completely grammatical.

When the proposition p is not explicitly mentioned, but it is accommodated (as, for example, in forms of speakers' expectation), we clearly cannot have a corrective implicature. Syntactically, this translates to FAIP not carrying a [corr] feature and hence not activating the dedicated focus projection for movement. As a consequence, *mica* stays *in situ*. How to describe the feature bundle of FAIP in this case, then? We extend Bianchi et al.'s (2015) and Cruschina's (2021) ideas for this case of focus-associated implicature. For FAIP, they define only a mirative implicature and a contrastive one, respectively activated on different features within FAI°. We argue that non-corrective *mica* is also characterized by its own feature which triggers distinct syntactic mechanisms. In other words, a focus associated implicature different from the corrective one is conventionalized. We propose that for non-corrective *mica* we have the conventionalization of a contrastive implicature.[13] We adopt this dichotomy from Bianchi & Bocci (2012), where they make such distinction in order to account for focus fronting in Italian. They argue that

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[13] There are also diachronic reasons to believe that *mica* in general associates with conventionalized implicatures. It is first introduced as minimizer (lit. 'crumb'), denoting the lowest point on a pragmatic scale. Under negation, it would open up the scalar implicature that the predicate does not apply even to its lowest degree. Through cycles of semantic and syntactic reanalysis, the scalar component got lost but the implicature $\neg p$ was conventionalized (Breitbarth et al. 2020). At this point, we believe that, when fronted, a conventionalized implicature of rejection emerged as specialized. However, in this paper we aim at finding synchronic evidence for our system, we will leave diachronic considerations at the end of the paper.

only corrective focus can undergo fronting, whereas the contrastive one must stay *in situ*. Their example of contrastive focus is reported here in (37).

(37)   a.   Maria era molto elegante l'altra   sera a teatro.
            Maria was very   elegant   the-other night at theatre
            'Maria was really elegant, yesterday night at the theatre.'

       b.   Si   era messa   un ARMANI, non uno straccetto di   H&M.
            REFL was put.3SG.F an Armani,   not a   cheap-dress from H&M
            'She wore an Armani dress, not a cheap dress from H&M.' (from Bianchi & Bocci 2012:2)

In sentence (37), focus-marking applies to Armani, deleting the other alternatives (in their example the other alternative is overt: a cheap dress from H&M, but its presence is optional and can be easily accommodated). In this case, contrast is conveyed, but the alternative does not come from a previous turn or information. Similarly, we argue that this is the case for non-corrective *mica*, the alternative is evoked within the same communicative turn and *mica* expresses contrast with *p* instead of correction. We will return to the semantic details of this in section 5.

Concerning its exact positioning, two hypotheses can be made about contrastive *mica*. First, we can simply assume that it stays *in situ* in the core part of the sentence, as adjunct to the verb. If this is the case, it could occupy a position in its specific projection in the negative circuit, MinimizerP (in Poletto's system). Following the description of TP as two fields, High Adverb Space (HAS) and Low Adverb Space (LAS) (Ledgeway & Lombardi 2005; Schifano 2018), built upon Cinque (1999), *mica* is base-generated at the left boundary of LAS before the T (anterior) phrase occupied by *già* 'already'. Similarly, Poletto (2020) reviews the possible merging positions of negative elements and puts the presuppositional negation in a T-anterior position.

For a discussion on the merging position of internal *mica*, based on its precedence relationship with adverbs, see also the extensive work by Manzini & Savoia (2005) and Poletto (2017; 2020). Alternatively, if we want to justify the non-corrective focus meaning associated with *mica*, we can resort to a low focus projection in the low periphery (à la Belletti 2004). According to Belletti, the vP Left Periphery possesses a specialized projection for new information focus, an interpretation which is not available in the periphery of CP (see Poletto & Bocci 2016; Badan & Crocco 2021 for a review on low focus). For the current discussion, we can dispense of a low focus movement for contrastive *mica*, since its interpretive effects are already present in the numeration of FAIP and do not need movement. Furthermore, the low focus position in the vP Left Periphery would be too low, considering that internal *mica* precedes *già* in TP. Hence, we adopt Poletto's final schema, which comprises a dedicated projection for clause-internal *mica*. Back to our discussion, we claim that *mica* encodes by default the conventionalization of contrastive focus, in particular it would create a contrast with *p* by proposing the alternative ¬*p*. Such conventionalization is syntacticized by a FAIP head, which would give interpretive instructions on the type of focus via

a dedicated feature. However, if *mica* is used to correct an antecedent proposition, then we add the conventionalization of a corrective focus in FAIP, a [corr] feature is attributed to enrich the structure, which would activate a focus projection for fronting.

To sum up, according to the activation of alternatives and thus the type of focus (encoded in different values in the FAI head), we can explain the different positioning and pragmatic requirement of *mica*. The lower position is accessible both by corrective (against active propositions) or contrastive (presenting a proposition), whereas the higher slot in C is available for the corrective reading only. We will address the issue of the two possible merging sites of corrective *mica* in section 6.

4.3 Syntactic tests

Adopting a dedicated FAIP operator, responsible for the licensing of different types of *mica* might seem superfluous: when *mica* is preposed, it would be enough to posit an activated FocusP in the high left periphery, triggered by the active propositions. More generally, in this paper, the architecture proposed by Bianchi et al. has been extended based on the similarity of corrective implicature, but we have not provided any specific test. In this section, we want to point some reasons why we cannot dispense the structure from a left-peripheral operator FAI.

As Cinque noticed, *mica* cannot appear in some kinds of subordinates, for example attributive relative clauses (38) and conditional protases (39) among others. We report Cinque's examples here (Cinque 1999: 102).

(38) *Mi   ha regalato quei libri   che non leggeva   mica.
       to-me has gifted   those books that NEG read.IMPF.3SG mica
       'He gifted me those books that he didn't read at all.'

(39) *Me   ne   vado, se non arriva mica tra cinque minuti.
       REFL thereout go.1SG if NEG arrives mica in five   minutes
       'I will leave, if he doesn't come in five minute at all.'

The marginality of these sentences was also replicated in the second acceptability test, as shown in **Figure 3**: the majority of the speakers rejected the sentences even though the judgements of (38) are less clear-cut.

Cinque's point to account for these cases depends quintessentially on meaning: these types of sentence are typical of irrealis mood which is incompatible with the type of commitment lexicalized in *mica*. These motivations are straightforward and convincing, but the syntactic model sketched here allows us to explain these restrictions.

If we take, for example, restrictive relative clauses and conditionals, the literature proposed that they cannot host focus fronting because of intervention effects with other operators licensing

the sentence type (Haegeman 2010). However, this is not sufficient to explain the limitations on *mica*: if such restrictions are given because of intervention effects at the high Left Periphery (potentially blocking the movement to FocusP), then the IP should be intact, allowing *mica* to appear at least postverbally. Notably, this is not possible, as shown in (38) and (39). Instead, the reason for the syntactic crash might be attributed to higher mechanisms, in a CP projection which licenses *mica* regardless of the position of the latter, FAIP. By adopting Haegeman's ideas, these clause types are realized by the extraction of an operator to the left periphery; at this point there is reduced access for other operators because of locality effects. The licensing of some clause types such as restricted relative clauses and conditional protases will then inhibit a FAIP projection because of intervention effects. In turn, no type of *mica* is licensed. As control, when we look at other embedded contexts with bridge verbs, which allow the subordinate to possess a fully-fledged CP with all respective projections (Benincà & Poletto 2004), *mica* can be merged, as shown by example (40) reported directly from Cinque (1976) and judged more acceptable in our dataset (the plot in **Figure 3**).
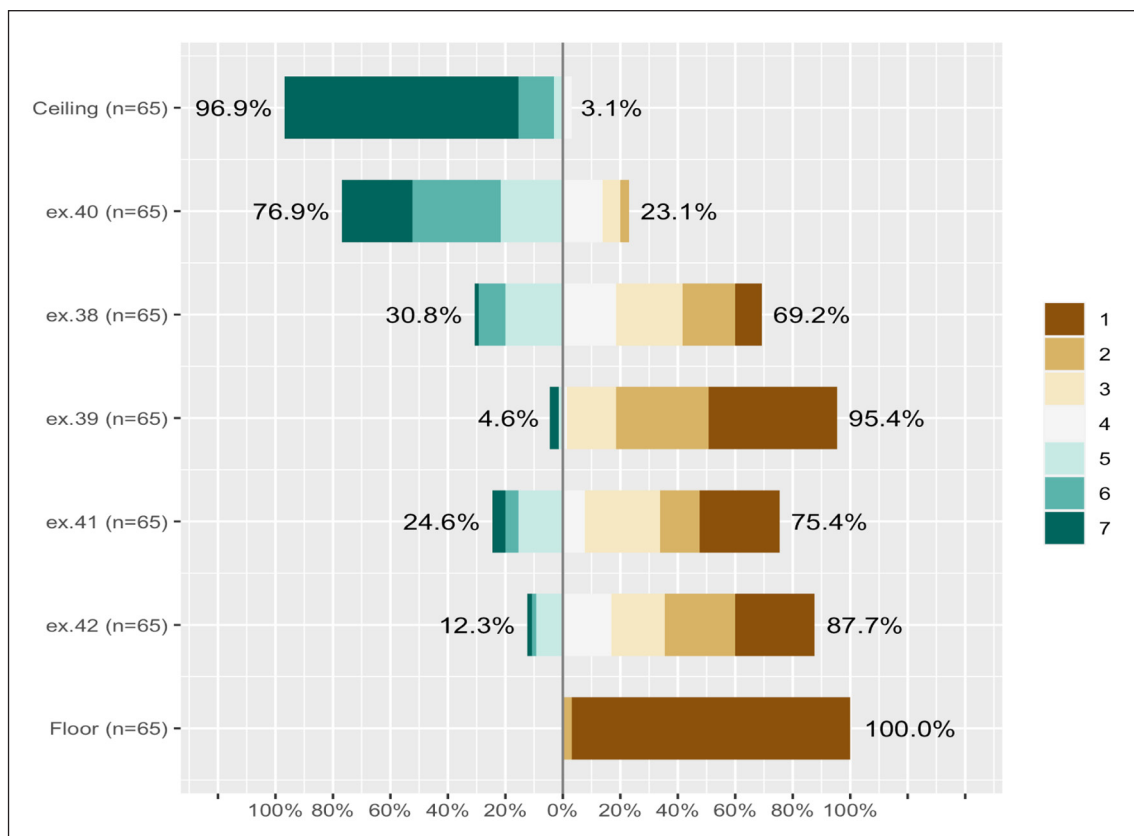

Figure 3: Acceptability of *mica* with a bridge verb (ex. 40), if-clause (ex. 38), relative clause (ex.39) (Cinque's examples), with internal and preposed *mica* in wh-questions (ex.41 and 42).

(40) Disse   che non sarebbe   mica venuto.
      said.3SG that NEG be.COND.PRES.3SG mica come
      '(s)he said (s)he wouldn't have come.'

Regardless of the type of focus involved, *mica* is necessarily activated by the FAI projection: in the absence of the latter, the derivation crashes. We take this piece of evidence to show that a left peripheral operator is necessary for both types of positions. Moreover, in a similar way as what happens with focus constituents, sentences with *mica* do not allow wh-movement altogether, regardless of its position (Erteschik-Shir 1986; Bocci et al. 2021 for a discussion), as reported in **Figure 3**.

(41) *Chi non può   mica venire?
      who NEG can.3SG mica come.INF?
      'who cannot come at all?'

(42) *Chi mica può venire?
      'Who cannot come at all?'

In section 6 we further explore the hypothesis that *mica* associates with focus, based on independent studies on the diachronic mechanisms of Jespersen's cycle. We will provide additional arguments supporting the adoption of a complex model with a FAIP and focus projections for the syntax and interpretation of *mica*. We will now try to define a semantic model for contrastive and corrective *mica* to justify their focal properties.

5 The semantics of preposed *mica*

In order to further examine the parallelism between focus fronting and *mica* preposing, a semantic analysis is convenient. In particular, we address the difference between the contrastive and corrective focus and give a theoretical framework which is able to capture their difference in pragmatic requirements. Based on a two-tier alternative semantics (Rooth 1992), a given expression A has two interpretive layers, one ordinary meaning $[\![A]\!]_0$, which corresponds to the usual denotational entry, and a focus meaning $[\![A]\!]_f$ which is the set of relevant alternatives.

(43) I have met $[\![$Marina$]\!]$
      $[\![$Marina$]\!]_0$ = Marina
      $[\![$Marina$]\!]_f$ = {Marina, John, Kim, Alexander...}

When we focus a certain constituent, not only do we apply its meaning to the rest of the sentence, but we also operate on a set of alternatives. Here, focus is first evoking a set of alternatives and then exhaustifying them by picking the only alternative which applies to the proposition, as

exemplified by (44).[14] Krifka (2008; 2015; 2017) captured this effect, inasmuch as the function of focus corresponds to the diminution of alternatives in the discourse situation.

(44) I have met ⟦Marina⟧
  ⟦Marina⟧$_0$ = Marina
  ⟦Marina⟧$_f$ = {Marina, ~~John, Kim, Alexander...~~}

With the focus-layer only, the focused constituent can make a contrast with the relevant alternatives, without necessarily implying the correction of a previous proposition.

Bianchi & Bocci (2012) illustrated this in example (45), where the contrast occurs within the sentence. In the example, a negative tag may be optionally added to represent a contrasted alternative.

(45) a. Maria era molto elegante l'altra sera a teatro.
      Maria was very elegant the-other night at theatre
      'Maria was very elegant at the theatre yesterday night.'

   b. Si   era messa   un ARMANI, non uno straccetto di H&M!
      REFL was put.3SG.F an Armani, not a   cheap-dress from H&M
      'She wore an ARMANI, not a cheap dress!'

By applying our analysis to Armani, we could derive the structure reported in (46).

(46) ⟦Armani⟧$_0$ = Armani
  ⟦Armani⟧$_f$ = {Armani, ~~H&M dress, Zara dress...~~}

Hence, the focus layer does not have to imply a correction: the alternatives are locally activated and exhaustified. In short, one alternative is simply contrasted against others. Bianchi and Bocci found experimental evidence that such broad definition of contrast is not available in Italian when the constituent is fronted: that slot is specialized for correction.

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[14] A caveat is important here, as reported by Chierchia (2013), there are two types of focus exhaustification, depending on the relations among the alternatives. The first type of focus is the one illustrated above, where the alternatives are exhaustified by a covert focus operator O(nly). The second type would not demote the other alternatives, but instead it would pick the less likely alternative under a covert E(ven) operator.

(i) Can you believe it? They have invited MARINA!
   ⟦Marina⟧$_0$ = Marina
   ⟦Marina⟧$_f$ = {Marina, John, Kim, Alexander}
   Marina is the least likely alternative

Cruschina & Bianchi (2021) label a similar case under the mirative meaning, resorting to a similar ranking of possible words compatible with a likelihood degree. For the current discussion, we will not take into consideration this instance of focus.

When we apply the two-layer approach to our specific case, the focus operator does not act upon the lexical meaning of the focused item, but on whole clauses (Lohnstein 2016).[15] Contrastive *mica* lexicalizes a contrast against an alternative proposition *p*, which can be activated locally and exhaustified by the focus layer, whereas the ordinary meaning introduces only the denial of the predicate. Not requiring the activation of the alternative in the previous turn, speakers can accommodate that *p* was expected or presented previously.

(47) $[\![mica(p)]\!]_0 = \neg p$
        $[\![mica(p)]\!]_f = \{ \neg p, \cancel{p}\}$

On the other hand, we associated a corrective focus implicature for preposed *mica*. We intend corrective focus as a special type of contrast. Not only are alternatives exhaustified, but they come from previous dialogical turns. In order to top up this conversational dynamic, we have to go back to the proposal of Bianchi and Bocci for fronted foci. They based their ideas on Van Leusen (2004), where the background of a corrective claim, in order to be contrasted by focus, must be presented in an antecedent proposition. To formalize this, they propose a specific function *incomp(p, p', C)*, which signals that a previous proposition *p* is not compatible with a new updating proposition *p'* in a given context *C*.

(48)   *incomp*$(p, p', C) \leftrightarrow C \models p \wedge (C + p' \models \neg p)$

By combining the definition in (48) with the framework of the focus layer, the corrective proposition *p'* has an alternative *p* in its set of focal alternatives, which was already introduced in the context. Such alternative *p* is incompatible with the compositional meaning of the corrective *p'*.

(49) $\exists p \in [\![p']\!]_f [p \neq [\![p']\!]_0 \wedge$ *incomp*$(p, p', C)]$
        (from Bianchi and Bocci: adapted for the current discussion)

For illustration purposes, we apply this to the prototypical case of focus fronting in (50). The alternative *p* is presented in the context *C*, indicating that Giulio was invited (a). The context is then updated with *p'*, indicating this time that Marina was the one invited (b). The type of corrective focus implicature encodes *p* as incompatible alternative with respect to *p'*(c), entailing ¬*p*, contrarily to what has been previously asserted in the context (d).

(50)   a. $[\![p]\!]_0 =$ invite(Giulio)
        b. $[\![p']\!]_0 =$ invite(Marina)
        c. $[\![p']\!]_f = \{$Marina, ~~Giulio~~$\}$
        d. $C \models p \wedge (C + p' \models \neg p)$

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[15] As we already mentioned, *mica* can also work as denial of constituents. In this case, its entry would be $[\![mica(x)]\!]_f$ = {~~x~~, y, ...}. Under this light, the behaviour of *mica* can be compared to that of focus sensitive particles (Cruschina 2022).

In short, the contrast between alternatives still holds, but the activation of the alternatives in the context is specified in the type of focus. In the merely contrastive focus, incompatibility with an antecedent is not a requirement (cf. example (45)).

We attribute the same difference to corrective *mica*, which is also specialized in rejecting a contextual proposition. For corrective *mica*, we top up the focal layer with the antecedent incompatibility interpretation.

The implementation of these definitions in formal terms are not trivial nor circular. First, they show that focus is always involved, both in the contrastive and corrective case. What changes is the discourse state of affair, which feeds the FAIP. Furthermore, we can now derive more formally the crash of the corrective extra layer with the accommodation of *p*. For this kind of focus, the context must be endowed with *p* by definition.

(51) $C \models p \land (C + [\![\text{mica}\ (p)\ ]\!] \models \neg\, p)$

The approach sketched here is compatible with previously proposed semantic definitions, e.g. *mica* as FALSUM (Frana & Rawlins 2016), inasmuch as it creates contrast with a salient proposition. While they argue for the accommodation of propositions with *mica* regardless of its clausal position, we argue that for corrective *mica*, FALSUM must scope over a prejacent *p* and cannot accommodate it. Interestingly, the dichotomy between corrective and simple contrast is somehow similar to what has been proposed in the classic paper by Kiss (1998) where two types of distinctive feature play a role in defining the type of focus, [±exhaustive] and [±contrastive]. Without committing strictly to this framework, we can define the corrective *mica* as being both [+exhaustive] and [+contrastive], where the last feature encodes the correction of explicit information.

6 Further theoretical consequences

Before concluding, we outline two research paths that can be linked to the theory that has been proposed here. To begin with, we discuss the issue of optionality of movement. Focus preposing is optional in Italian (as well as in other Italo-Romance languages): focalized constituents can appear *in situ* or *ex situ*. If we suppose that *mica* preposing is an instance of focus fronting, the optionality of movement would also be found for this particle. Secondly, we described both internal and preposed *mica* as having association with focus: previous literature used focus features in the diachronic trajectory of *mica* or similar elements. The fact that similar conclusions have been reached via independent data and methodology suggest that the role of focus promises to be a fertile testbed in understanding presuppositional negation.

6.1 On the optionality of corrective *mica*

As we said, while contrastive *mica* can occur only internally, corrective *mica* can appear also preposed. Similarly, an XP consistuent under contrastive focus can appear only internally, whereas

a corrective-focused XP may occur either internally or fronted. The optionality of movement for corrective focus is problematic within a generative approach, since there is no clear structural / semantic difference within the category of corrective foci.

By maintaining the parallelism between preposed *mica* and focus fronting, it might be useful to recall the solution put forth by Bianchi et al. (2015) and Bianchi (2019) on the optional movement of corrective focus. Bianchi (2019) sets out two equally important principles which produce constant tension between the "*in situ*" and "*ex situ*" constructions. The fronted form follows a scope principle, which requires the operator to be spelled out in its scope position; the clause-internal construction satisfies a syntax-prosody interface rule, the rightmost principle, which requires the nuclear pitch accent to be assigned to the rightmost position. A closely-related explanation was successively put forth by Bianchi & Bocci (2012), where the double positioning is based on the tension between the pragmatic markedness of focus and prosodic requirement, respectively rooting for fronted focus and *in situ* focus. They based their idea on Bobalijk's (2002) proposal that in a movement chain, either the lower copy or the higher one can alternatively be spelled out, according to the type of movement (overt or covert). Bianchi & Bocci's proposal disposed of covert movement, but rather suggests that the lower copy can be spelled out to meet the interface needs with prosody. This approach has a crucial impact on the syntax-prosody interface, inasmuch as it would imply a "lookahead model", where prosody does not map directly what came after syntax in a modular way, but can already intervene in the earliest stages of derivation.

More specifically, the default focus marking on the rightmost element would lead to overgeneration in the case of *mica*, where it may appear at the very end of the sentence. However, clause-final positioning is not grammatical in Italian, as found in the data from the second acceptability experiment, visually reported in **Figure 4**.

(52)   *Non ha invitato Marina mica.
        NEG has invited Marina mica
        '(s)he didn't invite Marina at all.'

Titov (2020) explained the alternative positioning of corrective focus in terms of competition between two principles, as well. According to Titov's formulation, the lower form follows the economy principle which favours Merge over Move (Chomsky 1995), whereas the structure with movement serves the function of mapping a more marked contrastive meaning (the corrective reply). In particular, she argues that Russian low focus constituents can be ambiguous in their informational import, i.e. they can be either informational or contrastive with different scope size; the movement to CP is then justified as a disambiguation strategy to remark the contrastive meaning. In conclusion, she argues that such movement is licensed by the quantificational property of the constituent over a set of discourse alternatives, a specialized meaning disambiguated across

all the other possible interpretations which were available prior to the movement. The idea that preposed *mica* emerged as disambiguating strategy might find some support in historical data. Visconti (2009) noticed that preposed *mica* only starts being attested in the XIX century. Independently, she reports that during the same century, *mica* moved from a set of monological functions (contrast, textual linker, repetition) to the specialized contrastive function in dialogues. In **Table 1**, we report these results from the inspection of historical corpora.
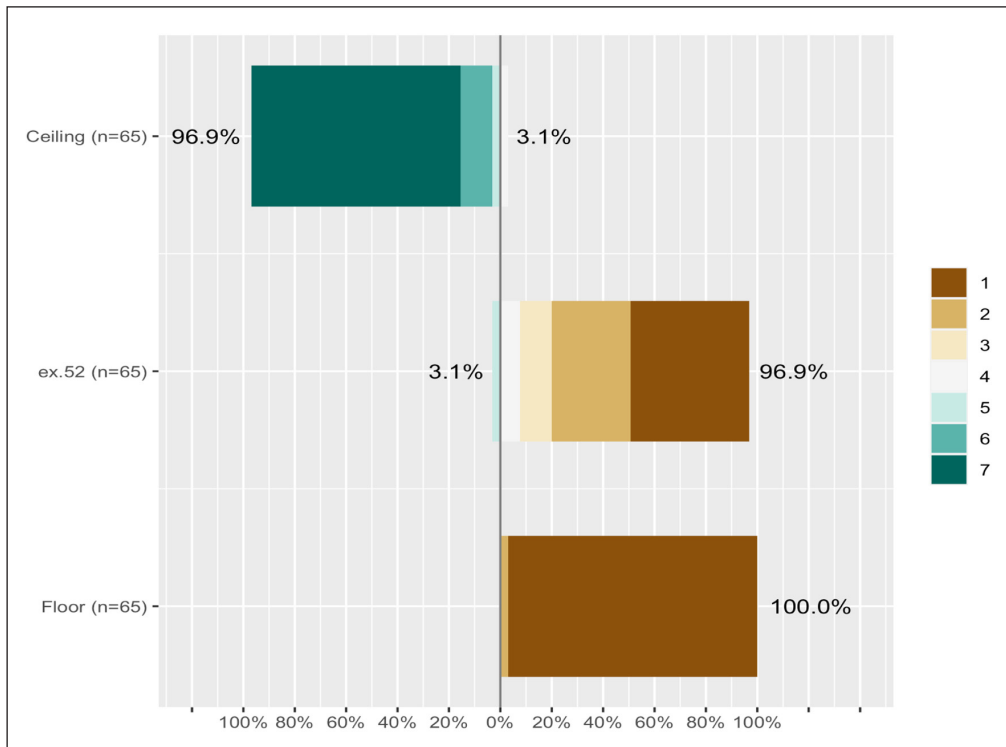

Figure 4: Acceptability of sentence (52) with *mica* appearing after the object.

	XIII–XIV	XV	XVI	XVII	XVIII	XIX	XX
Monological	73	33	33	25	53	5	16
Dialogical	27	67	67	75	47	95	84

Table 1: The type of contexts in percentage (either monologues or dialogues) in which *mica* appearead during the centuries in the LIZ and TLIO corpora (Visconti 2009: 943).

It is not unreasonable to suspect that the preposed *mica* emerged as disambiguating strategy for corrective denial during the same period in which this particle started to specialize in dialogical contexts.

In short, we believe that *mica in situ* would bear the contrastive implicature (and if it is the case, the corrective one) and the fronted one would specialize exclusively in the corrective meaning, where optional movement would be a 'disambiguating tool', à la Titov.

6.2 Some diachronic speculations

The idea that *mica* is associated with focus is not entirely new, in particular in diachronic studies. For instance, Garzonio (2019), based both on historical and contemporary data, sketches an explanation in which the Old Italian *né mica* is situated in an Existential Phrase (ExistP) below a FocP. In his analysis, *mica* would initially occupy ExistP because it is a quantifier operating on events, FocP, on the other hand, would be the place where the negative coordinator *né* was merged. *Mica* was then reanalysed upward in the functional spine, occupying the specifier of FocP while *né* was lost in Standard Italian. Hence, Garzonio's analysis of *mica* already pointed at sensitivity with focus.

(53)   Stage 1 (Old Italian): [FocP né [ExistP mica]]
         Stage 2 (Modern Italian): [FocP mica [ExistP mica]]

Interestingly, there is some research that may lead us to think that *mica* had already focus sensitivity at the beginning of Jespersen's cycle (Jespersen 1917; Breitbarth et al. 2020 for a recent review). To begin with, *mica* started its life as minimizer, denoting the lowest point on a pragmatic scale (*cf.* Horn 1989), in particular, in Latin, it used to mean 'crumb'. Now, similar minimizers have been claimed to be associated with the focus particle *even* (Heim 1984; Horn 1989; Giannakidou 2007; Kuno 2008; Chierchia 2013). Under negation, minimizers would exhaustify all the other alternatives lexically triggered in their pragmatic scale. To take a clearer example, if one has not eaten a crumb of bread, then no bigger alternatives (a slice, a loaf and so on) are eaten. This exhaustifying effect would be conventionalized under a focus feature, in line with the operational definition we provided for focal operations. For reference, we provide an example in (54), showing a tentatively internal structure for the minimizer.

(54)   He didn't eat a crumb!
         Not [FocP even [Foc] [NumP [Num a] crumb]]] (adapted from Tubau 2020)

Batllori (2016); Batllori & Hernanz (2013) started to bridge the passage between a negative minimizer and an "Emphatic Polarity Particle", arguing that the latter are licensed by a complex machinery with a [iNeg] feature and a Focus Operator that encodes the meaning [same]/ [reverse], or a Force Operator that encodes [objection].

Gianollo (2020), analyzing the diachrony of Italian *nessuno* emphasizes the role of focus features. This NPI was originally emphatic (It. *nessuno* < Lat. *Nec ipsum unum, lit.* 'not even

itself one'), internalizing a DP focus projection, connected to a higher focus operator. More interestingly, Gianollo (2021) applies similar considerations to the Latin negator *non*, in comparison with the older negator *ne*, which was replaced in an earlier instance of Jespersen's cycle (Schwegler 1988). It is argued that *non* is merged in a high CP-focus position, where it is endowed with [iNeg] and [uFoc] features. Of course, a rigorous model which could account for the maintenance of a focus feature from the minimizer to the polarity focus is beyond the scope of this paper, as it would imply core discussions about feature acquisition and change. What we want to stress here is that the association of *mica* with focus, as a result of FAIP, fits in with independent or similar previous studies.

To conclude this section, we want to show some other cases where the diachronic passage between an emphatic polarity particle to simple negation is attributed to the loss of a focus feature. It has been claimed that in some cases of Jespersen's cycle the emergent negator is deprived of [focus] and turns it into the standard negator. For example, Simpson & Wu (2002) argue that French *pas* started life as a focus element, triggered by semantic reasons; eventually it turned into an element inside a focus concord shell and, at the end of the cycle, it became a negative concord shell, being a functional element with no specific pragmatic import.

Similarly, Breitbarth (2017) and Breitbarth et al. (2020) argue that Jespersen's cycle is fed by two economy principles, *Minimize Structure* (introduced by Cardinaletti & Starke 1994) and *Feature Economy* (Van Gelderen 2009), which impoverish the internal structure of the emerging negators under certain conditions. Not only do we attest a change in the interpretability of the formal [Neg] feature, but the negation markers do not necessarily convey a focal interpretation anymore.

Preliminary experimental evidence in Magistro et al. (2022) show that Gazzolese *mia* (originating from Latin MĪCA as well) does not necessarily interpret a focus feature at PF, inasmuch as less prominent pitch accents are found in this variety, in comparison to less grammaticalized varieties, such as Venetian and Paduan. All these works suggest that we might be on the right track in attributing focus sensitivity to Italian *mica*, and hence by resorting to a mechanism with a FAI projection and a lower FocusP. Future research would then benefit from the application of this theoretical model to diachronic data.

7 Conclusions

Starting from Cinque's (1976) observations, we showed that preposed *mica* has a specific denial meaning: it must scope over explicitly activated information. On the other hand, clause-internal *mica* has a more general contrastive meaning, it still expresses that a certain proposition is false, but it is not necessarily a conversational move which rejects an antecedent proposition. In this light, it is easier to accommodate the denied proposition by resorting to shared world

knowledge, presuppositions and similar accommodation strategies, explaining Cinque's observation. The difference in information structure constraints found empirical support both in an acceptability experiment and corpora of spoken Italian.

We have also sketched a formal model to account for these two constructions. Based on Bianchi et al.'s (2015) treatment of focus fronting, we argue that the behaviour of *mica* can be accounted in similar terms. In particular, we adopted their FAIP projection, which encodes specific types of focus and activates syntactic operations accordingly. As instantiated for Italian, a corrective feature on FAIP will activate a focus position which could host fronted corrective focus, this also comprises *mica*. Such movement cannot apply when contrastive *mica* does not scope over explicit predicates, where FAIP gives different syntactic instructions.

Logically, *mica* implies the denial of an alternative proposition *p* (or other alternatives, since it can be used for constituent negation), its exhaustification of alternatives grants it a focus association, but a further pragmatic enrichment can be added. If the alternative was proposed previously in the conversation, then we would have a corrective focus, which could be disambiguated by focus fronting. On one hand, this model addresses a poorly-studied construction, on the other, it opens up a series of future research paths (e.g. concerning optionality, diachronic pathways).

Of course, further research is required. Moreover, we did not address the role of [Neg] features. How shall we account for the distribution of *mica* as Negative Concord Item? One important point is that *mica* Italian behaves as an NCI in non-strict negative concord, requiring the antiveridical marker *non* only when it is licensed postverbally (whereas *non* may be dropped in northern varieties).

Furthermore, the considerations put forth regarding the relationship between Jespersen's cycle and focus in preposed *mica* are neither complete nor systematic. Since we resorted to a parallelism with focus fronting, the study of prosodic contours associated with *mica* is necessary and will certainly offer new insight on these constructions. We leave a refined diachronic model and prosodic analysis for our future research agenda.

More empirically, we aim at covering the different regional distribution of preposed *mica*, to see the impact of micro-variation on this phenomenon. In our paper, we based the acceptability of preposed *mica* on Cinque's points, Cerruti's corpus search and our own data, which consider Standard Italian, regardless of specific regional variation. In our survey we did not attest any significant difference among speakers of different areas. It could also be that we had too few speakers to say anything conclusive, we do not exclude that some regiolectal variation could be found, giving new insight on the topic.

Abbreviations

1 = 1st person, 2 = 2nd person, 3 = 3rd person, COND = conditional, F = feminine, FUT = future, IMPF = imperfect, INF = infinitive, M = masculine, NEG = negation, PL = plural, PRES = present, REFL = reflexive, SG = singular

Data Availability

The final datasets and code of analysis are available at https://osf.io/8qpny/ according to the FAIR principles (Findable, Accessible, Interoperable, Reusable).

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Competing interests

The author has no competing interests to declare.

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