

## **Pragmatic, syntactic and phonological evidence in favour of the grammaticalisation of Northern Catalan negative *poc/poca*.<sup>1</sup>**

Language of the contribution: British English

**Abstract:** This paper focuses on the current synchronic interspeaker variation of the Northern Catalan negative expression *poc/poca* ‘no, not’, which is examined from a prosodic, pragmatic and syntactic standpoint. Firstly, it offers a general description of the diachronic evolution of the quantitative adverb *poc* and its first grammaticalisation towards a negative emphatic polarity particle. Secondly, it points to the prosodic, pragmatic and syntactic behaviour of *poc* in Modern Catalan and sets the differences between the two main values within the community of speakers that use this negator: 1) a prosodically non-neutral pragmatic activator, and 2) a prosodically neutral pragmatically unmarked negator (generally used in Girona and Figueres). These differences are taken as evidence in favour of a current reanalysis and/or grammaticalization process of *poc*, in the latter speech variety, which involves its use as a negative head. Therefore, we put forward that in this variety *poc* has undergone a “specifier to head” grammaticalisation within PolP (thus, being an instance of van Gelderen’s negative cycle). Last but not least, our argument is crucially supported by a phonetic test on intonation that proves, without a shred of doubt, that *poc* and *no* pattern alike from a prosodic viewpoint, whereas the intonation contours concerning *pla* (a Northern Catalan negative emphatic polarity particle ‘NOT’) clearly diverge in the same contexts. Taking into account the general understanding on the grammaticalisation process itself (mostly

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concerning the intervention of semantic bleaching, pragmatic unmarking, prosodic or intonational unmarkedness and syntactic reanalysis), we conclude that the loss of pragmatic activation and the use of *poc* in non-emphatic contexts can be taken as proofs of the grammaticalisation of *poc* into a PolP head.

Keywords: Negation. Descriptive negation. Metalinguistic negation.

Negative emphatic polarity particles. Pragmatic actuation.

Grammaticalisation. Pragmatic unmarking. Prosodic unmarkedness.

## 1. Introduction

This paper focuses on the analysis of Catalan *poc/poca* 'no'. Syntactically, it argues in favour of the current process of grammaticalisation undergone by *poc/poca* and hypothesizes that it is being reanalysed as a head in the lines of van Gelderen (2004, 2008a, 2008b, 2009 and 2011). Crucially, our hypothesis is supported by two main arguments: pragmatic unmarking (Wallage 2013), on the one hand, and prosodic unmarkedness, on the other. Most decisively, the latter is verified by the results of a phonetic test on intonation that points out to a clear intonational difference between *poc* and other Catalan emphatic polarity particles, such as *pla* 'NOT'.

As shown in Batllori & Hernanz (2013)<sup>2</sup>, in the northern region of Catalonia, *poc/poca* (< PAUCU, Latin quantitative adverb) is used by some speakers as a negative emphatic polarity particle, see (1a). It coexists with *poc*, which still displays a quantitative value, see (1b), but they can be easily set apart by their syntactic behaviour.

(1) a. [NEGATIVE EMPHATIC POLARITY PARTICLE]

En Pere *poc* ho ha fet, d'estudiar per a l'examen.  
 the Peter NOT it has done, to-study for to the-exam  
 "Peter didn't do it. Peter did not study for the exam"

b. [QUANTITATIVE ADVERB]

En Pere ho ha fet *poc*, d'estudiar per a l'examen.  
 the Peter it has done little, to-study for to the-exam  
 "Peter did it little. Little did Peter study for the exam"

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<sup>2</sup> Notice that the syntactic framework adopted is Rizzi (1997) *Theory of Left Periphery*.

However, there is microvariation (or interspeaker variation) with respect to the values expressed by non-quantitative *poc*. Some speakers use *poc*, in (1a), as a counterpresuppositional emphatic polarity particle that conveys pragmatic activation (Dryer 1996) – see (2a) and (2b). Others, though, can also use it as a plain pragmatically unmarked negative marker without presuppositional value, especially in Girona and Figueres,<sup>3</sup> see (2c) and (2d):

(2) a. A: –On és en Joan?

where is the John

“where is John?”

B: –*Poca* ho sé

NOT it know<sub>1SPSG</sub>

“I don’t know it”

b. A: –Ja ha arribat en Pere?

yet has arrived the Peter

“Has Peter arrived yet?”

B: –No, *poca* ha arribat

No, NOT has arrived

“No, he hasn’t”

c. –Avui *poca* hi aniré al teatre; estic molt cansada

today not there will-go to-the theatre; am<sub>1SPSG</sub> very tired

“Today I will not go to the theatre. I am very tired”

[= –Avui *no* hi aniré al teatre; estic molt cansada]

d. A: –Què faràs aquesta tarda?

What do<sub>FUTURE</sub> this afternoon

<sup>3</sup> On the surface, in Pla de l’Estany –see Rigau 2004– and the area of Ripollès, *poc* triggers pragmatic activation and is still an emphatic polarity particle, whereas in the regions of Gironès and Empordà a grammaticalisation process is attested.

“What are you going to do this afternoon?

B: *–Poc ho sé què faré [= –No ho sé què faré]*

Not it know what do<sub>FUTURE</sub>

“I don’t know what I am going to do.”

Notice that in (2a) the first speaker’s expectation is that B knows where John is, and in (2b) speaker A presupposes that John is at home, which means that both examples are discourse related and imply a metalinguistic negation with pragmatic activation (that is the activated proposition is related to the preceding discourse and may confirm or refute the earlier proposition). However, (2c) and (2d) can be uttered out of the blue in discourse-new propositions. Hence, we put forward that in the latter variety (that of Girona and Figueres) *poc/poca* is used as a negative head that has undergone a “specifier to head” grammaticalisation within PolP, in terms of van Gelderen (2004, 2008a, 2008b, 2009 and 2011). In our belief, it is another instance of the negative cycle explained and widely illustrated by this author.

As for the fact that the grammaticalisation process takes place within PolP, the examples in (3) show that *sí* and *poc/poca* (in contrast with *no*) cannot be ascribed to NegP, because they cannot occur below the connective *de*, which is generally taken as the head of FinP – compare (3a) with (3b) and (3c). So that, they must be attributed to the left peripheral polarity domain (i.e., PolP). That’s the reason why we posit that the grammaticalisation is a reanalysis within PolP.

(3) a. El simple fet [<sub>FINP</sub> de [<sub>NegP</sub> *no* [<sub>VP</sub> poder caminar]]]

The simple fact of not be-able-to walk

“The simple fact of being incapable of walking”

b. \*El simple fet de *sí* poder caminar

c. \*El simple fet de *poca* poder caminar

Our hypothesis gains further support from two main facts: 1) the loss of pragmatic activation (i.e., pragmatic unmarking), which according to Wallage (2013) is “a consequence of grammaticalisation rather than [...] a causal factor in the grammaticalisation process itself”, and 2) the use of *poc/poca* in non-emphatic contexts (that diverges from that of the negative emphatic polarity particle *pla*) in speakers that grammaticalize it. In particular, the negative emphatic polarity particle *pla* 'NOT' shows a similar behaviour with *poc/poca* concerning the possibility of licensing negative polarity items –see (4a) and (4b), but it displays a different behaviour in some relevant aspects<sup>4</sup>: it conveys a presuppositional value (i.e., pragmatic activation); and it is emphatic in nature and, accordingly, not equivalent to the negative marker *no*, see (4c).

(4) a. La Maria *poc* ha dit mai això.

the Mary not has said never this

“Mary has never said this”

b. La Maria *pla* ha dit mai això.

the Mary NOT has said never this

“Mary has NEVER said this”

c. A: –Tinc por que en Joan li ho digui tot.

take fright that the John to-him it said all

“I am afraid John will tell it all to him”

B: –En Joan *pla* dirà res. [≠ –En Joan *no* dirà res]

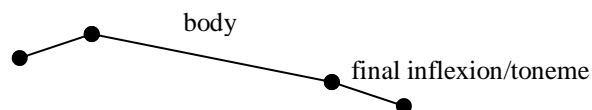
the John NOT will-say anything

<sup>4</sup> See Batllori (2013 / Forthcoming) for more information on the difference between *pla* and *poc/poca*. For instance, the former cannot co-occur with evidential adverbs, whereas the latter can, as shown by the contrast between \**Evidentment que pla ho farà* and *Evidentment que poc ho farà* “Evidently, he won’t do it.”

“John WON’T tell anything”

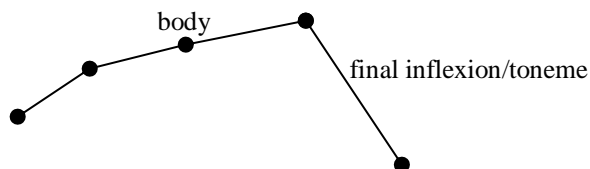
From a phonological standpoint, we also show that *poc/poca* behaves as a conventional negative marker, such as *no*. As known, negation sequences are comparable to declarative intonation patterns. In Catalan, the structure of the typical declarative melodic pattern displays a descending body and final inflexion (vid. Martínez Celdrán 1994, Prieto 1999, Julià-Muné 2005, Font Rotchés 2007). Accordingly, a non-emphatic negative statement would accommodate to (5):

(5)



If *poc/poca* were emphatic, (2c), for example, it would exhibit a different pattern from that in (5). As illustrated in (6), the body and the final inflexion of the curve would be ascending, instead of being a descending, and the final toneme would show an abrupt descending shape (cf. Font Rotchés 2007: 118). It is worth considering that emphatic patterns should display a rising curve the peak of which must correspond to the focused element: according to Prieto 2005, 2014, the emphasised syllable should present a L+H\* pitch accent, while in neutral declaratives, the most common prenuclear pitch accents should be L+>H\* -see §3.

(6)



To carry out the phonetic test on intonation we recorded 12 speakers who were asked to produce 6 utterances containing negative sequences with

*poc/poca* in non-emphatic contexts and 6 more with the negative particle *no*. Besides, they were asked to produce 5 utterances with the emphatic negative particle *pla*. Hence, we could contrast their intonational features with those of the statements with *poc/poca*. The melodic curves obtained provide us with evidence to pose that *poc/poca* is becoming a polarity head.

## 2. Pragmatic and syntax of *poc*

### 2.1 Diachronic evolution of the quantitative adverb *poc*. First grammaticalisation towards a Negative Emphatic Polarity Particle

As shown in Batllori & Hernanz (2008, 2009, and 2013), nowadays *poc* ‘no/not’ displays a negative meaning and contrasts with the quantitative value which is still retained by its homophone *poc* ‘little’ –see (1). The development of this value is fully documented in Old Catalan texts and originates in quantificational emphatic uses of the quantitative adverb –see (7).

(7) e pensà-se que *poc* li profitaria la sua probretat volenterossa.

and thought-<sub>PRON</sub>. that little him would-benefit the his poverty voluntary  
 “and thought that his voluntary poverty would serve him little (if the richest of the world were rewarded by Saint Gregory).”

[CICA: *Vides de Sants Rosselloneses*. XIIIb. Pàg. 301]

Following the syntactic structure posed by Rizzi (1997) *Theory of Left Periphery*, we can argue that in XIII century Old Catalan texts the quantificational behaviour of the quantitative adverb *poc* allows it to undergo leftward movement towards FocusP whenever it bears emphasis – see (8). This brings about subject verb inversion as exemplified in (7), where the verb *profitaria* precedes the subject *la sua probretat volenterossa*.



- (8) a. [<sub>FORCEP</sub> .... [<sub>FOCUSP</sub> .... [<sub>POLP</sub> ... [<sub>TP</sub> ... [<sub>VP</sub> *profitaria poc*]]]]]  
 b. [<sub>FORCEP</sub>.... [<sub>FOCUSP</sub> ... [<sub>POLP</sub> ... [<sub>TP</sub> *poc<sub>i</sub>* [<sub>VP</sub> *profitaria t<sub>i</sub>* ]]]]]]  
 c. [<sub>FORCEP</sub>.... [<sub>FOCUSP</sub> *poc<sub>i</sub>* ... [<sub>POLP</sub> *t<sub>i</sub>* [<sub>TP</sub> *t<sub>i</sub>* [<sub>VP</sub> *profitaria t<sub>i</sub>* ]]]]]]

Later on, at the beginning of the XIX century, though, we find examples in which *poc* has lost its quantitative meaning and only expresses a negative emphatic value –see (9).

- (9) Los manestrals *poch* tenian feyna, molts dias se morian gent de miseria.  
 The artisans little had work, many days PRON. died people of scarcity  
 “The artisans did not have work, and people often died of want”  
 [DVCB sv. *Poc: Cròn. Guerra Indep.* Penedès]

The grammaticalisation undergone by the quantitative adverb is an upward reanalysis, in Roberts and Roussou’s (2003) terms, and involves loss of movement, on the one hand, and merging *poc* into PolP, on the other, which provides this item with its negative value. From this base position *poc* is moved forward to FocusP so as to check the emphatic feature it conveys – see the derivation in (10).

- (10) [<sub>FORCEP</sub>...[<sub>TOPICP</sub> los manestrals [<sub>FOCUSP</sub> *poc<sub>i</sub>* ... [<sub>POLP</sub> *t<sub>i</sub>* [<sub>TP</sub> tenian feyna]]]]]

This syntactic change can be sketched in terms of structural and parametric change as illustrated in Figure 1.

**STRUCTURAL CHANGE:**

$$[\text{FORCEP} [\text{FOCUSP } \text{poc}_i [\text{POLP } t_i [\text{VP } t_i ]]]] > [\text{FORCEP} [\text{FOCUSP } \text{poc}_i [\text{POLP } t_i [\text{VP}]]]]$$
**PARAMETRIC CHANGE:**

Pol\* Move > Pol\* Merge

**MOTIVATION:**

Loss of quantitative meaning. Reanalysis as negative polarity marker.

[Batllori & Hernanz (2008, 2009)]

Figure 1. Syntactic change

## 2.2 Pragmatic and syntactic behaviour of *poc* in Modern Catalan

### 2.2.1 *Poc* as a pragmatic activator

As generally known (see *DCVB* sv. *poc*, Rossich 1996, Batllori & Hernanz 2013, etc.), negative *poc*<sup>5</sup> is used in the northern area of Catalonia (the dioceses of Girona and Elne, basically). It is a preverbal negative emphatic particle and the subject either occurs before it (i.e., topicalized), as in (11a) or in postverbal position, as in (11b). In Pla de l'Estany and Ripollès *poc* has a counterpresuppositional meaning and conveys pragmatic activation.

(11) a. La Maria *poc* ho sap.

the Mary NOT CL knows

“Mary DOESN’T know it”

b. *Poc* ho sap la Maria.

NOT CL knows the Mary

“Mary DOESN’T know it”

c. Ja ha arribat, en Pere? – No, *poca* ha arribat

Already has arrived, the Peter? –No, NOT has arrived

<sup>5</sup> Also *poc que*, according to some speakers. In Girona, however, it is generally used without *que* (i.e., *poc*, either pronounced as [pok] or [pokə] = *poca*), see Rossich 1996.

“Did Peter arrive? – No, he DIDN’T.”

As said in the introduction, it licenses negative polarity items in the same way as other negative markers do –see (12):

(12) a. *Poca* ho ha dit **mai** això, en Pere.

NOT CL has said never this, the Peter.

‘Peter NEVER said that.’

b. *Poc* he comprat **res** avui.

NOT have bought nothing today

‘I HAVEN’T bought anything today.’

2.2.2 The current change in progress: Pragmatic unmarking, prosodic unmarkedness and ‘Spec to Head’ reanalysis.

As already mentioned, *poc* displays interspeaker variability and most speakers from the cities of Girona and Figueres use it without any presuppositional value (i.e., it has undergone pragmatic unmarking) and without emphasis (i.e., loss of emphasis or prosodic markedness). Hence, we consider that it is going through a second reanalysis and/or grammaticalisation process. In this sense, a woman from Figueres who suffered from a maculopathy and was talking about the day she realized she was becoming blind uttered the sentence in (13) with no relation to a previous statement by the addressee.

(13) Aquell dia ho veia tot tort, fins i tot la cara del meu fill.

that day it see all bent, even the face of-the my son

Mirava la tele i *poca* la veia, *poca* veia res.

watched the tv and NOT it saw, NOT saw anything

“that day everything was bent, even my son's face. I was watching tv and could not see it, I could not see anything”.

From a pragmatic standpoint, the semantic bleaching concerning the inference conveyed<sup>6</sup> in the case of this type of *poc* leads us to put forward that this particular speaker, as well as many of the ones we have interviewed, has concluded another type of reanalysis (i.e., grammaticalisation process) which consists in a change from *Spec* to *Head* in the terms established by van Gelderen (2004: 26-27) and following works, once the *Head Preference Principle*<sup>7</sup> has applied.

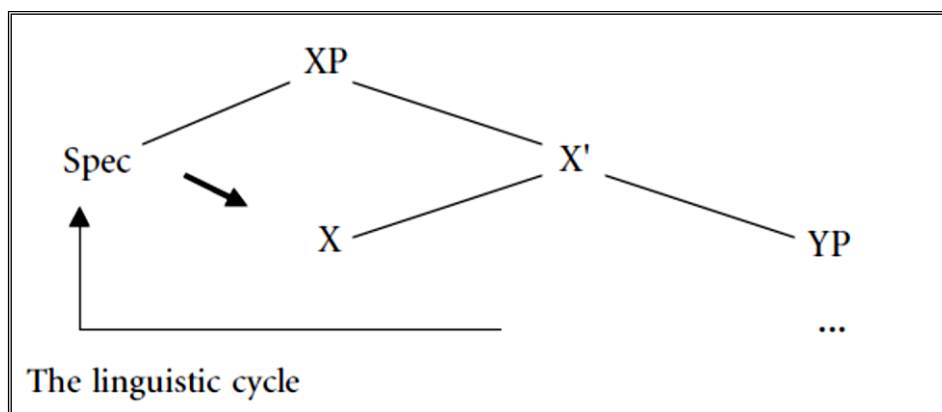


Figure 2. The linguistic cycle [van Gelderen (2009: 99)]

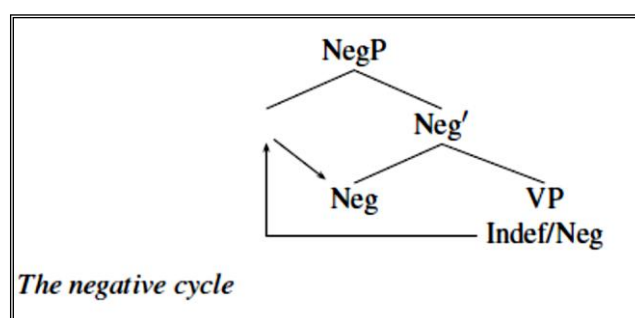


Figure 3. The negative cycle [van Gelderen (2008: 198)]

<sup>6</sup> That is, the pragmatic unmarking or loss of pragmatic activation.

<sup>7</sup> “**Head Preference Principle (HPP)**: Be a head, rather than a phrase” [van Gelderen (2009: 99), among other works of the same author]

As for these speakers, *poc* does not seem to undergo leftward movement to FocusP. Therefore, it should be compatible with contrastively focused constituents. It must be pointed out, however, that these structures are not regarded as natural by many speakers –see (14).

- (14) a. A: –Diu que no havien revisat bé l'examen de llengua catalana de la selectivitat i  
           say<sub>3PSG</sub> that not had<sub>3PPL</sub> revised well the-exam of language Catalan of the UEE and  
           estava ple d'errors.  
           was full of-mistakes  
           ‘‘They say that the Catalan test of the university entrance exam had not been revised and was full of mistakes’’  
       B: ?–No, L'EXAMEN DE MATEMÀTIQUES *poca* havien revisat  
           (i no el de  
           No, THE-TEST OF MATHS not had<sub>3PPL</sub> revised  
           (and not the of  
           llengua catalana).  
           language Catalan)
- b. A: –La Maria no menja pastanagues.  
           the Mary not eat carrots  
           ‘‘Mary doesn’t eat carrots’’  
       B: ?–PATATES *poca* menja (i no pastanagues).  
           POTATOES not eat (and not carrots)  
           ‘‘POTATOES doen’t eat Mary’’

Some informants considered the sentences in (14) grammatical, though, in spite of the fact that they said that they would rather use another

kind of construction. It should also be considered that, according to all speakers, *poc/a* is ungrammatical in interrogative sentences.

Despite the preceding facts, there is general agreement in regarding a sentence such as (15) as completely grammatical.

- (15) –Què fas? Cafè poc en pots beure, t’ho va dir el metge  
 [A.Suñer, p.c.]  
 what do<sub>2PSP</sub>? Coffee not of-it can<sub>2PSG</sub> drink, to-you-it PAST say the  
 doctor  
 “What are you doing? COFFEE you cannot drink. The doctor forbade  
 you it.”

Notice that in (15) *cafè* is a contrastive topic. If we consider that contrastive topics are derived by means of movements –as many authors do<sup>8</sup>–, our syntactic argument can still be maintained. We leave open, for further research, the investigation on the syntactic features and the structural positions involved in the grammaticalisation we put forward, so that currently we can only provide strong pragmatic and phonological evidence to argue in favour of this process.

### 3. Phonology of *poc*

Many scholars offer an accurate description of the canonical declarative pattern in Catalan<sup>9</sup> but here we will base our explanation on Prieto (2002: §11.2) who distinguishes between neutral declarative statements (broad focus statements) and non-neutral declaratives (narrow focus statements). The difference is on the speaker’s attitude: while in the

<sup>8</sup> According to many other authors, though, contrastive topics are base generated in the left periphery and, thus, they do not undergo movement.

<sup>9</sup> Cf. Prieto (1999: 211), Julià-Muné (2005: 178) or Font Rotchés (2007: 111).

former the speaker is completely impartial, in the latter he/she expresses some degree of emotions like doubt, surprise, confidence, etc. at some point of the statement in order to emphasise it. Hence, in narrow focus declaratives, there is a contrastive focus which does have an effect on phrasal prominence and intonation: contrastive focus<sup>10</sup> is tonally expressed by means of a particular pitch accent, L+H\*. It is also characterized by a high frequency scaling of the peak (Prieto 2014: 14).

According to this explanation, it seems quite clear that occurrences with the descriptive negative marker *no* should correspond to the neutral pattern because they do not imply any expressive effort from the speaker. On the contrary, those including the metalinguistic negator *pla* should be consistent with non-neutral declarative patterns since they involve some kind of emphasis, which would stem from its presuppositional value (i.e., from pragmatic actuation in terms of Dryer 1996).

The dilemma arises with utterances with *poc/poca*. If, as stated in the preceding sections, this negative particle (NEPA) has undergone a grammaticalisation process and has lost its emphatic value, it should fit in a neutral declarative pattern as described in §1. On the contrary, if it is still a metalinguistic emphatic negator, it is likely to agree with a non-neutral one, just as it happens with *pla*.

The only way to test the intonational behaviour of the negative markers involved in our study was to carry out a phonetic experiment. Thus, the following sections are devoted to the description of the methodology and the report of the final results concerning intonation.

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<sup>10</sup> Take specific note of the fact that, whenever we talk about contrastive focus in this section, we are referring to prosodic contrastive focus (not to the syntactic notion of contrastive focus).

### 3.1 Experimental design

As stated in §1, we recorded 12 native speakers from either Girona or Figueres who work in Girona, and are about 50 years old. They were asked to go through a reading task which consisted in reading brief sentences containing the three negative particles under study: either *poc/poca*, *no* or *pla*. Each token evoked a familiar situation in which these utterances are generally produced naturally. In fact, most of the speakers recognized they commonly use these structures. They were given 5 minutes to read each sentence and figure out how they usually pronounce it. Then, they were recorded while reading the sentences aloud. The corpus is reproduced below:

- (16)a. Mare meva! *Poca* han netejat mai aquesta gent.  
 mother mine! not have cleaned never these people  
 “My goodness! These people have never cleaned this room”
- b. *Poc* els entenc aquests polítics.  
 not to-them understand these politicians.  
 Avui diuen una cosa i demà en diuen una altra.  
 Today say<sub>1PPL</sub> one thing and tomorrow of-it say<sub>1PPL</sub> another  
 “I don’t understand politicians. They keep constantly changing their minds”
- c. *Poca* tindrè temps d’acabar aquest article.  
 not will-have time of-finish this article.  
*Poc* he fet res aquesta tarda.  
 not have done anything this afternoon.  
 “I won’t have time to finish this article. I haven’t done anything this afternoon”
- d. La Maria *poca* treballa les tardes.  
 the Mary not work the afternoons



“Mary doesn’t work in the afternoon”

e. *Poca* m’agradaria viure a Barcelona.

Not to-me would like live in Barcelona

“I would rather not live in Barcelona”

(17)a. Mare meva! *No* han netejat mai aquesta gent.

b. *No* els entenc aquests polítics. Avui diuen una cosa i demà en diuen una altra.

c. *No* tindrè temps d’acabar aquest article. *No* he fet res aquesta tarda.

d. La Maria *no* treballa les tardes.

e. *No* m’agradaria viure a Barcelona.

(18)a. Mare meva! Aquesta gent *pla* que han netejat mai.

mother mine! these people NOT that have cleaned never

“My goodness! These people have NEVER cleaned this room”

b. -Aquests polítics avui diuen una cosa i demà en diuen una altra.

this politicians today say<sub>1PPL</sub> one thing and tomorrow of-it say<sub>1PPL</sub> another

“These politicians keep constantly changing their minds”

-Deixa-ho estar. Per molt que vulguis, *pla* que els entendràs

let-it be. Even if that wanted<sub>2PSG</sub>, NOT that to-them will-understand

“Don’ worry. No matter how hard you try, you will NEVER understand them”

c. -Ja ho faràs demà, que ara és molt tard.

already it will-do tomorrow, that now is very late

- “Leave it for tomorrow, because now it is very late”
- Sí...!, demà...! Demà *pla* que tindrè temps  
d’acabar aquest article  
yes...! tomorrow..! tomorrow NOT that will-have time to-  
finish this article  
amb tot el que he de fer.  
with all the that have<sub>1PSG</sub> to do.  
“Tomorrow I WON’T have time to finish this article, with  
all that I must do”
- d. La Maria *pla* que treballa les tardes.  
the Mary NOT that works the afternoons  
“Mary DOESN’T work in the afternoon”
- e. A mi *pla* que m’agradaria viure a Barcelona.  
To me NOT that to-me would-like life in Barcelona  
Si sempre he volgut viure a pobles petits.  
if always have wanted live in villages small  
“I would rather NOT live in Barcelona. I always wanted to  
live in a small village!”

As a result, we gathered 204 utterances (distributed as shown in Table 1) that were examined using Praat (v. 5.3.0). Waveforms and pitch analysis have been used to determine the intonational contour. We have employed an interpolation algorithm to fulfil the pitch curve in voiceless segments. Besides, the intonational analysis was performed following the Autosegmental Metrical model adapted to Catalan language (see Prieto 2005, 2014).

	no	poc	pla
tokens (per speaker)	6	6	5
x 12 speakers			
TOTAL:	72	72	60
			204

Table 1. Number of occurrences (and total amount of tested tokens in the shaded cell).

Statistical analysis has been carried out with SPSS software (v. 21). We employed contingency tables and measures of association (chi-squared tests) to determine if there is any relationship between the variables and whether the results were significant or not. The variables taken into account are the kind of negative marker (*no*, *poc/a* and *pla*), the intonational pattern of the utterance (neutral declarative, non-neutral declarative) and the presence or absence of contrastive focus in the negative particle.

### 3.2 Results

The data we obtained point to very interesting results. First of all, we can observe certain tendencies when confronting the three negative particles with the kind of statements they are found in (see Table 2, Figure 4): *pla* is more common in narrow contrast statements (90% of the utterances), while *no* and *poc/a* are more frequent in broad contrast statements (56.9% each one). Statistical tests indicate there is a relevant relationship between the two variables.<sup>11</sup> In other words, the use of *pla*, on the one hand, and *no* and *poc/a*, on the other, must be related to the type of declarative statement.

	no	poc/a	pla	n
broad contrast statements	41	41	6	88
narrow contrast statements	31	31	54	116

Table 2. Instances of *no*, *poc/a* and *pla* in broad contrast statements and in narrow contrast statements. The shaded cells indicate the most common option.

<sup>11</sup> ( $\chi^2=38.051, p<0.0001$ ).

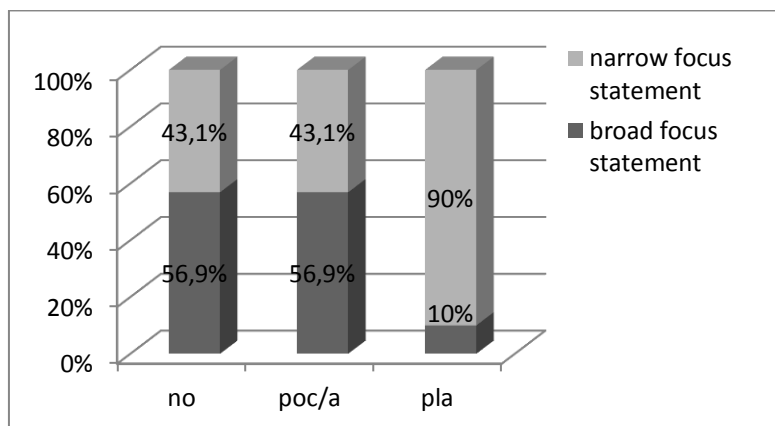


Figure 4. Percentage of *no*, *poc/a* and *pla* occurring in broad focus statements and in narrow focus statements.

As can be noticed, Figure 5 illustrates a neutral declarative pattern with the negative marker *no*. In fact, it fits perfectly with a canonical declarative intonational pattern: it displays rising prenuclear pitch accents associated to the stressed syllables followed by a low nuclear pitch accent (see Prieto 2014). In other words, the pitch contour rises until the first stressed syllable. After that point, it falls gradually to the nuclear syllable – which is the last stressed syllable in the utterance. Notice that this syllable is usually realized with a falling pitch accent, and the curve finally continues to fall until it reaches the base tone at the end of the sentence. Prenuclear pitch accents usually overlap with a bitonal pattern  $L+>H^*$ , which indicates that the H tone is aligned with the postaccidental syllable.<sup>12</sup> The same intonational contour can be observed in the majority of *poc/a* examples, as can be noticed in Figure 6: there is also a rising path towards the first pitch accent followed by a progressive falling until the nuclear accent.<sup>13</sup> From this point onwards, the pitch falls to the base tone at the end of the utterance.

<sup>12</sup> As can be observed, there is an accentual displacement in the first pitch accent, where the F0 peak is located in the posttonic syllable. This phenomenon is extremely common in declarative statements when concerning prenuclear accents.

<sup>13</sup> The curve also shows accentual displacement.

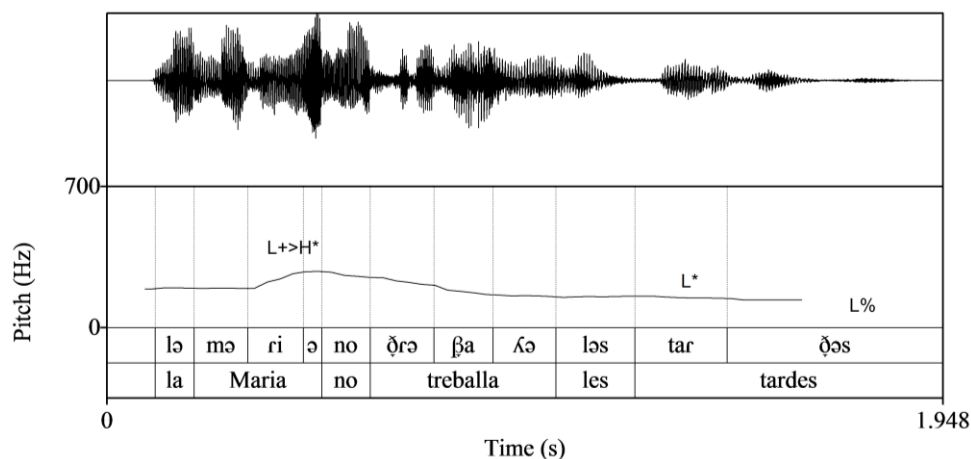


Figure 5. Waveform and F0 pitch track of the broad focus statement *La Maria no treballa les tardes*.

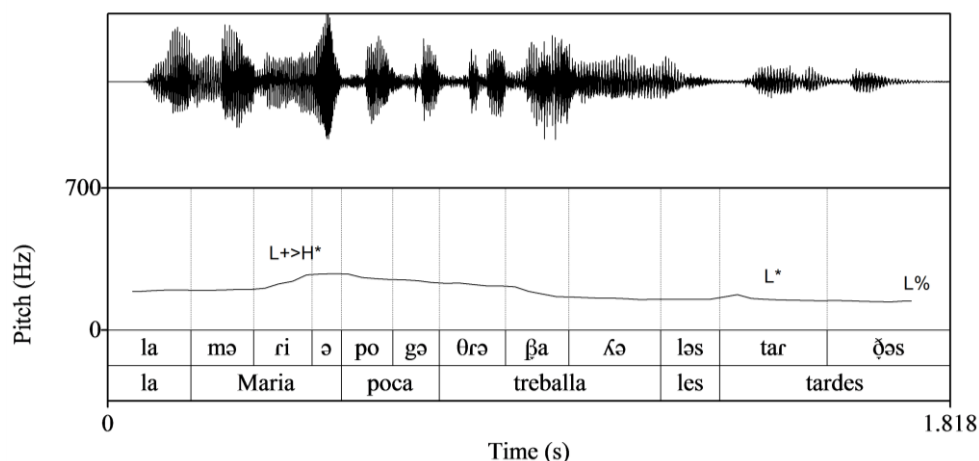


Figure 6. Waveform and F0 pitch track of the broad focus statement *La Maria poca treballa les tardes*.

Narrow focus statements display a different intonational contour, which is fairly clear in the example of Figure 7: the emphasized part of the statement shows an increase in the frequency scaling of the peak and a pitch accent L+H\*.<sup>14</sup> In this case the resulting pitch contour does not match with the description of neutral declarative sentences (see Prieto 2002, 2014; Font Rotchés 2007). Most of the examples containing the particle *pla* follow this

<sup>14</sup> “This pitch accent is phonetically realized as a rising pitch movement during the accented syllable. The rise starts at the onset of the accented syllable and ends at the end of that syllable” (Prieto 2014: 8).

intonational pattern. In fact, Figure 8 illustrates the typical pitch contour that maps metalinguistic emphatic negation (i.e., syntactic focus) and therefore shows that syntax has an effect on prosody by means of a prominence in the intonational curve. As can be seen, the peak of the negative particle is higher than the one corresponding with the first prenuclear pitch accent, which should exhibit the most important pitch rise.

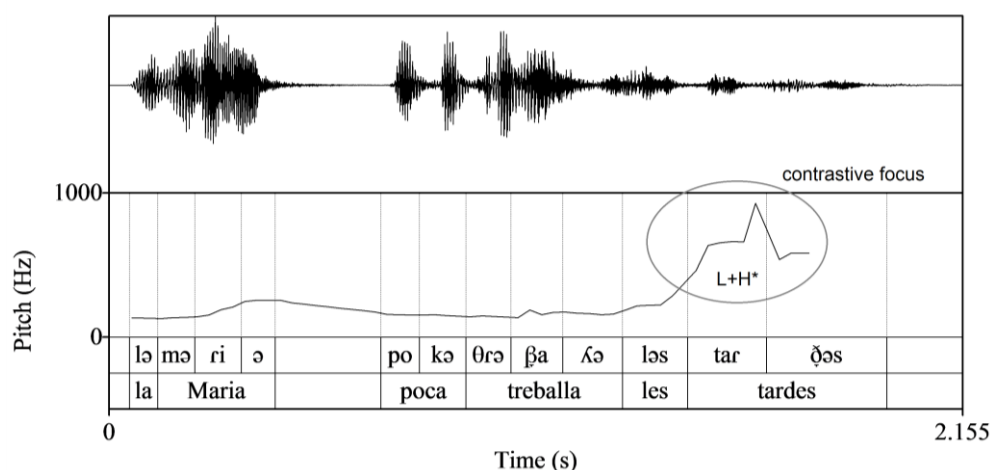


Figure 7. Waveform and F0 pitch track of the statement *La Maria poca treballa les tardes*. The pitch accent in *tardes* holds contrastive focus: it arises from the higher peak in the stressed syllable.

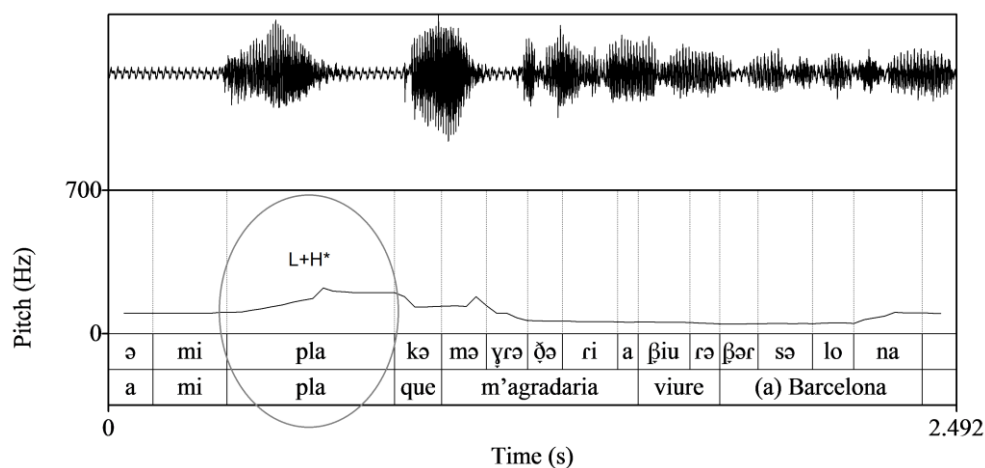


Figure 8. Waveform and F0 pitch track of the statement *A mi pla que m'agradaria viure a Barcelona*.

Although there seems to be a clear tendency for *pla* to occur in non-neutral declarative sentences and for *no* and *poc/a* to be in neutral ones, we

must draw attention to the fact that there is still an important percentage of examples of *no* and *poc/a* in non-neutral declaratives (43.1% of the cases in both *no* and *poc/a*). In such a context, it is essential to check whether these negative particles are conveying contrastive focus, in other words, if they are affected by emphasis in these narrow focus statements or if, even in such a context, they are not. We provide the results in table 3, in which we include all the data (even those of neutral declaratives) in order to offer the whole picture. Figure 9 summarizes the results.

	Broad focus statements	Narrow focus statements	
		Contrastive focus in NEPA	Contrastive focus not in NEPA
<i>no</i>	41	4	27
<i>poc/a</i>	41	9	22
<i>pla</i>	6	44	10
Total:	88	57	59

Table 3. Instances of *no*, *poc/a* and *pla* in broad contrast statements, in narrow contrast statements with emphasis in the negative particle and in narrow contrast statements without emphasis in the negative particle.

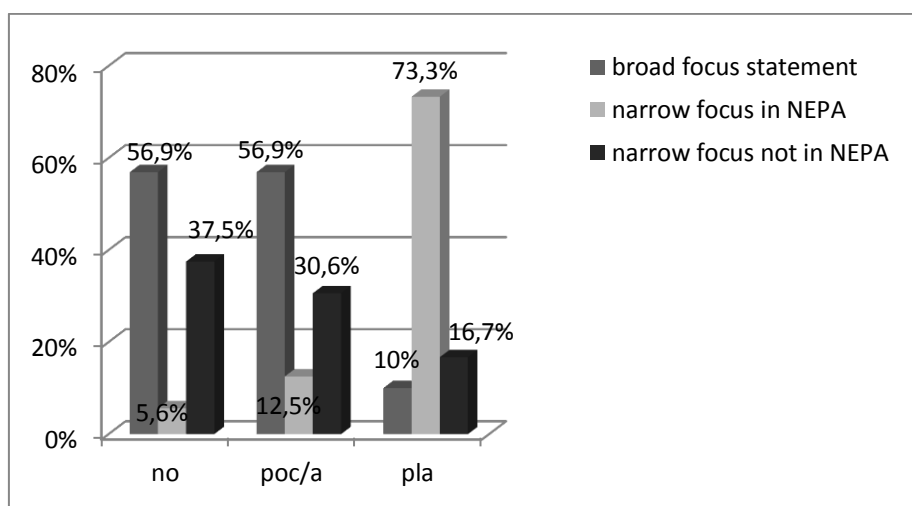


Figure 9. Percentage of *no*, *poc/a* and *pla* occurring in neutral declarative sentences and in non-neutral declaratives. We distinguish, in the latter case, whether the contrastive focus is on the negative particle or not.

Focusing on the 43.1% of the instances in narrow focus statements, it is worth considering that in most of the cases of *no* and *poc/a* (87% and

70.9% respectively) contrastive focus does not lie in the negative particle, but in another part of the statement (see Figure 9). Once again, we can note that both negative particles behave in the same way and, what is more, statistics support this idea.<sup>15</sup> What is really interesting is that, even in the few cases where the contrastive focus is on the negative marker, *poc/poca* and *no* behave clearly alike: Figures 10 and 11 provide further evidence of this fact, which implies that there is a clear match between the two structures.

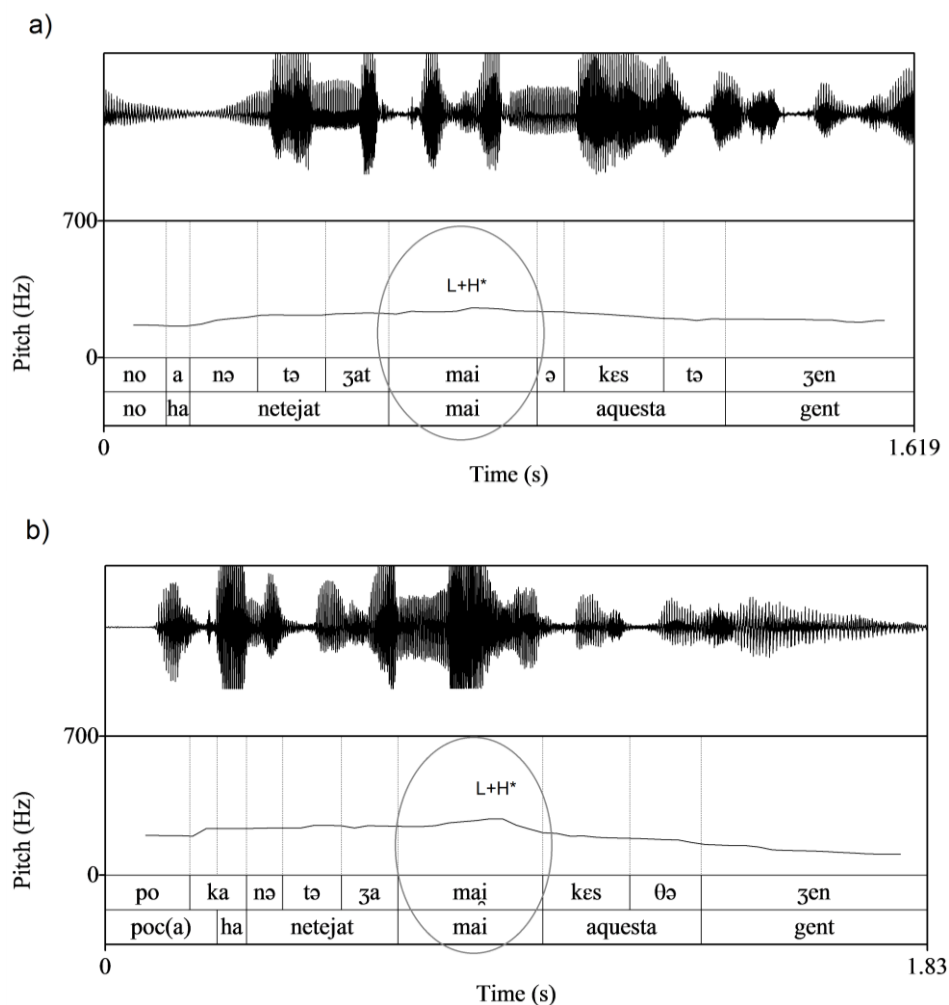


Figure 10. Waveform and F0 pitch track of the statements *No ha netejat mai aquesta gent* (a) and *Poca ha netejat mai aquesta gent* (b). The sentences are examples of narrow focus statements with no emphasis on the negative particle.

<sup>15</sup> ( $\chi^2=89.954, p<0.0001$ ).



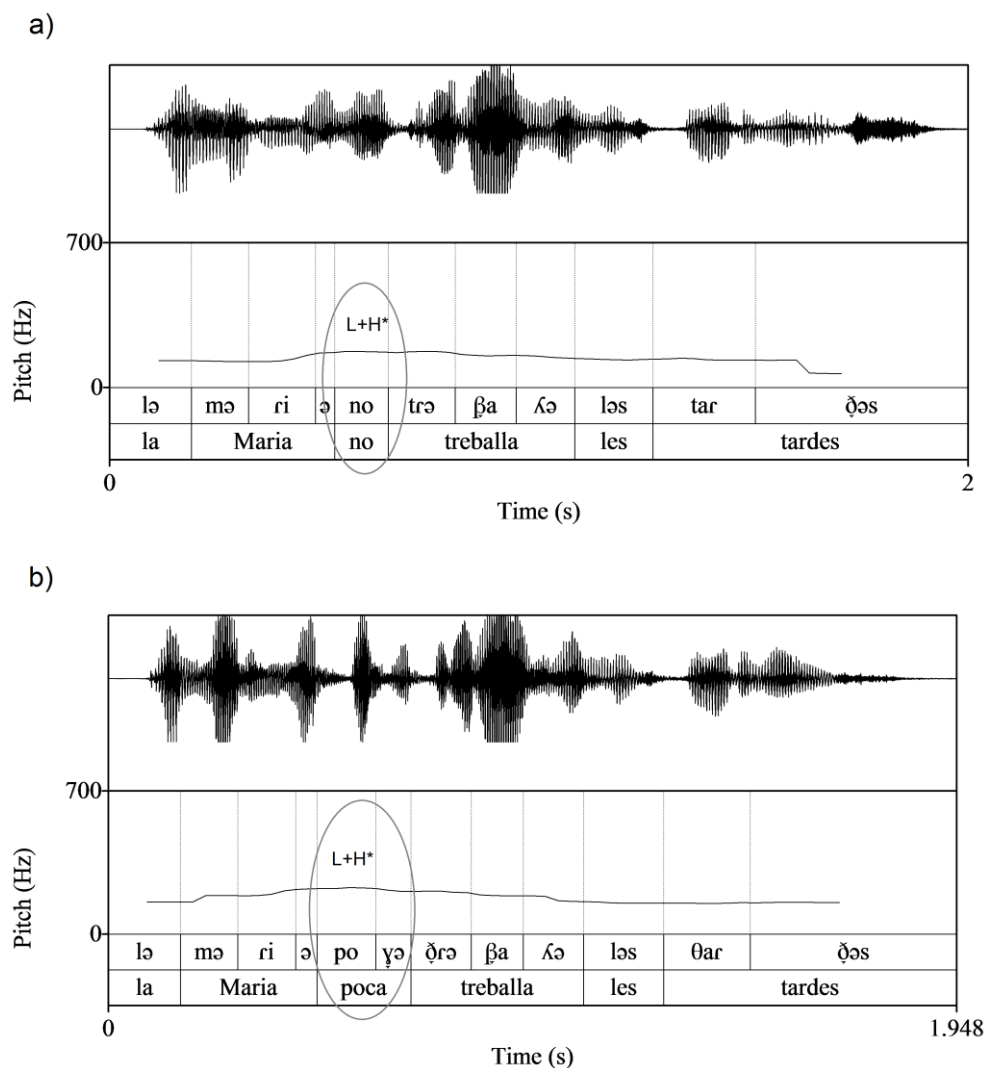


Figure 11. Waveform and F0 pitch track of the statements *La Maria no treballa les tardes* (a) and *La Maria poca treballa les tardes* (b). The sentences are examples of narrow focus statements with emphasis in the negative particle.

To summarize, we observe that most of the utterances of *no* and *poc/a* are found in unfocused non-emphatic contexts. In fact, the number of instances of *no* in this position is slightly higher (94.4%) than the examples of *poc/a* (87.5%), as can be seen in Table 4 and Figure 12. *Pla*, on the contrary, is much more common in emphatic contexts (78.3% of the cases). Thus, we can say that also 78.3% of the focused negative particles correspond to *pla*, a negative polarity marker with a clear emphatic value, while 91% of the instances with non-contrastive focus are for *no* (43.8%) and *poc/a* (47.2%).

Thus, examining *pla* sequences has been very useful as a control group since it has made possible to compare the behaviour of *poc/poca* with the negative marker *no* and with the emphatic polarity particle *pla*. The latter intonational contours supports our hypothesis according to which *poc/poca* is losing the emphatic value which is associated to the pressupositional meaning.

	<i>no</i>	<i>poc/a</i>	<i>pla</i>	Total
Contrastive focus	4	9	47	60
Non-contrastive focus	68	63	13	144
Total:	72	72	60	

Table 4. Instances of *no*, *poc/a* and *pla* in emphatic and non-emphatic environments. Shaded cells correspond to the predominant behaviour.

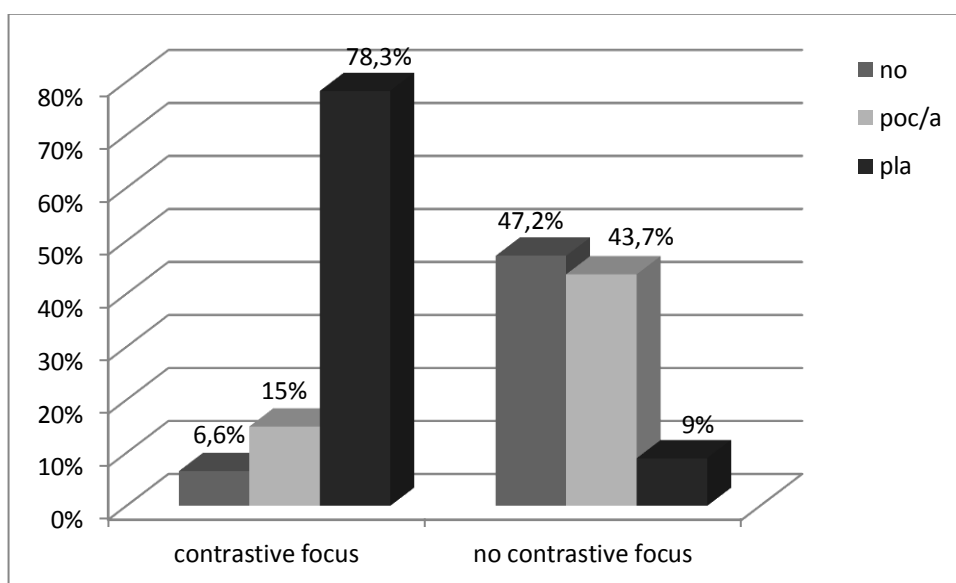


Figure 12. Percentages of occurrence of the three negative particles in prosodic contrastive focus position and in neutral position.

#### 4. Conclusions

This paper has provided mostly pragmatic and phonological evidence in favour of the fact that Northern Catalan *poc/poca* is being grammaticalised as a negative head by some speakers. From a syntactic standpoint, we have shown that some of these speakers do not consider ungrammatical those sentences with constituent fronting (such as focus fronting or contrastive topics), which means that, for them, *poc/poca* may not be an emphatic polarity particle anymore. Most crucially, following Wallage (2013) we have argued, from a pragmatic viewpoint, that pragmatic unmarking is a consequence of its grammaticalization process. And from a phonological perspective, we have illustrated the fact that sentences with *poc/poca* display the same prosodic contour as those with *no*, and contrast clearly with the ones with *pla*, which is considered a pragmatically marked emphatic polarity particle (i.e., a metalinguistic negator) by all our informants.

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