

A new approach to Negative Concord: Catalan as a case in point¹

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In this paper, we revisit the phenomenon of Negative Concord focusing on the Strict vs. Non-Strict divide. With Catalan as a case in point, we show that Negative Concord Items (NCIs) are not negative quantifiers (NQs) or polarity items (PIs) but inherently negative indefinites by virtue of carrying a negative feature [neg] that contributes a negative semantics to the proposition and is subject to a syntax–phonology constraint that forces it to overtly c-command Tense in compliance with Jespersen’s NegFirst principle. We argue that to satisfy such constraint, [neg] can disembodify from the NCI via overt Move F(eature) to adjoin at a pre-Infl(ection) position and be Spelled-Out homophonous to the negative marker. The Strict vs. Non-Strict contrast follows from whether [neg] always moves independently from the rest of the NCI via Move F (Strict Negative Concord) or predates, whenever possible, on another movement of the NCI that places [neg] in the required pre-Infl position (Non-Strict Negative Concord) thus not having to disembodify.

KEYWORDS: Catalan, disembodied feature, Move F, Negative Concord, Strict and Non-Strict Negative Concord

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1. INTRODUCTION

In this paper, we revisit the phenomenon of Negative Concord (NC) with special emphasis on Catalan facts. Catalan is well-known for optionally allowing the negative marker to co-occur with pre-verbal Negative Concord Items (NCIs) (*n-words* in Laka 1990) such as *ningú* ‘n-body’, *res* ‘n-thing’, and the like (Fabra 1912, 1918, 1956; Badia i Margarit 1962, 1994; Solà 1973; Quer 1993; van der Wouden and Zwarts 1993; Vallduví 1994; Espinal 2000, 2002; Zeijlstra 2004; Tubau 2008; Déprez et al. 2015) and is, hence, difficult to classify in a parametric division of NC into a Strict and a Non-Strict type (Giannakidou 1997, 1998). In addition, words like *ningú* and *res* in Catalan have a wider distribution than NCIs in other languages with NC.² Although *ningú*, *res*, and the like can occur in negative contexts as well as in non-negative ones (e.g. questions, conditionals, etc.), NCIs are restricted to negative contexts in other NC languages (e.g. Romanian). Again, then, Catalan is puzzling when it comes to establishing whether NCIs are negative or not and whether they are quantificational or not.

The article is organized as follows. In the remainder of this section, we review different approaches to NC and discuss why this phenomenon has been very often considered problematic for the *Principle of Compositionality* (as has been noted by Ladusaw 1992 or Giannakidou 2000, for example) and why Catalan poses a problem for the macro-parametric division of NC languages into the Strict and the Non-Strict type. In Section 2, we address different positions concerning the nature of NCIs and their implications for the understanding of NC with the Catalan data being core to the discussion. In Section 3, we unpack our new proposal to account for NC, which is articulated around the central assumption that NCIs are negative indefinites by virtue of carrying a negative feature [neg] that can be disembodied from the rest of the indefinite by means of overt Move F(eature) (Roberts 1998, cf. Pesetsky 2000) to c-command Tense (cf. Davidson 1967, Diesing 1992, Weiss 2002). In this new approach, NC and the Strict vs. Non-Strict NC distinction are best described as an epiphenomenon of a syntax–phonology interface requirement imposed on the expression of negation rather than as a syntactic dependency. This interface condition is in compliance with Jespersen’s (1917, 1933) NegFirst principle³ (see also Horn 1989; and the

[2] The use of (purported) NCIs in non-veridical contexts (e.g. yes/no-questions) is marginally possible in other NC languages such as Italian (Bernini & Ramat 1996: 37–8) or some of its varieties (Garzonio & Poletto 2023), but it is not a general property of NCIs in all NC languages. In Spanish, for instance, NCIs are not allowed in conditionals, yes/no-questions, the restriction of a universal quantifier, or the scope of a focus particle such as *solo* ‘only’ (Aranovich 2007: 191). In French, according to Corblin et al. (2004: 422) the use of NCIs in non-negative contexts such as yes/no-questions ‘is a relic of a preceding state of the language. It is not productive and has a strong old-fashioned formal taste’. According to our proposal, only PIs occur in non-veridical contexts; NCIs are restricted to negative contexts. We also show that a language may have homophonous series of PIs and NCIs.

[3] According to Jespersen (1933: 297), NegFirst is a constraint that encodes the functional need ‘to put the negative word or element as early as possible, so as to leave no doubt in the mind of the hearer as to the purport of what is said’.

Negative Early principle, van der Auwera & Van Alsenoy 2016). Section 4 concludes the paper.

1.1 *Negative Concord and compositionality*

It is often pointed out in the literature on NC that this phenomenon is a problem for compositionality. According to the *Principle of Semantic Compositionality* (Frege 1879), the meaning of a given expression is the result of the meaning of its parts. Hence, the fact that a sentence such as (1) is interpreted with a single negation (SN) reading either means that one of the two elements that look like negative is not, or that, if both are, a mechanism exists that combines two negations into one.

- (1) *No menja res.*⁴ [Catalan]
 NEG eats n-thing / anything
 ‘S/he doesn’t eat anything.’

Either position corresponds to existing views of NC and NCIs. For Zanuttini (1991), Haegeman & Zanuttini (1991), and Haegeman (1995), NCIs are negative universal quantifiers that bear a negative formal feature that needs to be checked in a Specifier–Head configuration with a negative operator sitting in the head Neg(ation). Given that in Zanuttini and Haegeman’s work both the NCI and Neg are assumed to be inherently negative, a semantic process of negative absorption known as Neg-factorisation is postulated. Neg-factorisation is argued to cancel the negative meaning of one or more raised negative quantifiers (NQs) when under the scope of a negative operator. Watanabe (2004) updates Zanuttini and Haegeman’s approach by arguing that Neg-factorisation naturally follows from the fact that feature-checking involves copying of the negative feature of the Goal (i.e. the NCI) onto the Probe (i.e. Neg). Co-occurrence of two negative features in the Probe cancels them so that the negative marker becomes non-negative, and it is the NCI that contributes the negative meaning to the sentence. De Swart & Sag (2002) also assume NCIs to be NQs that can either engage in resumption (thus yielding a SN reading) or in iteration (thus yielding a double negation (DN) meaning). By contrast, for Bosque (1980), Laka (1990), and Progovac (1994), NCIs are polarity items (PIs) and, as such, they must be bound by a suitable operator which includes, but is not restricted to, negation. Ladusaw (1992) argues that NCIs are self-licensing (they introduce their own licensing negative operator in certain contexts). Finally, NCIs have also been argued to be lexically ambiguous between NQs and PIs (Herburger 2001). This is because apart from the debate on the (non-)negativity of NCIs, their quantificational status has also been at the heart of the vast literature on NC. NCIs have been argued to be negative universal quantifiers (Haegeman & Zanuttini 1991; Zanuttini 1991;

[4] In Sections 1.1, 1.2., and 2.1, we gloss *no* as NEG to indicate that it is a negative lexical item though, as discussed later in the paper, not necessarily a syntactic negative head.

Haegeman 1995), non-negative universal quantifiers (Giannakidou 2000), non-negative PIs (Bosque 1980; Laka 1990), non-negative indefinites (Ladusaw 1992, 1994; Acquaviva 1993, 1997; Giannakidou & Quer 1997; Zeilstra 2004; Tubau 2008), negative indefinites (Suñer 1995), and indefinites incorporated into a zero numeral (Déprez 1997; Espinal 2000).

The literature is divided concerning the nature of NCIs because there is evidence for them to be analysed as inherently negative and, at the same time, evidence for them to be analysed as non-negative. The strongest argument for the analysis of NCIs as negative comes from the observation that in all NC languages, NCIs can be used as answers to questions in the absence of an overt negative marker; see (2A) and (3A).⁵

- (2) Q: ¿Quién llamó? [Spanish]
 who called
 ‘Who called?’
 A: *Nadie*.
 n-body
 ‘Nobody.’
- (3) Q: Τι είδες? [Greek]
 what saw.2sg
 ‘What did you see?’
 A: *TIPOTA*.
 n-thing
 ‘Nothing.’

Given that in some languages (e.g. Spanish, Italian) pre-verbal NCIs cannot co-occur with the (alleged) negative marker, (4), it may also be argued that this is because they are inherently negative.

- (4) *Nessuno* (**non*) ha telefonato. [Italian]
 n-body NEG has called
 ‘Nobody called.’

Yet, in some other languages (e.g. Greek, Romanian), pre-verbal NCIs must co-occur with the (alleged) negative marker, (5), and, hence, this makes it difficult to argue that they are inherently negative.

[5] The relevance of this argument is dependent on how much unpronounced structure is assumed for the answer. If no elided structure is assumed for (2A), the most straightforward explanation for its negative meaning is that the NCI is inherently negative. In an ellipsis-based approach to (2A), by contrast, it is assumed that an isolated NCI is part of a full-fledged clause affected by ellipsis (Giannakidou 2000, 2006; Merchant 2001, 2004; cf. Espinal & Tubau 2016). Whether NCIs are assumed to be negative or non-negative in the full clause extends to the analysis of the NCI as a fragment. In Section 2.1, the possibility that a PI preceded by a negative marker is used as an isolated answer is discussed as well.

- (5) *Nimeni* *(*nu*) *sună.* [Romanian]
 n-person NEG calls
 ‘Nobody calls.’

In addition, postverbal NCIs must co-occur with the purported negative marker in all languages that allow NC – see (6) and (7). This is the strongest argument to claim that NCIs are inherently non-negative.

- (6) *(*No*) *llamó nadie.* [Spanish]
 NEG called n-body
 ‘Nobody called.’

- (7) *(*Dhen*) *idhes TIPOTA.* [Greek]
 NEG saw.2SG n-thing
 ‘You didn’t see anything.’

In short, when it comes to whether NCIs introduce an instance of negation or not, the choice amounts to a yes-no answer, with ‘yes’ and ‘no’ only straightforwardly accounting for part of the data. If NCIs are assumed to be negative, isolated NCIs used as answers to wh-questions are easy to accommodate, but the distribution of post-verbal NCIs across languages with NC and the distribution of pre-verbal NCIs in languages such as Romanian or Greek (which must co-occur with the (alleged) negative marker) are problematic. So is the phenomenon known as negative spread (den Besten 1986), as in (8), where a pre-verbal NCI licenses one or more post-verbal NCIs in the absence of a negative marker. In all the problematic cases, the central question is how two (or more) negations end up being interpreted as only one.

- (8) *Nadie* *ha leído nada.* [Spanish]
 n-body has read n-thing
 ‘Nobody has read anything.’

By contrast, if NCIs are assumed to be non-negative, the distribution of post-verbal NCIs is straightforward, and the problematic data would be the use of isolated NCIs as answers to wh-questions, the distribution of pre-verbal NCIs in languages such as Spanish and Italian, and negative spread. For these problematic cases, it is not obvious where the negative meaning of the sentence comes from.

The Strict vs. Non-Strict NC classification, which is based on the distribution of pre-verbal NCIs and whether they must or must not co-occur with the alleged negative marker in this position, has also led to the assumption that the so-called negative marker is not negative in every language. According to Zeijlstra (2004), the negative marker carries an interpretable negative feature in languages with Non-Strict NC, but an uninterpretable negative feature in languages with Strict NC. In other words, whereas the negative marker would be truly negative in languages such as Spanish or Italian, it would not be negative in languages such as Romanian or Greek. In languages with Strict NC, Zeijlstra claims that the uninterpretable negative feature

of the negative marker is checked by an abstract negative operator that is inserted for this purpose as a Last Resort. It is, therefore, this abstract negative operator and not the negative marker that reverses the truth-conditions of a proposition.

Zeijlstra's (2004) analysis raises an important theoretical concern for the characterization of negation in languages with Strict NC: if the (purported) negative marker is semantically non-negative and it always triggers the Last Resort insertion of an abstract negative operator that is covert, why does the negative marker always have to be overt both in NC and non-NC structures? For Catalan, which has been reported to optionally allow the negative marker to co-occur with pre-verbal NCIs, Zeijlstra's (2004) analysis amounts to claiming that the negative marker is lexically ambiguous between the non-negative type that is found in Strict NC languages and the negative type of Non-Strict NC languages. The purpose of the present article is to put forward a new approach to NC that can explain the cross-linguistic similarities in the distribution of NCIs in the post-verbal position and the cross-linguistic differences in the distribution of pre-verbal NCIs with respect to the necessary presence/compulsory absence of *no* in Catalan (or *non*, *dhen*, *nu*, *ne* in Italian, Greek, Romanian, Russian, etc.) and possibly accommodate the NC-type flexibility attested in Catalan. We hereby hypothesize that (i) NCIs are negative indefinites with a formal feature [neg] that semantically translates as a negative operator \neg ; (ii) the negative marker is always negative (i.e. it also corresponds to a negative operator \neg), and (iii) the Strict vs. Non-Strict NC contrast is the result of whether the formal feature [neg] in an NCI moves overtly to c-command the Tense features of the sentence via Move F, or it ends up doing so after the NCI opportunistically moves via Move α for reasons independent from the expression of negation.⁶ We claim that the choice of Move F (à la Roberts 1998) to satisfy the syntax–phonology constraint that we are proposing has observable consequences for the syntax–phonology mapping of negation.

In the next section, we examine how Catalan poses a problem for the Strict vs. Non-Strict classification if this is understood as parametric. In Section 2, we review the evidence in favor and against analysing Catalan NCIs as PIs or as NQs. In Section 3, we develop our new approach to NC based on hypotheses (i)–(iii).

1.2 Catalan poses a problem for a macro-parametric Strict vs. Non-Strict NC classification

The Strict vs. Non-Strict NC classification is based on whether pre-verbal NCIs must co-occur with the alleged negative marker (Strict NC) or if, by contrast, they

[6] In Acquaviva (1995: 114), sentential negation is defined as 'closure of the event variable by a negated existential operator'. In this paper, although we agree that for a negative marker to express sentential negation, it must have scope over the event variable at LF, we also claim that the minimal semantic requirement for a sentence with NC to be interpreted as negative is that one or more NCIs occur within a sentential domain. However, a negative expression must overtly c-command the Tense features in order to be accepted by native speakers. See Espinal et al. (2023) for empirical arguments in support of this hypothesis.

cannot (Non-Strict NC). This distinction has been assumed to be connected to parametric variation in the morphosyntactic features of the negative marker. In Strict NC languages, the purported negative marker is assumed to carry a [uNeg] feature and, hence, needs to be licensed by an operator carrying a matching interpretable negative feature [iNeg] very much in the same way NCIs do. In Non-Strict NC languages, the negative marker is assumed to carry an [iNeg] feature (Zeijlstra 2004). The underlying structure of the Romanian and the Spanish sentences in (9a, b) is, therefore, claimed to be different.

- (9) (a) *Nu mănâncă nimic.* [Romanian]
 NEG eats n-thing
 ‘S/he doesn’t eat anything.’
 (b) *No come nada.* [Spanish]
 NEG eats n-thing
 ‘S/he doesn’t eat anything.’

As shown in (10), in Romanian, the [uNeg] feature of *nu* triggers the insertion of a covert Last Resort negative operator endowed with the feature [iNeg] ($\text{Op}_{\neg[\text{iNeg}]}$) that can check the [uNeg] feature of *nu* and the NCI under Multiple Agree (Ura 1996; Hiraiwa 2001; cf. Chomsky 1995, 2001).⁷ Checking is indicated by the strikethrough. In (11), by contrast, it is *no*, endowed with an [iNeg] feature, that engages in the checking relation mediated by Agree.

- (10) [_{NegP} $\text{Op}_{\neg[\text{iNeg}]}$ [_{vP} *nimic*_{[~~uNeg~~]_i} [_{vP} *nu*_[~~uNeg~~] mănâncă *t_i*]]]
 (11) [_{NegP} *no*_[iNeg] [_{vP} *nada*_{[~~uNeg~~]_i} [_{vP} come *t_i*]]]

As shown in (12), Catalan allows *no* to optionally co-occur with pre-verbal NCIs (Fabra 1912, 1918, 1956; Badia i Margarit 1962, 1994; Solà 1973; Quer 1993; van der Wouden & Zwarts 1993; Vallduví 1994; Espinal 2000, 2002; Zeijlstra 2004; Tubau 2008) and is thus a misfit in the landscape of NC (Déprez et al. 2015).⁸

- (12) *Ningú (no) menja.* [Catalan]
 n-body NEG eats
 ‘Nobody eats.’

If the parametric difference between Strict and Non-Strict NC lies upon the [uNeg] vs. [iNeg] feature distinction of the purported negative marker, as Zeijlstra (2004) suggests, then (12) must be accounted for as the co-existence of two dialects for

[7] Zeijlstra (2004) assumes the abstract negative operator to sit in the Specifier of NegP and the object NCI to raise to the vP-edge.

[8] The Strict and Non-Strict NC options in Catalan have different prescriptive considerations, with the Strict NC being strongly recommended in formal texts according to prescriptive norms (Fabra 1956; Institut d’Estudis Catalans 2016). Yet, there are speakers for whom the Strict and Non-Strict NC options are freely available.

Catalan⁹ (van der Wouden & Zwarts 1993; Zeijlstra 2004), each with a differently specified negative marker, or two registers (a formal one with Strict NC and an informal one with Non-Strict NC) (Penka 2011, van der Auwera & Van Alsenoy 2016, van der Auwera & Krasnoukhova 2020). However, in Déprez et al. (2015), empirical evidence is provided against this position. Before discussing such evidence though, let us note that in Section 2, we argue that Catalan *res*, *ningú*, etc. exist as NCIs and also as PIs, with the two series being homophonous (Espinal & Llop 2022).¹⁰ As will be later discussed, PIs are excluded from the pre-verbal position and cannot be used in isolation without an overt c-commanding licenser. When in post-verbal position though, NCIs *res*, *ningú*, etc. cannot be distinguished from PIs *res*, *ningú*, etc. Therefore, in what follows, in our examples we gloss PIs by means of *any* forms in English and NCIs by means of *n*-forms. Whenever there is ambiguity, it is reflected in the glosses.

We return now to Déprez et al.'s (2015) experimental evidence against van der Wouden & Zwarts' (1993) and Zeijlstra's (2004) account of the optionality of *no* with Catalan pre-verbal NCIs as the result of dialectal variation. Déprez et al. (2015) conduct two experiments to explore various research questions related to NC (hence SN) and DN in Catalan. Of relevance for our present discussion are two questions – namely, (i) whether NC is the default interpretation for sequences with *no* and multiple NCIs in Catalan and (ii) whether the co-presence of *no* could boost DN readings. The critical stimuli that the participants were asked to match with one of two available pictures (one corresponding to a SN reading resulting from NC, and one corresponding to an affirmative reading resulting from DN) contained pre-verbal and post-verbal NCIs with and without *no*, (13a, b).

- (13) (a) *Ningú trenca res.* [Catalan]
 n-body breaks n-thing / anything
 ‘Nobody breaks anything.’
 (b) *Ningú no trenca res.*
 n-body NEG breaks n-thing / anything
 ‘Nobody breaks anything.’

These authors show that there are no speakers for whom NC in Catalan is always Strict, as stimuli such as (13a) and (13b) are both most often interpreted as SN by all the participants; likewise, there are no speakers of the alleged Non-Strict NC variety that systematically attribute DN to NC sentences with *no* and a pre-verbal NCI such

[9] The idea that the optionality of *no* with pre-verbal NCIs in Catalan is a matter of dialectal variation is originally owed to Jaume Solà's personal communication with van der Wouden & Zwarts (1993: 216–17). Solà's judgement (empirically falsified by Déprez et al. (2015)) neglects the fact that speakers exist for whom the optionality of *no* with pre-verbal NCIs is in free variation in oral speech with no register effects. In later work, Zeijlstra (2022) claims that central Catalan is a Strict NC variety, with all instances of negation carrying [uNeg]. Central Catalan speakers' judgements blatantly disconfirm this assumption.

[10] See Herburger (2001) for a lexical ambiguity analysis of Spanish *nadie*, *nada*, etc., which she considers to be PIs in some contexts and NQs in some others.

as (13b). Although Déprez et al. (2015) do not discuss their findings against the formal vs. informal distinction attributed to Catalan, we take them to also disconfirm that the optionality of *no* with preverbal NCIs in Catalan is the result of register variation. Given that the experiment in Déprez et al. involved the evaluation of written stimuli, a deviation towards favoring a Strict NC system could have been expected in the participants' answers. Interestingly, not only was this not the case, but quite the opposite happened, as the proportion of DN readings in the participants' answers significantly increased with the presence of *no* in the stimuli with pre-verbal NCIs (though DN still remained a marginal reading in comparison with the dominant SN one). This is unexpected within a system of Strict NC which requires the presence of *no* with pre-verbal NCIs.

In addition, several theoretical concerns arise from Zeijlstra's (2004) theory of NC as well. The most pressing one concerns the syntax of post-verbal NCIs and the unrestricted nature of the insertion of a Last Resort abstract negative operator for the licensing of NCIs. If the presence of a [uNeg] feature that can be potentially left unchecked can trigger the insertion of $\text{Op}_{\neg[\text{iNeg}]}$, a Last Resort operator that negates the sentence, what prevents (14a), which could in principle have the underlying structure in (14b), from being well-formed?

- (14) (a) *Menja *res*. [Catalan]
 eats n-thing
 (b) $[\text{NegP } \text{Op}_{\neg[\text{iNeg}]} \text{ res}_{[\text{uNeg}]_i} [\text{vP } \text{menja } t_i]]$

According to Zeijlstra (2004: 247), the Last Resort $\text{Op}_{\neg[\text{iNeg}]}$ binds all free variables introduced in vP or below. Thus, (14a) should be grammatical with a syntax such as the one represented in (14b). In the absence of a Neg head, the [uNeg] in the NCI *res* would have to be checked by $\text{Op}_{\neg[\text{iNeg}]}$, inserted as a Last Resort.¹¹ Notice that there is no overt Neg head in NC sequences with a pre-verbal NCI in Non-Strict NC. Hence, if it were the case that the presence of a Neg head in (14) is mandatory, thus excluding the insertion of $\text{Op}_{\neg[\text{iNeg}]}$, what would need to be explained in the first place is why this is so for post-verbal NCIs, but not for pre-verbal NCIs in Non-Strict NC.

2. ON THE NATURE OF NEGATIVE CONCORD ITEMS IN CATALAN

In this section, we compare NCIs to PIs and to NQs with Catalan as a case in point. We aim at showing that Catalan has two homophonous series of polarity-sensitive

[11] Zeijlstra (2004: 272) tentatively analyses coordinated structures, such as (i), as potentially having the structure in (ii). In (ii), the [uNeg] feature of the NCI is what triggers the insertion of the abstract negative operator. Hence, no overt Neg head is necessary to license the NCI *nadie*, and a covert $\text{Op}_{\neg[\text{iNeg}]}$ can do it instead. It is not clear why $\text{Op}_{\neg[\text{iNeg}]}$ can check *nadie*'s [uNeg] feature in (ii), but the same option is not available to rescue (14) in Catalan.

(i) Me caso contigo o con *nadie*.

'I marry you or nobody'

(ii) $[[\text{Me caso contigo}] \text{ o } [\text{Op}_{\neg[\text{iNeg}]} \text{ con } \text{nadie}_{[\text{uNeg}]}]]$

PIs can be licensed by negation, but also by a wider range of non-veridical operators such as conditionals and interrogatives, whereas NCIs are restricted to licensing by anti-veridical operators (Giannakidou 2001). Consider, for instance, the case of non-emphatic Greek PIs *tipota* ‘anything’ and *kanenas* ‘anybody’, (15), and compare it to emphatic *TIPOTA* ‘n-thing’ and *KANENAS* ‘n-body’, which are NCIs, (16).

- Unlike PIs *tipota* and *kanenas*, NCIs *TIPOTA* and *KANENAS* are grammatical in pre-verbal position and as isolated answers to wh-questions. Compare (17) and (18) to (19) and (20).

- (17) **Kanenas dhen idhe tipota* / *TIPOTA*. [Greek]
anybody NEG saw anything n-thing
- (18) Q: *Ti thelis?*
what want.2SG
'What do you want?'
- A: **Tipota*.
anything

- (19) *KANENAS dhen idhe tipota / TIPOTA.*
n-body NEG saw anything / n-thing
‘Nobody saw anything.’

- (20) Q: *Ti thelis?*
what want.2SG
‘What do you want?’
A: *TIPOTA.*
n-thing
‘Nothing.’

PIs *tipota* and *kanenas* (but not *TIPOTA* and *KANENAS*) are licensed in the context of ‘before’, (21), whereas NCIs *TIPOTA* and *KANENAS* (but not *tipota* and *kanenas*) are licensed in the context of ‘without’, (22).¹²

- (21) O *Yanis efiye prin erthi kanenas/ *KANENAS.*
the Yanis left before comes anybody/ n-body
‘Yanis left before anybody came.’
(22) O *Yanis efiye xoris na fai TIPOTA / *tipota.*
the Yanis left without to eats n-thing / anything
‘Yanis left without eating anything.’

Finally, although PIs *tipota* and *kanenas* can be licensed long-distance by negation, NCIs *TIPOTA* and *KANENAS* cannot, as they must be licensed by a clause-mate negation, (23); see (16a) and (19).

- (23) *Dhen tou ipan oti o Bill milise me kanenan / *KANENAN.*
NEG they told that the Bill talked to anybody n-body
‘They didn’t tell him that Bill talked to anybody.’
(adapted from Giannakidou 2011: 1684, ex. (71))

If we now move to Catalan, examples (24), (25), and (26) show that *res* ‘n-thing’ and *ningú* ‘n-body’ have the same distribution as Greek PIs *tipota* and *kanenas* when it comes to the operators that can possibly license them and the grammaticality of long-distance licensing (Espinal & Llop 2022). However, as shown in (27) and (28), they also have the same distribution as *TIPOTA* and *KANENAS* when it comes to the possibility of *res* and *ningú* occurring pre-verbally and as isolated answers to wh-questions.

- (24) (a) *No ha vist res.* (negation) [Catalan]
NEG has seen n-thing / anything
‘S/he hasn’t seen anything.’

[12] We thank E. Tsiakmakis (p.c.) for these examples.

- (b) Si truça *ningú*, avisa'm. (conditional)
 if calls anybody warn.me
 'If anybody calls, let me know.'
- (c) Que vol *res*? (interrogative)
 Q wants anything
 'Does s/he want anything?'
- (25) Ho va veure abans que *ningú* ho veiés. (before)
 it saw before that anybody it see.SUBJ
 'S/he saw it before anybody did.'
- (26) No sabien que en Joan sortís amb *ningú*. (long-distance licensing)
 not knew that the Joan date.SUBJ with anybody
 'They didn't know that Joan dated someone.'
- (27) (a) *Ningú* ha vist *res*. (negation)
 n-body has seen n-thing / anything
 'Nobody saw anything.'
- (b) *Ningú no* ha vist *res*.
 n-body NEG has seen n-thing / anything
 'Nobody has seen anything.'
- (28) Q: Què ha vist? (isolated answer)
 what has seen
 'What did s/he see?'
 A: *Res*.
 n-thing
 'Nothing.'

The data above thus make it difficult to classify *res* and *ningú* as either PIs or as NCIs. The situation improves if, as is the case for Greek, it is assumed that a series of PIs co-exists with a series of NCIs. In Greek, they are distinguished by emphasis, but this is not the case in Catalan. Therefore, (24a) and (27a, b) may be derived both with *res* being a PI 'anything' or an NCI 'n-thing'; and (24b, c), (25), and (26) would only be grammatical with the PI *ningú*; and (27a, b) and (28) are only grammatical with the NCI *ningú* and *res*, respectively. Notice that Catalan also allows PIs (e.g. *gaire* 'much, many') to occur in isolation as answers to wh-questions provided that they are under the scope of the overt negative marker *no* 'not', (29).

- (29) Q: Que té gana?
 Q has hunger
 'Is s/he hungry?'
 A: *(No) *gaire*.
 not much
 'Not much.'

If, as we claim, *res*, *ningú*, etc. can be PIs, they should be fine used as answers to wh-questions with an overt negative marker. This is indeed the case for *res* in all varieties of Catalan, and for *ningú* in some (Rigau 1998; Espinal 2002).

- (30) Q: Què vol?
 what wants
 ‘What does s/he want?’
 A: No *res*.
 not anything
 ‘Nothing.’

2.2 Are Negative Concord Items negative quantifiers in Catalan?

In the previous section, we claimed that Catalan has a series of NCIs which is homophonous to a series of PIs, which is licensed in a broader set of non-veridical contexts. In this section, we evaluate whether they can be assumed to be NQs.

Standard English NQs *nobody*, *nothing* and the like occur in the absence of a negative licenser in all contexts (including post-verbal contexts), (31), and do not allow negative spread (i.e. they cannot co-occur with each other yielding a SN reading). Thus, in Standard English, (32) is ill-formed under a SN interpretation. An example parallel to (31a) is not possible with a post-verbal NCI in Catalan, (33a), whereas the parallel to (32) is grammatical with a SN interpretation in Catalan, (33b). Hence, although the distribution of NCIs in Catalan (and in other NC languages) overlaps with that of NQs, it does so only partially, thus indicating that NCIs are not NQs.

- (31) (a) I called *nobody*. [Standard English]
 (b) *Nobody* called me.
 (c) Q: Who did you call?
 A: *Nobody*.
- (32) **Nobody* said *nothing*. [Standard English]
- (33) (a) **Vaig dir res*. [Catalan]
 PAST say n-thing / anything
 (b) *Ningú va dir res*. (= (27b))
 n-body PAST say n-thing / anything
 ‘Nobody said anything.’
 (c) *No va dir res*.
 NEG PAST say n-thing / anything
 ‘(S)he didn’t say anything.’

But is there something special and specific to NQs when it comes to their lexical characterization (in comparison with NCIs)? There is a tradition in the literature according to which NQs contain an incorporated semantic negation alongside an

existential quantifier (Klima 1964; Jacobs 1980; Ladusaw 1992; Penka & Zeijlstra 2010; Iatridou & Sichel 2011; among others). When in a post-verbal position, the semantic negation in the NQ can covertly take sentential scope. Example (33a) would presumably be interpreted as negative, if native speakers were forced to interpret it but – even in accounts that take NCIs to be inherently negative – *res*, in contrast to *nobody*, requires a negative expression to c-command Tense features, as in (33b, c). This means that if NCIs carry negative import, as we argue, this must have a different syntactic status from the negation that is incorporated in NQs. We discuss this issue further in Section 3.

It is pointed out by Corblin (1995, 1996), de Swart (2010), and van der Auwera & Van Alsenoy (2016), among others, that in French, two readings are attested for the sentence in (34). Although the SN reading is expected if French NCIs can participate in negative spread, the DN reading would follow from an analysis in which *personne* and *rien* are considered NQs, ‘nobody’ and ‘nothing’, respectively.

- (34) *Personne ne dit rien.* [French]
 n-body NEG says n-thing
 ‘Nobody says anything.’ [SN reading]
 ‘Everybody says something.’ [DN reading]

It seems, therefore, that in the same way Catalan has a series of NCIs that is homophonous with a series of PIs, other languages (e.g. French) may have a series of NCIs that is homophonous with a series of NQs. We return to this issue with a more detailed discussion in Sections 3.6 and 3.7.

3. A NEW APPROACH TO NEGATIVE CONCORD

The assumption that NCIs are non-negative is a position that has been widely explored in the literature to account for the phenomenon of NC, and it has led to solutions that involve advocating for a covert source of negation of some kind to explain the distribution of NCIs in pre-verbal position in so-called Non-Strict NC languages and the possibility to use isolated NCIs as answers to wh-questions generally. In this paper, on the contrary, we want to explore the possibility that NCIs are inherently negative. Therefore, in what follows, we present a new approach to NC that combines the three following core hypotheses:

- (i) NCIs are inherently negative indefinites by means of carrying a feature [neg] that semantically translates as a negative operator \neg that can reverse the truth-conditions of the proposition;
- (ii) the negative marker always introduces an instance of logical negation, \neg ,¹³ and

[13] In Catalan, negation can be expletive in the sense that the negative marker *no* occurs with some predicates (e.g. verbs of fear, doubt, etc.) or in some constructions where it fails to reverse the truth-conditions of the proposition, as described in Par (1923), Fabra (1912, 1918, 1956), Badia (1962), Espinal (1991, 1992, 1997, 2000, 2002, 2007), and Tubau et al. (2018), among others.

- (iii) the [neg] feature of an NCI can disembody by means of overt Move F (Roberts 1998) to overtly c-command the Tense features of the sentence; the Strict vs. Non-Strict NC contrast is the result of whether this requirement is satisfied by means of movement of [neg] (Move F) or by some other movement of the NCI that contains the feature [neg] (Move α).

In any approach that assumes that NCIs are negative, the fact that these can be used in isolation as answers to wh-questions receives a straightforward explanation, even without having to take sides in the open debate on whether answers to questions are fragments of fuller clauses that are subject to ellipsis or not. In a similar vein, the syntax of pre-verbal NCIs in Non-Strict NC languages (where the pre-verbal NCI seems to contribute the negative meaning to the clause) is also straightforward.

What needs to be explained within an account that takes NCIs to be inherently negative, therefore, are the following research questions in (35):

- (35) **RQ 1:** Why do post-verbal NCIs need to co-occur with what looks like a negative marker in the pre-Infl position in all NC languages?
RQ 2: Why must pre-verbal NCIs occur with what looks like a negative marker in some NC languages but not in all?
RQ 3: What is the syntax of strings with a pre-verbal NCI and what looks like a negative marker?
RQ 4: What is the syntax of multiple post-verbal NCIs and what looks like a negative marker?
RQ 5: What is the syntax of negative spread in the NC languages that allow it?
RQ 6: What is the syntax of strings with multiple pre-verbal NCIs in NC languages?
RQ 7: How is DN obtained in NC languages?

In the sections that follow, we address each of the above questions in turn but first, in Section 3.1, we outline our assumptions concerning the difference between the negative marker in a negative sentence without NC, and the purported ‘negative marker’ in a sentence with NC. In Section 3.2, we address RQ 1, and in Section 3.3, we deal with RQs 2 and 3. In Sections 3.4 to 3.7, we answer RQs 4 to 7.

3.1 *On the expression of negation by means of negative markers and morphosyntactic negative features*

In this paper, we assume that negation is a semantic operator that can reverse the truth-conditions of a proposition when at the level of meaning representation, it

Several accounts have been proposed in the literature to account for this phenomenon – among them, logical absorption at the level of LF, or an analysis of *no* as a polar item, a non-negative lexical item that does not introduce an instance of logical negation. See Tsiakmakis & Espinal (2022) for an analysis of expletive negative markers as items that show a semantic dependency on other constituents within the sentence and that possibly introduce meaning enrichment at higher levels of representation.

binds the event variable (sitting in νP , or denoted through the tense feature; Acquaviva 1995; Roberts 1998; Zeijlstra 2004, 2008; Penka 2011). Take, for example, the sentences in (36). If (36a) expresses the proposition p , the presence of the negative marker *no* in (36b) results in the expression of $\neg p$, and the speaking event is negated.

- (36) (a) En Joan parla amb la Laia. [Catalan]
 the Joan speaks with the Laia
 ‘Joan speaks to Laia.’
 (b) En Joan *no* parla amb la Laia.
 the Joan not speaks with the Laia
 ‘Joan doesn’t speak to Laia.’

Since Pollock (1989), negation has been argued to have its own dedicated functional projection, NegP. Thus, in (36b), we assume the Catalan pre-verbal negative marker *no* to be a syntactic head Neg that projects into NegP in line with Zanuttini (2001).¹⁴ A relevant question at this point is whether Neg (and NegP) are always present in negative sentences and, more specifically, whether they are always present in sentences with NC if NCIs are assumed to be inherently negative.

In the present paper, we entertain the idea that NCIs are negative by virtue of carrying a negative feature, [neg], but unlike Zeijlstra (2004), who claims that negative features are either interpretable, [iNeg], or uninterpretable, [uNeg], so that they can participate in an Agree chain where [iF] checks [uF], we do not link the [neg] feature to (un)interpretability. Rather, our account is inspired by proposals such as Puskás (1998, 2000) or Jäger (2008), for whom negative indefinites are specified with the feature [+neg]. In this paper, we claim that the feature [neg] has the semantic potential to negate a proposition.¹⁵ Yet, for a negative sentence containing NCIs to be grammatical (and fully accepted by native speakers), [neg] should occur in a position from where it overtly c-commands the Tense features of the sentence. We take this to be a syntax–phonology interface constraint rather than a constraint on the assignment of sentential scope to negation. (See Espinal et al., in press, for experimental support of this hypothesis).

Furthermore, we also assume that multiple [neg] features can participate in a feature-sharing operation (Kuno 2006: 150) that ‘...voids the negative meaning of a Neg-feature without actually deleting it.’¹⁶ In what follows, we address how our

[14] Not every negative marker is a syntactic head though. In English, for instance, it has been suggested that the contracted form *-n’t* is a head Neg, whereas the uncontracted form *not* is a maximal projection that sits in the Specifier of NegP (Haegeman 1995; Zeijlstra 2004). According to Pollock (1989), *ne* is the head of the French NegP and *pas* its typical Specifier.

[15] The semantic representation of NCIs, therefore, is $\lambda P \neg \exists x.[P(x) \ \& \ \{\text{Hum/Thing}/\dots\}(x)]$. Yet, the formal feature [neg] syntactically constrains NCIs in crucially different ways in comparison to NQs.

[16] Feature-sharing has been proposed by Frampton & Gutmann (2006), Pesetsky & Torrego (2007), Ackema & Neeleman (2013), Camacho (2010), Danon (2011), and Preminger (2017), among others, to account for the kind of syntactic relation that Chomsky (2000, 2001) refers to as Agree.

proposal accounts for the syntax of NCIs in different positions in Catalan. However, before doing this, it is important to clarify that we do not take the lexical item *no* in Catalan (as well as in Spanish, or *nu* in Romanian, *dhen* in Greek, *non* in Italian, etc.) to always correspond to the syntactic head Neg. Rather, we claim that although *no* is the Spell-Out of a syntactic head Neg in negative sentences without an NCI, it is actually the phonetic realization of a disembodied (i.e. displaced by means of Move F) feature [neg] in sentences with an NCI.¹⁷ That is, we take two sentences such as (37) and (38) to have different underlying syntactic structures. The structure we assume for (37) is (39), with *no* corresponding to the syntactic head Neg; the analysis of (38) is discussed in Section 3.2, but note that *no* in this case would not correspond to the syntactic head Neg.

(37) *No menja.*

not eats

‘S/he doesn’t eat.’

(38) *No menja res.*¹⁸

[neg] eats n-thing

‘S/he doesn’t eat anything.’

(39) [_{NegP} [_{Neg} *no*] [_{TP} *pro*_i [_{T'} [_T *menja*_j] [_{VP} *t*_i [_{V'} [_V *t*_j] [_{VP} *t*_j]]]]]]]

In short, in this paper, we assume that different polarity-sensitive lexical items hold different relations with different forms of negation. So-called NQs (e.g. Standard English *nobody*, *nothing*, etc.) contain an incorporated negation (Temmerman 2012) that can take sentential scope covertly and cannot participate in concord relations (thus disallowing negative spread between a pre-verbal NQ and one or more post-verbal NQs). PIs are existential expressions that depend on a semantically suitable licenser (a non-veridical licenser, according to Giannakidou 2001). By contrast, in this paper we argue that NCIs are existential expressions endowed with a negative feature [neg] that can raise to overtly c-command Tense, which is a syntax–phonology interface requirement for the expression of negation in NC languages. What is unique about NCIs is that the [neg] feature can move up by disembodiment from the NCI to satisfy this requirement (in compliance with Jespersen’s 1917, 1933 NegFirst principle).¹⁹ When this happens, [neg] is phonologically realized in the same way as the corresponding head Neg (i.e. *no*, *nu*, *dhen*,

Acquaviva (1999) also discusses feature-sharing in the context of negation from a semantic perspective.

[17] The ‘disembodiment’ terminology is inspired by Szabolcsi (2017, 2018a, b), but the proposed mechanism is (a type of) Move F, which we understand as in Roberts (1998), for whom (weak) features can overtly move before Spell-Out (cf. Chomsky 1995). Unlike Roberts, though, we do not commit to Move F applying to a particular type of features (e.g. weak). See also Lee (1996) for whom formal features can be moved without pied-piping in the overt syntax as long as this movement does not cause any problem for convergence at PF.

[18] From now on, whenever the sentence contains an NCI, *no/dhen/nu/ne*, etc. is glossed as [neg] to indicate that it corresponds to a disembodied feature that was once part of the NCI.

[19] See also de Swart (2010) in support of the central role of the NegFirst principle in the syntax of NC.

etc.) and the NCI is (semantically) downgraded to a non-negative indefinite. Crucial to the present analysis is the proposal that the underlying structure of a sentence with an NCI contains no Neg head even if a SN reading is to be composed.

3.2 *On the syntax of post-verbal Negative Concord Items*

In this section, we address RQ 1 – namely, why post-verbal NCIs must co-occur with what looks like a negative marker in the pre-InfI position in all NC languages. We argue that the [neg] feature of an NCI that is merged post-verbally is too embedded in the structure to fulfil the syntax–phonology interface requirement that we propose for sentential negation in this paper. Given the Phase Impenetrability Condition (PIC) (Chomsky 2000), (40), and assuming that negation in Romance languages is higher than the TP (Ouhalla 1990), [neg] needs to be extracted via the phase edge.²⁰

(40) *Phase Impenetrability Condition*

In phase α with head H, the domain of H is not accessible to operations outside α ; only H and its edge are accessible to such operations.

(Chomsky 2000: 108)

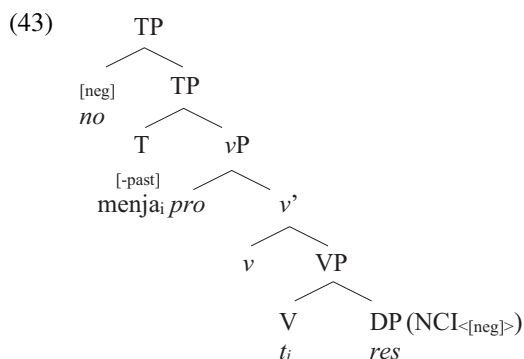
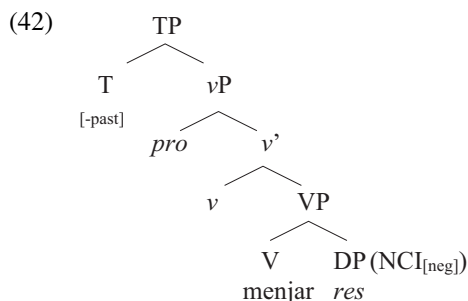
Let us examine a sentence such as (38), repeated here as (41) for convenience.

- (41) *No menja res.*
 [neg] eats n-thing
 ‘S/he doesn’t eat anything.’

The Numeration includes the NCI *res* ‘n-thing’,²¹ endowed with a [neg] feature that can potentially negate the clause due to its negative semantics, but which needs to overtly c-command Tense. The derivation of the first relevant phase is (42). Extraction of the [neg] feature of the NCI to the TP-phase edge by means of Move F adjoins [neg] to TP and yields the structure in (43). Upon transfer of the syntactic structure to exponence (Nevins 2012), [neg] undergoes Vocabulary Insertion and is pronounced as *no*. In (43), the angled brackets indicate traces of movement.

[20] According to Gallego (2005, 2007), TP is a phase in null-subject languages such as Catalan. Notice that the concept of *phase* is crucial to explain why long-distance licensing of NCIs is not possible. Following Chomsky (2005), we consider *v* as the functional head associated with full argument structure. Only transitive and unergative *v*Ps were originally considered phases in Chomsky’s work. In Chomsky (2000 and ff), nonetheless, as well as in Legate (1998, 2003) and Richards (2004), all kinds of *v*Ps constitute phases.

[21] Recall that this Catalan sentence may also be interpreted as having a PI *res* ‘anything’ in post-verbal position under the scope of a Neg licenser. We will not consider the licensing of PIs in this paper, for which we refer the reader to Giannakidou (1997, 1998).



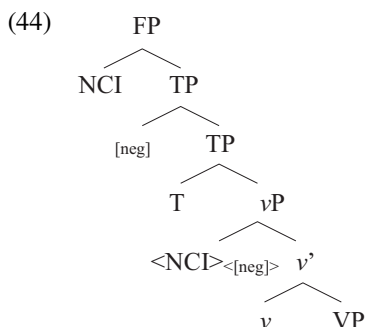
This simple mechanism answers our RQ 1. The reason why post-verbal NCIs are c-commanded by what looks like a negative marker in all languages with NC is because the [neg] feature of a post-verbal NCI, which is responsible for the negative semantics of the NCI, can disembody from the negative indefinite to satisfy a syntax–phonological interface constraint (fully compatible with Jespersen’s Neg-First principle) that negation overtly c-commands the Tense features of the sentence. The disembodied [neg] feature is pronounced with the same phonological realization that a given language uses to Spell-Out negation.²²

What is novel about the present analysis of NC structures is (i) the possibility for the negation (feature) contained in the NCI to disembody by means of Move F independently from the rest of the lexical item, and (ii) that NC is analysed not as a narrow syntax phenomenon but as a mapping from syntax to exponence. Such an option is considered to fit with minimalist tenets, as only the essential feature overtly moves to the phase-edge.

[22] Note that this is the case for languages such as Catalan, Greek, or Romanian, but is different in French, which distinguishes between the negative marker, Spelled-Out as *pas* ‘not’, and the so-called scope marker *ne*. In European French, *pas* is incompatible with NCIs, but *ne* is not.

3.3 On the syntax of pre-verbal Negative Concord Items

Let us now consider RQs 2 and 3 – namely, why pre-verbal NCIs must occur with what looks like a negative marker in some NC languages but not in all (RQ 2), and what is the syntax of strings of a pre-verbal NCI in combination with what looks like a negative marker (also known as Strict NC) (RQ 3). Assuming that the [neg] feature of NCIs is required to overtly c-command Tense features for a sentence with NC to be fully grammatical (i.e. compliant with the syntax–phonology interface conditions), whether it does so by means of Move F or whether it can do so opportunistically (i.e. as a consequence of an instance of Move α that relocates the entire NCI for reasons that have little to do with the expression of negation) might result in the observed difference between so-called Strict NC and Non-Strict NC. If in a structure such as (44), [neg] satisfies the aforementioned syntax–phonology interface constraint by means of Move F, it will be extracted to the TP phase-edge prior to subject movement of the NCI from the Specifier of ν P to the Specifier of a left-peripheral projection, here labelled FP (for TopicP, FocusP, etc.).²³ At the time of Vocabulary Insertion, the F Moved [neg] feature is Spelled-Out as *dhen*, *nu*, *no*, etc. depending on the languages' vocabulary insertion repertoire. Although the possibility that a [neg] feature disembodies from an NCI is the property that characterizes all NCI languages, by what means (Move F or Move α) a language manages to satisfy the syntax–phonology interface constraint that an expression of negation overtly c-commands Tense is what results in two main types of NC (so-called Strict NC and Non-Strict NC) that are only detected when pre-verbal NCIs are involved.



For the Romanian pair in (45), (45a) has a structure where the NCI subject *nimeni* remains in the ν P-internal position; by contrast, to derive (45b), *nimeni* moves upwards, as illustrated in the structure in (44). In both the examples in (45), [neg] undergoes Move F and *nu* is inserted.

[23] We do not discuss here what the ultimate position of the subject is in null-subject languages, though it has been suggested in the literature that it may be the Specifier of TP but also in higher positions of the left-periphery (Camacho 2011; Villa-García 2012). We deliberately label it as FP.

- (45) (a) *Nu suna nimeni.* [Romanian]
 [neg] calls n-body
 ‘Nobody calls.’
 (b) *Nimeni nu suna.*
 n-body [neg] calls
 ‘Nobody calls.’

In Non-Strict NC languages, by contrast, the syntax–phonology interface constraint that we propose is satisfied by an application of Move α such as movement of the subject NCI from the Specifier of ν P to the Specifier of FP, thus sparing the need for the [neg] feature to disembody. In this case, [neg] will not receive distinct phonological content (i.e. what looks like a negative marker will not be present in the clause). That the repositioning of [neg] in a higher position in Non-Strict NC languages is predatory on other movement operations is supported by the contrast that can be observed in (46) for Catalan. Although in (46a), the [neg] feature of the NCI relocates via subject movement, in (46b), the subject NCI does not move further from its first-merge position in the Specifier of the ν P, thus forcing the [neg] feature of the NCI to disembody; see (44). After Move F, the disembodied [neg] feature in (46b) will be pronounced as *no*.

- (46) (a) *Ningú_[neg] menja.* [Catalan]
 n-body eats
 ‘Nobody eats.’
 (b) *No_[neg] menja ningú.*
 [neg] eats n-body
 ‘Nobody eats.’

In short, the difference between Strict and Non-Strict NC is connected to how a very specific syntax–phonology interface condition is met (namely, the need for negation to overtly c-command Tense features). Although Strict NC languages use Move F allowing [neg] to relocate, Non-Strict NC languages allow Move α of the NCI for reasons other than the expression of negation to do the job. Yet, the relevant contrast between these two kinds of NC languages is only observed with pre-verbal NCIs: although in Strict NC, pre-verbal NCIs co-occur with what looks like a negative marker, they do not in Non-Strict NC. This is so, we argue, because it is only in the case of pre-verbal NCIs that the [neg] feature can reposition above TP via movement of the entire NCI for syntactic reasons other than the expression of negation. Given that the Strict vs. Non-Strict NC divide is a syntax–phonology interface issue, it is not surprising that Catalan can be flexible in how the [neg] feature of pre-verbal NCIs gets to a position above TP, thus freely alternating between Move F and Move α .²⁴

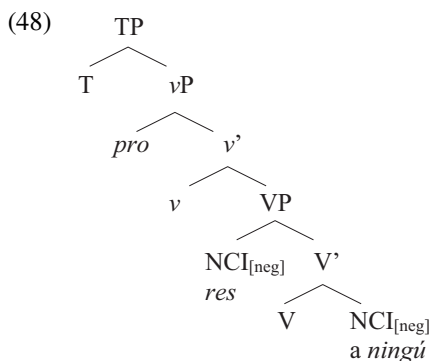
[24] See Haegeman & Lohndal (2010) for optional NC in West Flemish and Tubau (2008) for ‘switches’ between Strict and Non-Strict NC in the speech of the same speakers in some Traditional Dialects of British English.

3.4 *On the syntax of multiple post-verbal Negative Concord Items*

Once the syntax of post-verbal and pre-verbal NCIs in Strict and Non-Strict languages has been examined, RQ 4 follows: what is the syntax of multiple post-verbal NCIs? In other words, if NCIs are assumed to be inherently negative, how is it possible for several of them to co-occur post-verbally? Let us consider the Catalan well-formed sentence in (47).

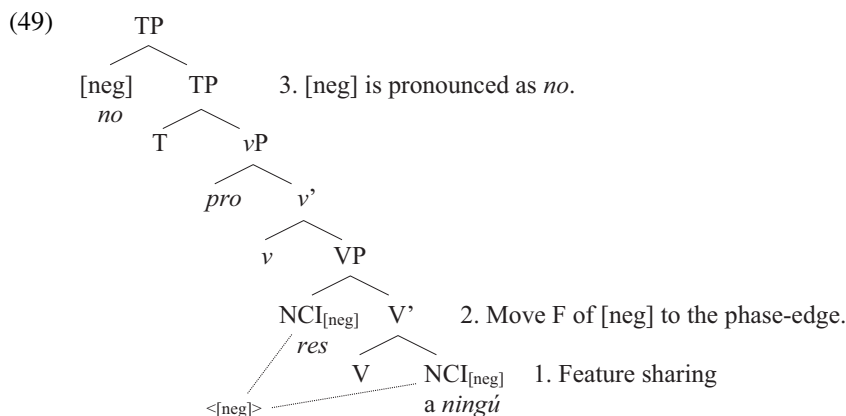
- (47) *No diu res a ningú.* [Catalan]
 Neg says n-thing to n-body
 ‘S/he doesn’t say anything to anyone.’

We argue that the derivation of a negative sentence with multiple post-verbal NCIs involves a concord relation and the disembodiment mechanism prompted by Move F that we have already outlined above for the feature [neg]. For a sentence such as (47), the TP-phase would be that in (48).²⁵



As they are in a c-command relation, the two [neg] features in the VP-domain can establish a concord relation and resume into one. We entertain the idea that the mechanism that combines two identical [neg] features is a case of feature-sharing (Kuno 2006). That is, we assume that when two identical [neg] features occur within a given syntactic domain (the vP in this case) and they are in a c-command relation, the [neg] feature is shared (step 1 in (49)) and, thus interpreted as a single instance of negation at the interface. Furthermore, the shared feature [neg] can then be disembodied (step 2 in (49)) and extracted to the edge of the phase (step 3 in (49)) via Move F. The [neg] feature will be pronounced as *no* and the sentence in (47) will convey SN.

[25] The analysis of the two objects in (48) is based on Adger's (2004) minimalist update of Larson (1988).

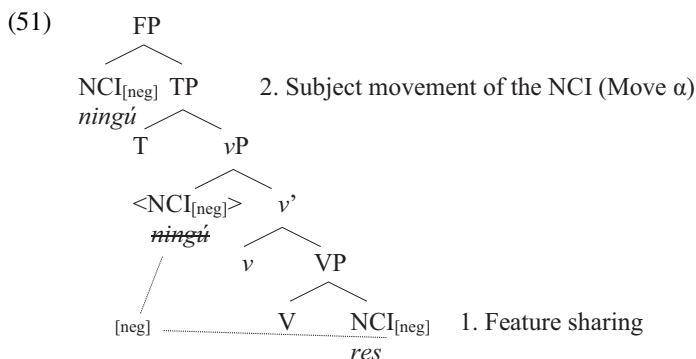


3.5 On negative spread

Our fifth research question is connected to the syntax of negative spread (den Besten 1986). Recall that this is the possibility that a pre-verbal NCI occurs with one or more post-verbal NCIs in Non-Strict NC languages. Negative spread is illustrated in the Catalan example in (50).

- (50) *Ningú menja res.* [Catalan]
 n-body eats n-thing
 ‘Nobody eats anything.’

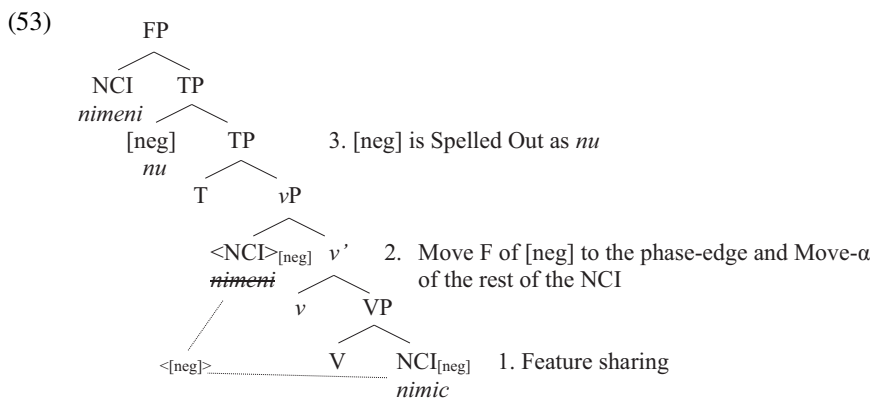
Negative spread fits well with our assumption that a [neg] feature c-commanding another one establish a concord relation that leads to feature-sharing. That is, the [neg] feature of the subject NCI c-commands the [neg] feature of the object NCI, and thus they share a [neg] feature and negation is interpreted only once. In addition, negative spread also follows from the fact that in Non-Strict NC, the syntax–phonology interface requirement that negation overtly c-commands the Tense features of the sentence can be met after [neg] is put in place thanks to an instance of Move α that targets the NCI and occurs independently from the expression of negation. Once movement of the external argument NCI has taken place, there is no need for [neg] to disembody and F Move and, therefore, it is not independently pronounced from the rest of the NCI. The derivation of (50) is shown in (51), with feature-sharing of two [neg] features in the vP -domain and posterior subject movement of the NCI, which guarantees that the shared [neg] feature c-commands Tense.



In Strict NC languages, negative spread is not attested, as what looks like a negative marker always occurs with both a pre-verbal and a post-verbal NCI. Thus, the equivalent of (50) in Romanian, for example, is (52).

- (52) *Nimeni nu mănâncă nimic.* [Romanian]
 n-body [neg] eats n-thing
 ‘Nobody eats anything.’

In (52), *nimeni* and *nimic* also establish a concord relation (as *ningú* and *res* in (51) above) and share a [neg] feature. Then [neg] disembodies and is first extracted to the phase-edge via Move F. Later, the rest of the subject NCI (i.e. the existential indefinite, as [neg] has moved on its own) will move. The result is that the NCI is higher than the [neg] feature, which is Spelled-Out as *nu*, but the interpretation is that of SN. Thus, we propose that the derivation of (52) is that in (53).



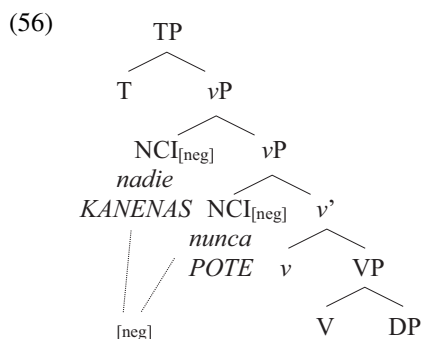
3.6 On the syntax of multiple pre-verbal Negative Concord Items

In this section, we discuss our RQ 6 – namely, what the syntax of strings with multiple pre-verbal NCIs is in NC languages. As can be seen in (54) and (55), even when more than one NCI occurs preverbally, the contrast between so-called Non-

Strict and Strict NC languages concerning the obligatoriness of the presence/absence of what looks like a negative marker is maintained.

- (54) *Nadie nunca compra postales.* [Spanish]
 n-body n-ever buys postcards
 ‘Nobody ever buys postcards.’
- (55) *KANENAS POTE dhen aghorazi ghramatosima.* [Greek]
 n-body n-ever [neg] buys postcards
 ‘Nobody ever buys postcards.’

Both in Spanish and in Greek, the order of the two pre-verbal NCIs may be reversed. The underlying structure for the TP-phase in both (54) and (55) would be that in (56). Given that the two NCIs establish a syntactic relation where one [neg] feature c-commands another, feature-sharing obtains both in Spanish and Greek. For Greek, the shared [neg] feature will disembody and relocate to a position above TP via Move F; [neg] will end up pronounced as *dhen*. Move- α will be responsible for the final position of the two pre-Infl NCIs, both in Greek and in Spanish.



What sets the difference is the point at which the shared [neg] satisfies the syntax-phonology requirement to overtly c-command the Tense features of the sentence.

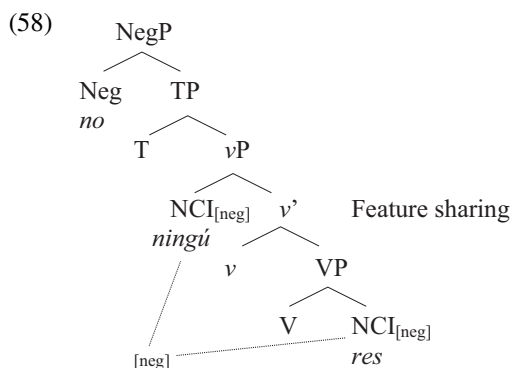
3.7 On double negation

Our last RQ 7 concerns how DN emerges in NC languages. We argue here that it can arise in two different ways: (i) DN can be compositional and emerge as a result of combining a syntactic Neg head and an NCI endowed with a formal feature [neg], or (ii) by combining two NQs, if a given language has a series of NCIs that is homophonous with a series of NQs (e.g. French). We discuss each possibility in turn.

In our approach to NC, the syntactic head Neg is not part of the derivation of a negative sentence when an NCI is present in the lexical selection (or Numeration). This happens, of course, when/if the intended meaning is that of SN. Suppose,

nonetheless, that the intended meaning is DN. It may then be possible to include both an NCI and a Neg head in the Numeration. These two negations, we have discussed, do not actually interact in NC, as they are of different syntactic status. Thus, it is expected that they will both be interpreted, hence cancelling each other out and yielding a DN reading. For cases such as (57), which, despite being most often interpreted as conveying a SN reading, were found to yield some proportion of DN in Déprez et al. (2015), a compositional DN reading can obtain if the underlying structure of (57) is assumed to be the one in (58), where the negative head *no* combines with [neg] within a sentential domain and they both translate into \neg .²⁶

- (57) *Ningú no trenca res.* [Catalan]
 n-body not breaks n-thing
 ‘Everybody breaks something.’



Earlier in the paper, we presented some data from French showing that two NCIs may give rise to a SN reading as the result of negative spread, but also to a DN reading, (34), repeated here as (59) and (60) for each reading (Corblin 1995, 1996).

- (59) *Personne ne dit rien.* [French]
 n-body NEG says n-thing
 ‘Nobody says anything.’ [SN reading]
- (60) *Personne ne dit rien.*
 nobody NEG says nothing
 ‘Everybody says something.’ [DN reading]

Although the SN reading in (59) follows from the mechanism described in Section 3.5, we argue that the DN reading attested in sentences such as (60) follows

[26] Note that syntax and prosody may also interact at the time of conveying DN and, more generally, a reject interpretation. See Espinal et al. (2016), Prieto & Espinal (2020), among others. See also Fălăuș (2007) and Fălăuș & Nicolae (2016) for a discussion of the emergence of DN in Romanian, and Puskás (2006, 2012) for the possibility to obtain DN in Hungarian. In these languages (both with Strict NC), DN is linked to a special intonation contour.

from the fact that French has a series of NQs that is homophonous with a series of NCIs. If *personne* and *rien* are NQs (like Standard English *nobody* and *nothing*), their negation is incorporated (Temmerman 2012) and cannot disembody in the way that the [neg] feature of NCIs does. In a structure involving them both in a c-commanding relation, therefore, no feature-sharing will take place, as this is, in our account, an option reserved for identical formal features and thus available to NCIs only. Thus, one negation will cancel out the other, predicting a DN interpretation as a consequence.

4. CONCLUSION AND FURTHER DISCUSSION

With Catalan as a case in point, in this paper we have put into question the syntactic macro-parametric division between Strict and Non-Strict NC as characterized by Zeijlstra (2004). We align with a micro-parametric approach that drives NC from the properties assigned to the NCI. The optionality of *no* with preverbal NCIs shows that the difference Strict vs. Non-Strict cannot be due to the feature-marking of the negative marker. In the new proposal that we have developed, negative markers are inherently negative across all so-called NC languages, and so are NCIs, but negative markers and NCIs are formally distinct. It is precisely because NCIs are inherently negative that they can occur, in the absence of the negative marker, as answers to *wh*-questions.

As far as the Strict vs. Non-Strict NC distinction is concerned, we have argued that it follows from by what means a language must satisfy the syntax–phonology requirement that the Tense features of the sentence be overtly c-commanded by a negative expression, a requirement which is ultimately an instantiation of Jespersen’s NegFirst principle. In so-called Strict NC, [neg] relocates by means of Move F on all occasions. Move F of [neg] consists in disembodying [neg] from the rest of the NCI so that it can move to a position above TP, downgrading the NCI to an existential under the scope of negation. At the stage of Vocabulary Insertion, a disembodied [neg] feature will be Spelled-Out in different NC languages by means of items that are homophonous to a negative marker. The novelty of our analysis, therefore, consists in claiming that in NC structures (i.e. sentences containing one or more NCIs), what looks like the negative marker (e.g. Catalan/Spanish *no*, Italian *non*, Greek *dhen*, Romanian *nu*, etc.) is actually not a syntactic head Neg but the phonological realization of a [neg] feature that has moved independently from the rest of the NCI. Given that post-verbal NCIs are too embedded for [neg] to get to a position above TP unless it disembodies, they co-occur with what looks like a negative marker in all NC languages (regardless of whether they are classified as Strict or Non-Strict).

For the so-called Non-Strict NC languages, [neg] does not have to disembody when the NCI occurs pre-verbally, as [neg] is allowed to opportunistically relocate above TP as a consequence of any other movement of the NCI to a pre-verbal position. Regarding the need for negation to meet the syntax–phonology interface requirement we have proposed results in all NC structures having a phonological

manifestation of [neg] with postverbal NCIs, but only some having a phonological manifestation of [neg] with pre-verbal NCIs (in Strict NC structures).

To motivate our proposal, we have taken into account the differences between NCIs and PIs, and NCIs and NQs. We have suggested that PIs are inherently non-negative, whereas NQs contain an incorporated negation. The difference between the negation in an NQ and the feature [neg] in NCIs is that although the latter can participate in concord configurations that involve feature-sharing (of identical [neg] formal features), the former is not allowed to do so. That is, if a [neg] feature c-commands another one within the νP , the co-occurring NCIs share their feature [neg], thus yielding a SN reading for structures containing more than one NCI.

We have also addressed the case of Catalan, which we concluded has a series of NCIs that is homophonous with a series of PIs. This gives the false impression of NCIs having a much wider distribution in Catalan than they have in other NC languages. In addition, the optionality of the (alleged) negative marker with pre-verbal NCIs has traditionally put Catalan in a gray area when having to classify it as having either Strict or Non-Strict NC. In the present paper, we claim that NC in Catalan displays flexibility between the Strict and the Non-Strict type because this division results from how a well-formedness syntax–phonology interface constraint is met.

We have discussed how DN readings can be accommodated in the new proposal we have developed. In summary, we have claimed that by virtue of being negative, NCIs that co-occur with a Neg syntactic head will give rise to DN readings because the semantic operator \neg in Neg cannot participate in feature-sharing with the formal feature [neg] of the NCI, since they have different syntactic status and do not share identical formal properties in the same syntactic domain. Both NQs (which carry an incorporated negation) and NCIs (by virtue of a [neg] feature) are semantically negative; yet, the possibility that two [neg] features express only one logical negation as a consequence of feature-sharing is what sets NCIs apart from NQs. By virtue of allowing the [neg] feature to disembody, NCIs are close to PIs in the sense that at LF, they would both be translated as existentials under the scope of an operator. Yet, the licenser of PIs in negative contexts is either a negative marker or an NCI with a [neg] feature in it, whereas NCIs are self-licensing. This means that what looks like a negative marker co-occurring with NCIs in post-verbal position in all NC structures and with pre-verbal NCIs in Strict NC structures is just the phonological realization of the formal feature [neg] that used to be part of the NCI when it entered the derivation.

CONFLICT OF INTEREST STATEMENT

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

REFERENCES

- Acquaviva, Paolo. 1993. *The logical form of negation: A study of operator-variable structures in syntax*. Ph.D. dissertation, Scuola Normale Superiore, Pisa.
- Acquaviva, Paolo. 1995. Operator composition in the licensing of Negative Concord. *Geneva Generative Papers* 3/2, 72–104.
- Acquaviva, Paolo. 1997. *The logical form of negation: A study of operator-variable studies in syntax*. New York: Garland.
- Acquaviva, Paolo. 1999. Negation and operator dependencies. *Lingua* 108, 137–174. <https://doi.org/dxsjb6>
- Ackema, Peter & Ad Neeleman. 2013. Subset controllers in agreement relations. *Morphology* 23, 291–323. <https://doi.org/kfgv>
- Adger, David. 2004. *Core syntax: A minimalist approach*. Oxford: Oxford University Press.
- Aranovich, Raúl. 2007. Negative polarity and scalar semantics in Spanish. *Linguisticae Investigationes* 30.2, 181–216. <https://doi.org/kfgw>
- van der Auwera, Johan & Lauren Van Alsenoy. 2016. On the typology of negative concord. *Studies in Language* 40.3, 473–512. <https://doi.org/kfgx>
- van der Auwera, Johan & Olga Krasnoukhova. 2020. The typology of negation. In Viviane Déprez & M. Teresa Espinal (eds.), *The Oxford handbook of negation*, 91–116. Oxford: Oxford University Press. <https://doi.org/kfgz>
- Badia i Margarit, Antoni Maria. 1962. *Gramàtica catalana*. Madrid: Gredos.
- Badia i Margarit, Antoni Maria. 1994. *Gramàtica de la llengua catalana*. Barcelona: Enciclopèdia Catalana.
- Bernini, Giuliano & Paolo Ramat. 1996. *Negative sentences in the languages of Europe*. Berlin: de Gruyter. <https://doi.org/kfg2>
- Bosque, Ignacio. 1980. *Sobre la negación*. Madrid: Cátedra.
- den Besten, Hans. 1986. Double negation and the genesis of Afrikaans. In Pieter Muysken & Norval Smith (eds.), *Substrata versus universals in Creole genesis*, 185–230. Amsterdam: John Benjamins. <https://doi.org/kfg3>
- Camacho, José. 2010. On case concord: The syntax of switch-reference clauses. *Natural Language and Linguistic Theory* 28, 239–274. <https://doi.org/fspbd8>
- Camacho, José. 2011. On the position of preverbal subject in Spanish: A view from the discourse perspective. Ms., Rutgers University.
- Chomsky, Noam. 1995. *The minimalist program*. Cambridge: MIT Press.
- Chomsky, Noam. 2000. Minimalist inquiries: The framework. In Roger Martin, David Michaels & Juan Uriagereka (eds.), *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, 89–155. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In Michael Kenstowicz (ed.), *Ken Hale: A life in language*, 1–54. Cambridge, MA: MIT Press. <https://doi.org/kfg5>
- Chomsky, Noam. 2005. On phases. Ms., Massachusetts Institute of Technology.
- Corblin, Francis. 1995. Compositionality and complexity in multiple negation. *Logic Journal of the IGPL* 3.2–3, 449–471. <https://doi.org/ctj4wc>
- Corblin, Francis. 1996. Multiple negation processing in natural language. *Theoria* 17, 214–259. <https://doi.org/cc2m7n>
- Corblin, Francis, Viviane Déprez, Henriëtte de Swart & Lucia Tovenia. 2004. Negative concord. In Francis Corblin & Henriëtte de Swart (eds.), *Handbook of French semantics*. Stanford: CSLI Publications. Available at: https://www.researchgate.net/publication/46652684_Negative_Concord.
- Danon, Gabi. 2011. Agreement and DP-internal feature distribution. *Syntax* 14, 297–317. <https://doi.org/bwn57p>
- Davidson, Donald. 1967. The logical form of action sentences. In Nicholas Rescher (ed.), *The logic of decision and action*, 81–95. Pittsburgh: University of Pittsburgh Press. <https://doi.org/bqqp72>
- Déprez, Viviane. 1997. Two types of negative concord. *Probus* 9, 103–143. <https://doi.org/d6w9kd>
- Déprez, Viviane, Susagna Tubau, Anne Cheylus & M.Teresa Espinal. 2015. Double negation in a negative concord language: An experimental investigation. *Lingua* 163, 75–107. <https://doi.org/kfhc>
- Diesing, Molly. 1992. *Indefinites*. Cambridge, MA: MIT Press.
- Espinal, M.Teresa. 1991. On expletive negation: Some remarks with regard to Catalan. *Linguisticae Investigationes* XV.1, 41–65. <https://doi.org/c4wcd3>

- Espinal, M.Teresa. 1992. Expletive negation and logical absorption. *The Linguistic Review* 9.4, 338–358. <https://doi.org/d7v7pw>
- Espinal, M.Teresa. 1997. Non-negative negation and *wh*-exclamatives. In Danielle Forget, France Martineau, Paul Hirschbühler & María Luisa Rivero (eds.), *Negation and polarity: Syntax and semantics*, 75–93. Amsterdam: John Benjamins. <https://doi.org/kfhf>
- Espinal, M.Teresa. 2000. On the semantic status of *n*-words in Catalan and Spanish. *Lingua* 110, 557–580. <https://doi.org/dk42d6>
- Espinal, M.Teresa. 2002. La negació. In Joan Solà, M.Rosa Lloret, Joan Mascaró & Manuel Pérez-Saldanya (eds.), *Gramàtica del català contemporani*, 2687–2757. Barcelona: Empúries/Grup 62.
- Espinal, M.Teresa. 2007. Licensing expletive negation and negative concord in Catalan and Spanish. In Frank Floricic (ed.), *La négation dans les langues romanes (Linguisticae investigationes: Supplementa 26)*, 49–74. Amsterdam: John Benjamins. <https://doi.org/kfhf>
- Espinal, M.Teresa & Susagna Tubau. 2016. Meaning of words, meaning of sentences: Building the meaning of *n*-words. In Susan Fischer & Christoph Gabriel (eds.), *Manual of grammatical interfaces in Romance*, 187–212. Berlin: Mouton de Gruyter. <https://doi.org/kd36>
- Espinal, M.Teresa, Susagna Tubau, Joan Borràs-Comes & Pilar Prieto. 2016. Double negation in Catalan and Spanish. Interaction between syntax and prosody. In Pierre Larrivée & Chung-min Lee (eds.), *Negation and polarity: Cognitive and experimental perspectives*, 143–174. Dordrecht: Springer. <https://doi.org/kfhf>
- Espinal, M.Teresa & Ares Llop. 2022. (Negative) polarity items in Catalan and other trans-Pyrenean Romance languages. *Languages* 7.1, 30. <https://doi.org/kd35>
- Espinal, M.Teresa, Eloi Puig-Mayenco, Urtzi Etxebarria & Susagna Tubau. 2023. On the status of NCIs. An experimental investigation on so-called Strict NC languages. *Journal of Linguistics*.
- Fabra, Pompeu. 1912. *Gramàtica de la lengua catalana*. Barcelona: Aqua.
- Fabra, Pompeu. 1918. *Gramàtica catalana*. Barcelona: Institut d'Estudis Catalans.
- Fabra, Pompeu. 1956. *Gramàtica catalana*. Barcelona: Teide.
- Fălăuş, Anamaria. 2007. Le paradoxe de la double négation dans une langue à concordance négative stricte. In Florian Floricic (ed.), *La négation dans les langues romanes*, 75–97. Amsterdam: John Benjamins. <https://doi.org/kd37>
- Fălăuş, Anamaria & Andreea C. Nicolae. 2016. Fragment answers and double negation in strict negative concord languages. In Mary Moroney, Carol-Rose Little, Jacob Collard & Dan Burgdorf (eds.), *Proceedings of Semantics and Linguistic Theory (SALT) 26*, 584–600. Ithaca: Linguistic Society of America and Cornell Linguistics Circle. <https://doi.org/kd38>
- Frampton, John & Sam Gutmann. 2006. How sentences grow in the mind: Agreement and selection in an efficient minimalist syntax. In Cedric Boeckx (ed.), *Agreement systems*, 121–157. Amsterdam: John Benjamins. <https://doi.org/ghdqbd>
- Frege, Gottlob. 1879. *Begriffsschrift eine der arithmetischen nachgebildete Formelsprache des reinen Denkens*. Halle: Verlag Louis Nebert.
- Gallego, Ángel. 2005. Phase sliding. Ms., Universitat Autònoma de Barcelona and University of Maryland. Available at: https://www.academia.edu/1880964/Phase_sliding.
- Gallego, Ángel. 2007. *Phase Theory and parametric variation*. Ph.D. dissertation, Universitat Autònoma de Barcelona. Available at: <http://hdl.handle.net/10803/4888>.
- Garzonio, Jacopo & Cecilia Poletto. 2023. Living on the edge. On bare and non-bare NCIs across Italo-Romance. *Languages* 8.2, 119. <https://doi.org/kfhk>
- Giannakidou, Anastasia. 1997. *The landscape of polarity items*. Ph.D. dissertation, University of Groningen. Available at: https://www.researchgate.net/publication/36239611_The_landscape_of_polarity_items.
- Giannakidou, Anastasia. 1998. *Polarity sensitivity as (non)veridical dependency*. Amsterdam and Philadelphia: John Benjamins. <https://doi.org/kfhf>
- Giannakidou, Anastasia. 2000. Negative...Concord? *Natural Language and Linguistic Theory* 18, 457–523. <https://doi.org/db7nfw>
- Giannakidou, Anastasia. 2001. The meaning of free choice. *Linguistics and Philosophy* 24, 659–735. <https://doi.org/d27hvt>
- Giannakidou, Anastasia. 2002. *N-words and negative concord*. *The linguistics companion*. Oxford: Blackwell. Available at: <https://home.uchicago.edu/~giannaki/pubs/nwords.pdf>.
- Giannakidou, Anastasia. 2006. *Only*, emotive factive verbs, and the dual nature of polarity dependency. *Language* 82(3), 575–603. <https://www.jstor.org/stable/4490205>

- Giannakidou, Anastasia. 2011. Positive polarity items and negative polarity items: Variation, licensing, and compositionality. In Claudia Maienborn, Klaus von Heusinger & Paul Portner (eds.), *Semantics: An international handbook of natural language meaning*, 1660–1712. Berlin: de Gruyter. Available at: https://www.researchgate.net/publication/255578263_Negative_and_positive_polarity_items_Variation_licensing_and_compositionality.
- Giannakidou, Anastasia & Josep Quer. 1997. Two mechanisms for the licensing of negative indefinites. In Leslie Gabriele, Debra Hardison & Robert Westmoreland (eds.), *Formal Linguistics Society of Mid-America (FSLM) 6*, 103–114. Bloomington: Indiana Linguistics Club (IULC).
- Haegeman, Liliane. 1995. *The syntax of negation*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/9780521432141>
- Haegeman, Liliane & Terje Lohndal. 2010. Negative concord and (Multiple) Agree: A case study of West Flemish. *Linguistic Inquiry* 41.2, 181–211. <https://doi.org/10.1017/S002226720000233>
- Haegeman, Liliane & Raffaella Zanuttini. 1991. Negative heads and the Neg-criterion. *The Linguistic Review* 8, 233–251. <https://doi.org/10.1017/S002226720000233>
- Herburger, Elena. 2001. The negative concord puzzle revisited. *Natural Language Semantics* 9, 289–333. <https://doi.org/10.1017/S002226720000233>
- Hiraiwa, Ken. 2001. Multiple Agree and the defective intervention constraint in Japanese. *MIT Working Papers in Linguistics* 40, 67–80. Available at: <http://web.mit.edu/norvin/www/24.956/Hiraiwamultipleagr.pdf>.
- Horn, Laurence R. 1989. *A natural history of negation*. Chicago: University of Chicago Press.
- Iatridou, Sabine & Ivy Sichel. 2011. Negative DPs, A-movement, and scope diminishment. *Linguistic Inquiry* 42, 595–629. <https://doi.org/10.1017/S002226720000233>
- Institut d'Estudis Catalans. 2016. *Gramàtica de la llengua catalana*. Barcelona: Institut d'Estudis Catalans.
- Jacobs, Joachim. 1980. Lexical decomposition in Montague Grammar. *Linguistics* 3, 121–136. <https://doi.org/10.1017/S002226720000233>
- Jäger, Agnes. 2008. *History of German negation*. Amsterdam: John Benjamins. <https://doi.org/10.1017/S002226720000233>
- Jespersen, Otto. 1917. *Negation in English and other languages*. Copenhagen: A. F. Høst.
- Jespersen, Otto. 1933. *Essentials of English grammar*. London: Allen & Unwin.
- Klima, Edward S. 1964. Negation in English. In Jerry A. Fodor & Jerold J. Katz (eds.), *The structure of language. Readings in the philosophy of language*, 246–323. New Jersey: Prentice Hall.
- Kuno, Masakazu. 2006. Negative concord as feature sharing. In Danièle Torck & W. Leo Wetzels (eds.), *Romance languages and linguistic theory 2006: Selected papers from 'Going Romance'*, Amsterdam 7–9 December 2006, 143–158. Amsterdam: John Benjamins. <https://doi.org/10.1017/S002226720000233>
- Ladusaw, William. 1992. Expressing negation. In Chris Barker & David Dowty (eds.), *Proceedings of Semantics and Linguistic Theory (SALT) II*, 237–259. Columbus: The Ohio State University. <https://doi.org/10.1017/S002226720000233>
- Ladusaw, William. 1994. Thetic and categorial, stage and individual, weak and strong. In Mandy Harvey & Lynn Santelman (eds.), *Semantics and Linguistic Theory (SALT) IV*, 220–229. Ithaca: Cornell University Press. <https://doi.org/10.1017/S002226720000233>
- Laka, Itziar. 1990. *Negation in syntax: On the nature of functional categories and projections*. Ph.D. dissertation, Massachusetts Institute of Technology. Available at: <http://www.ai.mit.edu/projects/dm/theses/laka90.pdf>.
- Larson, Richard K. 1988. On the double object construction. *Linguistic Inquiry* 19.3, 335–391. Available at: <https://www.jstor.org/stable/25164901>.
- Lee, Man-Ki. 1996. Feature movement without pied-piping in the overt syntax. *Catalan Working Papers in Linguistics* 5.2, 213–230. Available at: <https://ddd.uab.cat/pub/cwpl/1132256Xv5n2/1132256Xv5n2p213.pdf>
- Legate, Julie. 1998. Verb phrase types and the notion of a phase. Ms., Massachusetts Institute of Technology.
- Legate, Julie. 2003. Some interface properties of the phase. *Linguistic Inquiry* 34, 506–516. <https://doi.org/10.1017/S002226720000233>
- Merchant, Jason. 2001. *The syntax of silence: Sluicing, islands, and the theory of ellipsis*. Oxford: Oxford University Press.
- Merchant, Jason. 2004. Fragments and ellipsis. *Linguistics and Philosophy* 27.6, 661–738. <https://doi.org/10.1017/S002226720000233>

- Nevins, Andrew. 2012. Haplological dissimilation at distinct stages of exponence. In Jochen Trommer (ed.), *The morphology and phonology of exponence. Oxford studies in theoretical linguistics*, 84–116. Oxford: Oxford University Press. <https://doi.org/kfsr>
- Ouhalla, Jamal. 1990. Sentential negation, relativised minimality and the aspectual status of auxiliaries. *The Linguistic Review* 7, 183–231. <https://doi.org/c59xvv>
- Par, Anfós. 1923. *Sintaxi catalana. Segons los escrits en prosa de Bernat Metge*. Halle: Max Niemeyer.
- Penka, Doris. 2011. *Negative indefinites*. Oxford: Oxford University Press. <https://doi.org/c9fdzm>
- Penka, Doris & Hedde Zeijlstra. 2010. Negation and polarity: An introduction. *Natural Language and Linguistic Theory* 28, 771–786. <https://doi.org/c7rgqw>
- Pesetsky, David. 2000. *Phrasal movement and its kin*. Cambridge: MIT Press.
- Pesetsky, David & Esther Torrego. 2007. The syntax of valuation and the interpretability of features. In Simin Karimi, Vida Samilan, Wendy Wilkins & Joseph Emonds (eds.), *Phrasal and clausal architecture: Syntactic derivation and interpretation*, 262–294. Amsterdam: John Benjamins. <https://doi.org/kfss>
- Pollock, Jean-Yves. 1989. Verb movement, universal grammar and the structure of IP. *Linguistic Inquiry* 20.3, 365–424. Available at: <https://babel.ucsc.edu/~hank/pollock.pdf>.
- Preminger, Omer. 2017. How can feature-sharing be asymmetric? Valuation as union over geometric feature structures. In Claire Halpert, Kotek Hadas & Coppe van Urk (eds.), *A pesky set: Papers for David Pesetsky* (MIT Working Papers in Linguistics 80), 493–502. Cambridge, MA: MITWPL.
- Prieto, Pilar & M. Teresa Espinal. 2020. Prosody, Gesture, and Negation. In Viviane Déprez & M. Teresa Espinal (eds.), *The Oxford Handbook of Negation*, 667–693. Oxford: Oxford University Press.
- Progovac, Liljana. 1994. *Positive and negative polarity: A binding approach*. Cambridge: Cambridge University Press.
- Puskás, Genoveva. 1998. On the neg-criterion in Hungarian. *Acta Linguistica Hungarica* 45.1–2, 167–213. <https://doi.org/cpwgkz>
- Puskás, Genoveva. 2000. *Word order in Hungarian: The syntax of A-bar positions*. Amsterdam and Philadelphia: John Benjamins. <https://doi.org/kfst>
- Puskás, Genoveva. 2006. Double negation and information structure: Somewhere between topic and focus. In Valéria Molnár & Susanne Winkler (eds.), *The architecture of focus*, 291–317. Berlin: Mouton de Gruyter. <https://doi.org/kfsv>
- Puskás, Genoveva. 2012. Licensing double negation in NC and non-NC languages. *Natural Language and Linguistic Theory* 30, 611–649. <https://doi.org/fx7zx6>
- Quer, Josep. 1993. *The syntactic licensing of negative items*. MA thesis, Universitat Autònoma de Barcelona.
- Richards, Marc. 2004. *Object shift and scrambling in North and West Germanic: A case study in symmetrical syntax*. Ph.D. dissertation, University of Cambridge.
- Rigau, Gemma. 1998. La variació sintàctica: uniformitat en la diversitat. *Caplletra: Revista internacional de filologia* 25, 63–81. Available at: <https://raco.cat/index.php/Caplletra/article/view/296160>.
- Roberts, Ian. 1998. *Have/Be raising, Move F, and Procrastinate*. *Linguistic Inquiry* 29.1, 113–125. <https://doi.org/cv2nqn>
- Solà, Joan. 1973. La negació. *Estudis de sintaxi catalana*, vol. 2., 87–118. Barcelona: Edicions 62.
- Suñer, Margarita. 1995. Negative elements, island effects and resumptive *no*. *The Linguistic Review* 12, 233–373. <https://doi.org/bj7hcv>
- de Swart, Henriëtte & Ivan Sag. 2002. Negation and negative concord in Romance. *Linguistics and Philosophy* 25, 373–417. <https://doi.org/c28r7d>
- de Swart, Henriëtte. 2010. *Expression and interpretation of negation: An OT typology*. (Studies in natural language and linguistic theory 77). Dordrecht, Heidelberg, London, New York: Springer. <https://doi.org/c9j4hv>
- Szabolcsi, Anna. 2017. Disembodied or phonetically null operators. Paper presented at the Biolinguistic Conference on Interface Asymmetries, New York. Available at: https://www.academia.edu/35133649/Disembodied_or_phonetically_null_operators_slides_2017.
- Szabolcsi, Anna. 2018a. Strict and non-strict negative concord in Hungarian: A unified analysis. In Huba Bartos Bánréti, Marcel den Dikken & Tamás Váradí. (eds.), *Boundaries crossed, at the interfaces of morphosyntax, phonology, pragmatics and semantics*, 227–242. Cham: Springer. <https://doi.org/kd5b>
- Szabolcsi, Anna. 2018b. Two types of quantifier particles: Quantifier-phrase internal vs. heads on the clausal spine. *Glossa: A journal of general linguistics* 3.1, 69, 1–32. <https://doi.org/kfsx>

- Temmerman, Tanja. 2012. *Multidominance, ellipsis, and quantifier scope*. Ph.D. dissertation, Universiteit Leiden. Available at: https://www.lotpublications.nl/Documents/303_fulltext.pdf.
- Tubau, Susagna. 2008. *Negative concord in English and Romance: Syntax-Morphology interface conditions on the expression of negation*. Ph.D. dissertation, Universitat Autònoma de Barcelona and Universiteit van Amsterdam. Available at: https://www.lotpublications.nl/Documents/187_fulltext.pdf.
- Tsiakmakis, Evripidis & M.Teresa Espinal. 2022. Expletiveness in grammar and beyond. *Glossa: a journal of general linguistics* 7(1). <https://doi.org/10.16995/glossa.5807>
- Tubau, Susagna, Viviane Déprez, Joan Borràs-Comes & M. Teresa Espinal. 2018. How speakers interpret the negative markers *no* and *no...pas* in Catalan. *Probus: International Journal of Romance Linguistics* 30.1, 121–167. <https://doi.org/jz6x>
- Ura, Hiroyuki. 1996. *Multiple feature-checking: A theory of grammatical function splitting*. Ph.D. dissertation, Massachusetts Institute of Technology. Available at: <http://hdl.handle.net/1721.1/11238>.
- Vallduví, Enric. 1994. Polarity items, N-words and minimizers in Catalan and Spanish. *Probus* 6, 263–274. <https://doi.org/fmkznh>
- Villa-García, Julio. 2012. Spanish subjects can be subjects: Acquisitional and empirical evidence. *IBERIA: An International Journal of Theoretical Linguistics* 4.2, 124–169. Available at: <https://revistascientificas.us.es/index.php/iberia/article/view/238>.
- Watanabe, Akira. 2004. The genesis of negative concord: Syntax and morphology of negative doubling. *Linguistic Inquiry* 35, 559–612. <https://doi.org/b3vc3k>
- Weiss, Helmut. 2002. A quantifier approach to negation in natural languages. Or why negative concord is necessary. *Nordic Journal of Linguistics* 25, 125–153. <https://doi.org/fhxxt9>
- van der Wouden, Ton & Franz Zwarts. 1993. A semantic analysis of negative concord. In Utpal Lahiri & Adam Wyner (eds.), *Semantics and Linguistic Theory (SALT) III*, 202–219. Ithaca, NY: Cornell University Press. <https://doi.org/kfs2>
- Zanuttini, Raffaella. 1991. *Syntactic properties of sentential negation: A comparative study of Romance languages*. Ph.D. dissertation, University of Pennsylvania. Available at: <https://repository.upenn.edu/dissertations/AAI9200407>.
- Zanuttini, Raffaella. 2001. Sentential negation. In Mark Baltin & Chris Collins (eds.), *The handbook of contemporary syntactic theory*, 511–535. London: Blackwell. <https://doi.org/c6n4r5>
- Zeijlstra, Hedde. 2004. *Sentential negation and negative concord*. Ph.D. dissertation, University of Amsterdam. <https://hdl.handle.net/11245/1.224908>
- Zeijlstra, Hedde. 2008. Negative concord is syntactic agreement. Ms., University of Amsterdam. Lingbuzz/000645. Available at: https://www.academia.edu/9963325/2008_Negative_Concord_is_syntactic_agreement_Ms_University_of_Amsterdam_Lingbuzz_000645.
- Zeijlstra, Hedde. 2022. *Negation and negative dependencies*. Oxford: Oxford University Press.

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