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# Negative Concord by phase. Multiple downward Agree and the parametrization of edge features

# Maria Rita Manzini (University of Florence) & Diego Pescarini (CNRS, Université Côte d'Azur)

**Abstract**: We divorce Negative Concord (NC) among two or more n-items, which is invariably present in Romance languages, from the mutual exclusion or cooccurrence between clausal negation markers (CNMs) and other n-items. The standard minimalist treatment in terms of Agree with respect to a formal feature [n] (for [negation]) is maintained here. However, an EPP-like principle, conceived as a (parametrized) condition regulating the representation of [n] at phase edges is introduced to deal with CNMs. By divorcing the n-EPP condition from n-Agree, we eliminate Zeijlstra's Upward Agree in favor of Multiple Downward Agree between a phase head probe endowed with Formal Feature FF and one or more elements endowed with the same interpretable feature FF in the WorkSpace. We argue that these theoretical moves are beneficial from an empirical point of view. Focusing on varieties spoken in Northern Italy, we argue that an exhaustive typology of Romance negative systems can be derived by the parametrized [n]-EPP. We claim that the present approach allows this variation to be accounted for within the syntax – specifically, no recourse is made to semantic variation.

Keywords: Negative Concord, Agree, EPP, phase, Romance

# 1. Introduction

The aim of this paper is both empirical and theoretical. From an empirical point of view, our main target is Romance-internal variation. The Agree theory of NC proposed by Zeijlstra (2004, 2022) has considerable success with NC systems involving a clitic or inflectional negation (roughly corresponding to stage I of Jespersen's Cycle, cf. Jespersen [1917]), and in capturing the parameter between so-called Strict and Non-Strict NC. At the same time languages with negative adverbs or with discontinuous negation, i.e. with both clitic/inflectional and adverbial negations are not captured by Zeijlstra's implementation of Agree, unless semantic constraints are invoked (see Section 2). Previous studies have already focused on variation in NC across Romance, but, to the best of our knowledge, no account has attempted to analyze all attested patterns in one go. Our study aims to do so by focusing mostly on varieties spoken in Northern Italy, which exhibit the patterns of NC already examined in other Romance(-based) varieties, such as Quebec French or Haitian Creole, and least an additional one.<sup>1</sup>

Theoretically, our main proposal is introducing a division of labor between Agree with respect to the negative feature [n] and an EPP-like principle, conceived as a (parametrized) condition regulating the representation of [n] at phase edges. The former yields NC as *negative spread* among two or more negative items. The latter yields variation in *negative doubling*, i.e. in the mutual exclusion or cooccurrence between clausal negators and other negative items. With the term NC, here we refer in a shorthand way to the former.<sup>2</sup> By divorcing the n-EPP condition from n-Agree, we aim at a simplification of the latter. We propose that (downward) multiple Agree is responsible for NC (cf. Deal [2022], also the Attract all F rule of Boskovic [1999] in an earlier minimalist framework), thus eliminating Zeijlstra's Upward Agree from the grammar. One of the sources of the empirical

<sup>&</sup>lt;sup>1</sup> Non-standardized Romance varieties are often called dialects. These are not sociolinguistic variants of some language, but independent historical outcomes of Latin. We comment on this because lack of clarity concerning external conditions may lead scholars to wrongly infer that limiting factors are at play. Speakers interviewed for the corpora we use are bilingual, but they are not 'heritage' speakers, because so-called dialects are widely spoken in the relevant local communities. For these reasons in the rest of the article we refer simply to these languages as varieties of Romance. All data about Italo-Romance varieties (or Romance varieties spoken in Italy) are from Manzini and Savoia (2005).

 $<sup>^{2}</sup>$  In the current literature, the term NC often encompasses both phenomena, i.e. the cooccurrence of multiple n-items (or *negative spread*) and the cooccurrence of CNMs and n-items (or *negative doubling*, Den Besten, Hans [1986]).

difficulties encountered by Agree theories of NC resides in the apportioning of interpretable/uninterpretable features to clausal negation markers. We propose identifying uninterpretable/unvalued features generally with phase heads. Agree takes place between a phase head probe endowed with Formal Feature FF and one or more elements endowed with the same interpretable feature FF in the WorkSpace.

We argue that simplifying Agree as just suggested (no Upward Agree, no apportioning of [iFF] and [uFF] values lexically) is actually beneficial from an empirical point of view. In particular, we argue that an exhaustive typology of Romance negative systems can be derived *crossing* Agree with a parametrized [n]-EPP. We claim that the present approach allows NC (including variation in NC patterns) to be accounted for within the syntax – specifically, no recourse is made to semantic variation.

The article has a bipartite structure. In Section 2 we detail the account of NC (or negative spread, see above), including the (empirical) reasons for our abandonment of Upward Agree and of the feature assignments that it presupposes, as well as the discussion of Downward Multiple Agree that replaces it. Sections 3-6 focus on Clausal Negation Markers (CNMs), more specifically on the cooccurrence between CNMs and n-items (or lack thereof). Our empirical domain are the Romance languages and, more specifically, northern Italian varieties, as already mentioned. After setting out our general idea of the n-EPP in Section 3, we discuss a distribution of CNMs that has not been analyzed before, to our knowledge (Emilian in Section 4) and we then systematically review the other Romance patterns known to us (Sections 5-6). Section 7 concludes.

# 2. Negative Concord

# 2.1 NC as syntax

All Romance languages exhibit NC, i.e. the cooccurrence of multiple n-items does not result in Double Negation (DN) readings, see Italian (1a). This contrasts with languages like English where two n-items introduce two separate negations (1b), necessarily yielding a DN reading, hence ultimately an affirmative propositional content.<sup>3</sup>

- (1)Nessun insegnante ha dato nessun libro nessuno studente (Italian) a. а teacher has given no student no book to no 'No teacher gave any book to any student.'
  - b. No teacher gave this book to no student(i.e. All teachers gave this book to some student)

Since the seminal work of Haegeman and Zanuttini (1991), Haegeman (1995), the explanation for NC has been taken to have a syntactic component – in their terms the application of a Neg Criterion (paralleling the Wh-Criterion) yielding head-Spec configurations between a Neg head and an n-item. The syntactic line of explanation is also taken by the most widely known minimalist approach to NC, namely Zeijlstra's (2004, 2022) analysis, which will be discussed at length below. Alternatively, Déprez (1997, 2000, 2012, 2017) argues that parameters of NC may result from the semantic properties of n-items, which either have quantificational force (French) or are indefinites (Haitian Creole).

A semantic treatment is also usual for the NC/DN parameter. Now, notice that DN is available in NC languages under certain conditions; see French in (2) (from de Swart and Sag [2002: 376], cf. Deal [2022]), Italian in (3), from Zeijlstra (2022: 71).

<sup>&</sup>lt;sup>3</sup> But notice that some varieties of English do accept NC interpretations (Zeijlstra 2022: Section 6.4.2).

(2)	Personne	(n') ai	me personne		(French)
	n-body	CNM 1	oves n-body.		
	'Nobody lov	ves noboo	ły' (i.e. everyb	ody loves somebody)	
(3)	Nessuno	(non)	ha telefonato	a nessuno	(Italian)
	n-one	CNM	has called	to n-one	
	'Nobody ca	lled nobo	dy' ( i.e. Every	body called somebody)	

Chierchia (2013: 237), Larrivée (2016), and Zeijlstra (2022: 71) notice that DN obtains when one of the n-items is focal.<sup>4</sup> Importantly, the data in (2) show that DN and NC are triggered by specific syntactic conditions (e.g. focus), not by the nature of n-items, otherwise DN should be always barred in Italian and French. We tentatively conclude that n-items are semantically uniform, at least in the languages of our sample. Following Chierchia (2013: 8-9) we assume that n-items "have the same meaning [...] in fact, the same as for ordinary indefinites like *some* or *a*... generally viewed as existential indefinites." This claim, i.e. the semantic uniformity of n-items, holds particularly true for Romance linguistic varieties that belong to the same subphylum and, as previously mentioned, almost always exhibit NC.<sup>5</sup> Building on the assumption that n-items are fundamentally uniform, in this section we propose a syntactic analysis, and in fact an Agree analysis, of NC, in terms of Multiple Downward Agree (Deal 2022) triggered by an [n] probe carried by sentential Phase Heads.

Recall that the (second) main topic of this work is the cooccurrence or mutual exclusion between n-items and Clausal Negation Markers (CNMs), as illustrated by Strict and Non-Strict NC languages respectively. NC is an invariable property of Romance, whereas the occurrence of CNMs is subject to considerable crosslinguistic variation even within the Romance group. NC is a necessary precondition for cooccurrence of CNMs with other n-items, but we will argue that mutual exclusion results from an independent mechanism, which will be discussed in sections 3-6.

#### 2.2 Multiple Downward Agree: Setting the scene

We propose that NC results from Multiple Downward Agree from an n-Probe to one or more n-Goal(s). The multiple Agree configuration in (4) results in the interpretation of multiple instantiation of the feature [n] as a single semantic negation at the semantic interface (cf. Neg-absorption in Haegeman 1995, Haegeman and Zanuttini 1996). Standard, Downward Agree is defined as follows by Chomsky (2000: 122): (i) the Probe c-commands the Goal(s), (ii) Agree is Minimal Search and Match, where "matching is feature identity". As originally discussed in the Relativized Minimality framework (Rizzi 1990), we understand identity to be identity with respect to some Formal Feature (FF). Therefore, the application of Agree presupposes the existence some FF shared by Probe and Goal(s), namely [n] in (4).<sup>6</sup>

# (4) [Probe<sub>[n]</sub>... Goal1<sub>[n]</sub>... Goal2<sub>[n]</sub>]

In standard minimalism, meta-features (i.e. features of features) notated *i* and *u* are used to identify Probe and Goal. The Probe is [uFF] and the Goal is [iFF], where the *i*/*u* alternation means

<sup>&</sup>lt;sup>4</sup> Zeijlstra (2022) argues for an analysis in terms of his theory, according to which DN in (3) results from the cooccurrence of *non* 'not' and an abstract negative operator. However, for several speakers *non* in (3) can be omitted without affecting the DN interpretation of the clause, as negation can be left out when the preverbal n-item is focus-fronted.

<sup>&</sup>lt;sup>5</sup> We do not exclude, however, that the featural endowment of n-items may vary at a finer granularity level, as argued by Poletto (2020), who focuses on lexical-specific patterns of NC/DN. The Italian n-item *mai* 'never', for instance, is a weak NPI, occurring in all Downward Entailing contexts, while n-items like *nessuno* 'noone' etc. are more restricted (and subject to inter-speaker variation), see Chierchia (2013: 8).

<sup>&</sup>lt;sup>6</sup> No confusion is possible with any other current [FF] – nor with the category and phase head *n*.

interpretable/uninterpretable (Chomsky 2000) or valued/unvalued (Pesetsky and Torrego 2007). We will see that trying to impose these metafeatures on specific lexical items, e.g. CNMs, raises considerably difficulties for (Upward) Agree.<sup>7</sup> We pursue a different hypothesis, which is very much implicit in  $\varphi$ -Agree (Chomsky 200, 2001) or in Q Agree (Chomsky 2013), namely that the Probe is simply identified with phase heads such as C-I and/or *v*, avoiding lexically assigned [*i*FF] or [*u*FF] feature values. In other words, we assume that the schema in (4) automatically translates into (5). The diacritics *i* and *u* can be added to the [n] features in the schema but they simply encode the asymmetry between phase heads (which are intrinsically probes) and other syntactic objects carrying a matching [n] feature. As for the trigger problem, we may simply assume that any FF at a phase head automatically initiates Minimal Search. Furthermore, a void Agree procedure simply leads to a default setting (Preminger 2014).<sup>8</sup> No special role in the schema in (5) is assigned to CNMs either, which, with respect to Agree, must be considered Goals on a par with other n-items. Some differences between CNMs and other n-items will be discussed at length in sections 3-6, but as far as NC/Agree is concerned, CNMs and n-items behave alike.

(5) PhaseHead<sub>[n]</sub>... [... n-item1<sub>[n]</sub> ... [ ...n-item2<sub>[n]</sub> ...]]

We assume that Head-Spec configurations are also Agree configurations, as in (6). Head-Spec Agree requires an enrichment of the Search domain of  $\alpha$  from c-command domain of  $\alpha$  to the c-command of  $\alpha$ (P) (sometimes called m-command). Recall that under Chomsky's (2013) proposals, Spec-head Agree is involved in labelling subject-IP configurations, as  $\langle \phi, \phi \rangle$ , or wh-phrase-CP configurations as  $\langle Q, Q \rangle$ . Thus, phase heads standardly Agree with their Specs.

(6)  $[n-item_{[n]}$  [PhaseHead<sub>[n]</sub>...]]

As for which categories are phase heads, our analysis builds on the standard assumption that clauses are bi-phasal. Thus, the phase heads probing for [n] are v and C (or I via inheritance).<sup>9</sup> As shown in (7), CNMs undergo External Merge (EM) at the edge of CP-IP or in vP. In section 3, we will argue that the cross-linguistic distribution of CNMs and their interaction with other n-items brings empirical support to the claim that negation marking, i.e. the distribution of morphologically negative forms, results from the bipartite structure in (7).

(7)  $[_{CP/IP} CNM_1 \dots [_{\nu P} CNM_2 \dots ]]$ 

<sup>&</sup>lt;sup>7</sup> The literature of the last decade has recorded various criticisms of the interpretable/uninterpretable meta-feature (Preminger 2014). Deal (2022), discussing NC, pushes for "a separation between analytical decisions as to probe vs. goal status and the question of what is semantically interpreted". *Vice versa*, Zeijlstra (2022: Section 17.2) argues that iF are categorial features and uF are selectional features, whereas what is semantically interpreted is always the (abstract) negative semantic operator, not the elements endowed with formal features.

<sup>&</sup>lt;sup>8</sup> Metafeatures are not incompatible with the present proposal. Thus we may say that the probe is  $[\alpha n]$ , and Agree with a [+n] element sets it to [+n]. Default setting (in the absence of Agree) is of course [-n].

<sup>&</sup>lt;sup>9</sup> We acknowledge that there is debate concerning the inventory of phase heads and whether phase heads are inherently so, or not. Here we adopt standard Chomskyan assumptions. An anonymous reviewer points out that, under a phase-based account, DPs are expected to exhibit NC and DN patterns. In fact, the internal structure of DPs is discussed in several accounts of NC, such as Déprez (1997, 2000, 2012, 2017) among others. Our analysis is predicated on the assumption that NC is a clausal phenomenon and that n-items can be taken to be substantially invariant for the purposes of NC (at least in the languages of our sample). However, our account and a Déprez-style analysis might be brought close to one another under the hypothesis that the *n* phase head carries [n] and probes DP-internal n-items. Déprez's hypothesis that negative quantifiers are merged with D, while negative-concord items occupy a lower position in the DP may result from an edge/EPP requirement like the one proposed in Section 3.

We are aware that the schematic representation in (7) needs to be fleshed out in order to account for the distribution of negative elements in specific syntactic contexts. NC across sentential boundaries as in (8) is a case in point.<sup>10</sup>

(8)	a.	Non	mi	hanno		chiesto	)	di	cambia	are	nulla	(It.)
		CNM	me	they.ha	ve	asked		to	change	e	n-thin	g
		'They	didn't a	ask me to	o chang	ge anytł	ning'					
	b.	<sup>?</sup> Non	hanno		pretesc	)	che	cambia	assi	nulla		
		CNM	they.h	ave	insisted	d	that	I.chang	ge	n-thing	5	
		'They	didn't i	nsist tha	t I char	nge any	thing'					
	c.	*Non	hanno		capito		che	cambie	erò	nulla		
		CNM	they.h	ave	unders	tood	that	I.will.	hange	n-thing	5	
		'They	haven't	realized	l that I	will ch	ange no	thing'	-	-		

Here we can hint at a possible analysis. (8a) is an instance of (obligatory) control treated by Hornstein's (1999) theory, and more recently by Chomsky's (2021) copy theory, as involving a non-phasal embedded sentence. As expected, NC across the embedded CP is starkly unacceptable in (8c), where by all independent diagnostics the CP is phasal. In this respect, (8b) seems to pattern with (8a) rather than (8c), though it is perhaps somewhat degraded. This correlates with an independent phenomenon of obligatory disjoint reference between the embedded subject and the matrix subject (a sort of anti-control referred to as 'obviation' in the literature). The latter phenomenon points again to the absence of an embedded CP phase (and corresponding application of Principle B). In short, this particular issue is likely to be accounted for under a phase-based account of NC. Recall however that our target here is not a detailed investigation of one language, but rather an attempt to establish the basic shape of a family of languages. Therefore, only simple sentence will be analyzed in what follows.

An obvious question raised by Multiple Downward Agree is what determines that Agree applies recursively, as opposed to just once, yielding simple, binary Agree. In Deal's (2022) approach this is built into the probe. In her terms "the specification of a probe is [INT: $\alpha$ , SAT: $\beta$ ]. Interaction specification  $\alpha$  means that the feature [ $\alpha$ ], when encountered, is copied to the probe. Satisfaction specification  $\beta$  means that encountering [ $\beta$ ] halts further probing of additional goals. Naturally definable in this theory is an *insatiable* probe—one for which no particular feature will halt probing".

Our proposal is that Multiple Agree is the default mode of application of Agree. Examples of Multiple Agree include NC, but also Agree with respect to Q, i.e. interrogative, features – considering the robust crosslinguistic attestation of multiple wh-movement, e.g. in Slavic languages (cf. Boskovic's [1999] Attract-all-F in the earlier framework of Chomsky [1995]). In this perspective, what is generally taken to be the basic form of Agree, i.e. binary Agree, would be a restriction that may apply to some types of Agree, e.g.  $\varphi$ -feature Agree.<sup>11</sup>

A question connected to Multiple Agree concerns Minimal Search. In binary Agree, the closest match under Minimal Search (MS) enters Agree with the probe. Granted that the Agree relation between the Phase Head and *n-item1* in the configuration in (5) satisfies MS, the question is how satisfaction is insured by an Agree relation between the Phase Head and *n-item2*. It seems to us

<sup>&</sup>lt;sup>10</sup> In the examples quoted in the text, the scope of the logical negation is firmly within the matrix sentence. Therefore, the issue in the text is not to be confused with that of Neg Raising, e.g. (i)-(ii), whereby the scope of the logical negation can be reconstructed into the embedded sentence (Horn 2020 for a review). Though an anonymous reviewer enquires about it, Neg raising is beyond the scope of the present discussion, because it may be a partially semantic, or entirely semantic phenomenon (e.g. Collins and Postal 2017, Zeijlstra 2022 for differing views).

<sup>(</sup>i) Maria non intende leggere quel libro.

Mary does not intend to read that book (=Mary intends not to read that book)

<sup>(</sup>ii) Maria non intende leggere niente.

Mary does not intend to read anything (= Mary intends to read nothing)

<sup>&</sup>lt;sup>11</sup> Even so, it is not entirely obvious that  $\varphi$ -feature Agree holds of a probe and a single goal (see Anagnostopoulou 2003; D'Alessandro 2007; Nevins 2011 on multiple  $\varphi$ -feature Agree).

that, once we introduce Multiple Downward Agree as here, the conclusion is forced that Agree can be satisfied by any Probe, Goal relation within the domain defined by the Phase Impenetrability Condition (PIC).

The French example in (9a) provides a concrete application of the framework discussed so far. As shown in (9b), v, endowed with the [n] feature, probes the vP-internal n-items (the internal argument and the applicative/oblique) – and it also probes its Spec, i.e. the external argument prior to IM to Spec, IP. Recall that at the moment we are not concerned about the cooccurrence, or lack thereof, between n-items and CNMs such as *ne* in (9), a topic that will be discussed in sections 3-6.

(9)	a.	Personne	(ne) dit	rien	à personne (French)				
		n-body	says	n-thin	g to n-body				
		'Nobody says anything to anybody'							
	b.	[vP personne[n]	$V_{[n]} \dots [ApplP]$	à persoi	nne $[n]$ [VP dit rien $[n]$ ]]]				

#### 2.3 Feeding interpretation

The discussion in Section 2.2 details how the basic configurations of NC, e.g. (9), can be captured in terms of an [n] probe associated with v and C phase heads triggering a search for multiple [n] item goals – constrained by the usual locality constraints (roughly c-command and the PIC). But how do these assumptions feed into the interpretation (INT) procedure at Transfer?

In section 2.1, n-items have been semantically characterized as indefinites. This means that NCIs (Negative Concord Items) are NPIs (Negative Polarity Items). If Agree fails to take place, the derivation does not necessarily crash, but leads to the non-negative interpretation of n-items, which need to be semantically licenced by some alternative means. Thus, NCIs such as Italian *nessuno* or French *personne* may be interpreted as NPI in non-negative contexts such as polar questions. Vice versa, the presence or absence of negative *n*- morphology (as in It. *nessuno* and Fr. *personne*, respectively) is independent from their feature endowment (reflecting independent etymological conditions, which translate into a different internal structuring of the word).

In the same way, DN languages, or DN readings that arise in NC languages in certain contexts such as (2), result from the lack of multiple Agree, not from the feature endowment of n-items. Although we only make claims on NC languages, we believe that our model can be extended to DN languages as well. In particular, pronominal/ quantificational elements that can contribute sentential negation might be analysed as elements carrying an [n] feature that agree with an [n] phase head. The idea is that n-agree is possible in DN languages, but it is restricted to a single goal.

It is fairly customary to treat the NC/DN parameter as semantic – roughly n-items are NPIs in NC languages, but negative quantifiers in DN languages (Zeijlstra 2004). However, as discussed by Penka (2012 and references quoted there), DN languages like German have well-formed existential reading of n-items, forced by an operator intervening between the logical negation and the n-item (so called split readings). This suggests that n-items are existentials in German and similar languages as well – so that it is difficult to enforce an NC/DN parameter, involving NPIs vs. negative quantifiers.<sup>12</sup> Penka (2011), Deal (2022) go on to suggest that the relevant parameter between NC and DN languages may in fact be syntactic and involve Multiple Agree vs. simple Agree. Multiple Agree correspond to the NC reading as briefly sketched above. In the absence of multiple Agree [n] features are not occurrences of the same [n] feature and require multiple logical negations (DN).

Let us then turn from the interpretation of n-items to that of n-Agree. We have assumed that phase heads C and v are associated with a set of Formal Features (FFs) acting as probes, including [n]. If they find at least one goal, then an Agree relation is established. If there is no goal, then as in

<sup>&</sup>lt;sup>12</sup> The availability of DN readings in NC languages, cf. (2), means that DN is available with n-items that are NPIs.

Preminger (2014), lack of Agree does not lead to the derivation crashing but simply leads to default – and default is non-negative. A CNM is just an Agree Goal in this system. If the CNM is merged then the FF on the phase head takes it as a goal – otherwise the interpretation is default, i.e. non-negative.

The three main scenarios predicted by our model are illustrated in (10). In (10a), the Phase Head finds no matching goal, no Agree relation can be established, no negative interpretation is obtained. In (10a) the phase head probes one or more n-item(s) in its search domain, and a (multiple) Agree relation is established, resulting in a negative interpretation. In (10c) an analogous negative interpretation is obtained when the goal is a CNM, i.e. an element that carries a pure [n] FF (the cooccurrence between CNM and n-items will be discussed at length in sections 3-6).

(10)		Syntactic configuration:	Interpretation:
	a.	$[H_{[n]} \dots ]$	non-negative
	b.	$[H_{[n]} \dots XP_{[n]} (YP_{[n]})]$	negative
	c.	$[CNM_{[n]}H_{[n]} \dots ]$	negative

Importantly, Agree always connects a phase head to goals carrying [n]. Therefore, there is no licencing mechanism linking the CNM directly to n-items, as in (11a). Similarly, n-items, i.e. goals, do not agree with each other as in (11b).

(11) a.  $\begin{array}{c} *[CNM_{[n]} H_{[n]} \dots & XP_{[n]}] \\ \\ b. & *[H_{[n]} \dots & XP_{[n]} & YP_{[n]}] \\ \end{array}$ 

In (10), the [n] features in an Agree pair, or a sequence of Agree pairs, are read as copies, i.e. as occurrences of the same [n] feature. If there is a single [n] feature (with multiple occurrences) – and not multiple [n] features, there is a single logical negation and not several logical negations (for each separate [n]) – which is of course the essence of NC. As for the locus where logical negation is interpreted, it is independent from the position of n-items. Negation usually takes scope over the event denoted by the verb and its arguments and modifiers (Acquaviva 1997). This suggests an edge of IP/CP position (essentially that position of the abstract operator Op for Zeijlstra [2022: 70-100]) In Zeijlstra-style analyses (on which more below) the CNM is [iNeg] in some languages and [uNeg] in others. If an [iNeg] CNM was the locus where logical negation is interpreted, one would expect to find much more cross-linguistic variation in the interpretable and uninterpretable metafeatures are nothing else than formal devices to distinguish probes from goals without any effect on the interpretation of logical negation.

In a nutshell, NC as described here is a pure computational procedure, carried out automatically by the syntax. It is a purely formal calculus on [n] features in the domain of a given phase head, where [n] in itself simply denotes a variable, requiring a particular type of quantification for its closure (in the traditional account – see Chierchia 2013 for an alternative). As part of the INT procedure, a logical negation is supplied, which allows this formal calculus to be interpreted. The actual semantic content of the n-word may further determine that an alternative closure by downward entailing operators is possible (weak NPIs), or not.

#### 2.4 Why not Upward Agree

Zeijlstra (2022) argues that NC is a form of Multiple Agree involving two or more elements that share

a formal feature [Neg], generally corresponding to some lexical or morphological encoding. N-items carry [Neg] without being necessarily interpreted as semantically negative, but rather interpreted as "non-negative existentials that are syntactically marked for negation" (Zeijlstra 2022: 68). In other words, the semantic interpretation of negation and its morpho-syntactic encoding are to be kept distinct.

The next question to be addressed is: How do we represent elements that are syntactically marked for negation, but are just existentials semantically? At first sight, Zeijlstra (2022) adopts (12), implementing the classical system of Chomsky (2000, 2001) for the Neg feature. The [Neg] feature corresponds to semantic content and is inert with respect to Agree operations in the syntax – it is the valuation system that triggers Agree.

(12) Adopt binary features, e.g. [*i*Neg] vs [*u*Neg], and assume that an element that carries [*u*Neg] is not interpreted as negative.

In practice, however, his explanation departs from this view. In his model a three-way distinction holds, whereby n-items can be [*i*Neg], [*u*Neg] or lack the [Neg] feature. This yields a proliferation of types of n-items, since elements can be semantically negative (or not) regardless of the presence and/or value of the formal feature [Neg]. Many logical possibilities are then allowed by Zeijlstra's feature system, including semantically negative elements that neither carry [Neg] nor are [*i*Neg] (more on this below). Our provisional conclusion is that this is far from the standard apparatus involved not only in  $\varphi$ -feature Agree, but also, say, in Q (Question/wh) Agree (Cable 2010, Chomsky 2013). In other words, the reduction of the NC feature system to the standard (12) is apparent, not real. The real system is much richer. A reduction of NC to standard Agree is therefore not fully achieved.

Let us proceed. By adopting this set of primitives, Zeijlstra accounts for possible and impossible Agree configurations. NC is possible if both the conditions below are satisfied.

- (13) Upward Agree (Zeijlstra 2022: 68)
  - a. NC is an Agree relation between a single feature [iNeg] and one or more features [uNeg].
  - b. the [*i*Neg]-feature c-commands the [*u*Neg]-features.

The two conditions in (13) account for the well-known distinction between Strict and Non-strict NC languages. In Non-strict NC languages such as Italian (14), [uNeg] items agree with the preverbal [iNeg] CNM *non*, as in (15a). A preverbal n-subject cannot cooccur with the CNM because otherwise the former would c-command the latter as in (15b). A covert operator is then postulated to agree with preverbal [uNEG] items as in (15c).<sup>13</sup>

(14)	a.	Non	arriva nessuno	Italian
		CNM	arrives n-one	
		'Nobo	dy arrives'	

<sup>&</sup>lt;sup>13</sup> We disregard here some more specific issues. Concerning covert operators, Zeijlstra argues that learners can reconstruct the feature endowment of n-items by looking at their distribution in the clause, hence a covert negative operator can be postulated to justify the occurrence of [uNeg] elements in non-strict NC languages. Covert operators can be postulated if and only if there is "a clear signpost for them (such as an overt element carrying [uNeg])", thus ruling out the option of generalizing covert operator in any context. However, the question remains why non-strict NC languages do not always resort to the covert operator to licence postverbal n-items. Why are examples such as (i) ungrammatical? An anonymous reviewer suggests that inserting a covert operator is a Last Resort operation, taking place at the end of the derivation only if no other option is available. Since all languages have CNMs, the option of inserting it will always be possible and preferred to Last Resort.

(i) op<sub>[iNEG]</sub> arriva nessuno<sub>[uNEG]</sub> 'nobody arrives'

	b.	Nessuno	(*non) arriva		
		n-one	CNM arrives		
		'Nobody arriv	va'		
15)	a.	non <sub>[iNeg]</sub>	arriva	nessuno <sub>[uNeg]</sub>	=(14a)
	b.	*nessuno[uNeg]	*non <sub>[iNeg]</sub>	arriva	= (14b)
	c.	$Op \neg [iNeg]$	nessuno[uNeg]	arriva	

In Strict NC languages such as Romanian (16), the CNM always cooccurs with [uNeg] n-items because the CNM itself is [uNeg], as in (17).

(16)	a.	Nu vreau	nimic			Romanian
		CNM I.want	n-thin	g		
		'I want nothing	ng'	-		
	b.	Nimeni	nu	а	venit	
		n-one	CNM	has	come	
		'Nobody cam	ne'			
(17)	a.	Op¬[iNeg] nu[i	Neg]	vreau	nimic <sub>[uNeg]</sub>	= (16a)
	b.	Op¬[ <i>i</i> Neg] nim	eni <sub>[uNeg</sub>	] nu[uNe	g] a venit	= (16b)

There is, however, a third condition that rules out NC, which becomes crucial in Zeijlstra's analysis of French. Languages like French, which exhibit two CNMs, are particularly problematic for an Agree account like Zeijlstra's. As a first, tentative explanation, one might assume that two CNMs forming a single logical negation should stand in an Agree relation. Then, to comply with Zeijlstra's two conditions on Agree, this means that: (i) one or both CNM(s) must be [uNeg]; (ii) if one is [iNeg], it must be the c-commanding one, i.e. in French *ne*. Unfortunately, neither hypothesis is borne out by the facts. With respect to the distribution of *ne*, French patterns with Strict NC languages, which means that *ne* should be [uNEG] like in Romanian. It follows that *pas* cannot be [iNeg], otherwise it would be co-commanded by  $ne_{[uNEG]}$ . But if *pas* were [uNeg], it should be compatible with other [uNeg] n-items, which is not the case.

In the end, to account for the French pattern, Zeijlstra resorts to a purely semantic explanation. Neither *ne* nor *pas* carries the feature [Neg]. The former, *ne*, is semantically non-negative (hence, an NPI). In fact, *ne* cannot negate a sentence by itself.<sup>14</sup> N-items do not agree with *ne*, but with a covert operator, as in (18).

(18)	a.	Je ne mange rien
		I CNM eat n-thing
		'I eat nothing'
	b.	Op <sub>[iNeg]</sub> je ne mange rien <sub>[uNeg]</sub>

(

*Pas* again carries no [Neg] formal feature, but is semantically negative. Since it is semantically negative, it can occur with *ne*, but it cannot cooccur with n-items without triggering a DN reading. The DN reading results from the cooccurrence with the covert operator that enters Agree with n-items.

(19)	a.	#Je ne mange pas rien	
		I CNM eat CNM n-thing	
	b.	Op <sub>linegl</sub> ie ne mange pas rien <sub>[uneg]</sub>	$\rightarrow$ DN

In short, the DN reading in (19) receives a semantic explanation. The lack of NC between *pas* and other n-items does not follow from the Agree mechanism, i.e. from the syntactic distribution of

<sup>&</sup>lt;sup>14</sup> Additionally, it can occur in certain DE environments. But this is also true of Italian non.

[*i*Neg] and [*u*Neg]. This is a rather unwelcome result for a theory that aims at a syntactic account of NC. If semantic and formal features are independent (Zeijlstra 2014) and if the former are allowed to tamper with NC, then the goal of a syntactic analysis of NC (a reduction of NC to syntactic Agree) is not achieved.

Our argument therefore is the following. We share the conclusion of much literature that NC is a syntactic phenomenon (Haegeman and Zanuttini 1991, Haegeman 1995, Zeijlstra 2004, 2008, Chierchia 2013 for a semantic viewpoint). We follow Zeijlstra in assuming that Agree operating on some Formal Feature (FF) is the natural syntactic notion under which such a research goal can be pursued within the minimalist framework. Nevertheless, Zeijlstra's implementation of this general program enriches the theory in various ways (*pace* Zeijlstra 2012). Crucially, we have argued that such enrichments may ultimately undermine the research program itself. We therefore have proposed reverting to standard (Downward) Agree, with certain further developments (i.e. the [n]-EPP) which we discuss in the next section.

#### 3. The (in)compatibility between n-items and CNMs: the n-EPP

Though all Romance languages are NC, there is considerable variation regarding the CNMs present in the various languages and the cooccurrence or mutual exclusion patterns involving CNMs and nitems. Some relevant data are summarized in (14) and (16) for languages with clitic CNMs (Italian, Romanian) and in (20)-(21) for languages with adverbial CNMs (French, Haitian Creole).

(20)	a.	Je	ne	mange	(*pas)	rien		French
		Ι	CNM	eat	CNM	n-thing		
		'I eat r	nothing.	,				
	b.	Person	ine	n'	est	(*pas)	venu.	
		n-one		CNM	is	CNM	come	
		'Nobo	dy has o	come'				
(21)	a.	Li	pa	wè	pèsonn	l I		Haitian Creole
		he	CNM	see	n-one			
	'He saw nobody.'							
	b.	Pèsonn		ра	vini			
		n-one		CNM	come			
		'Nobo	dy cam	e'				

The Italian data show that the incompatibility between the clitic CNMs and subject n-items in (14b) is independent of NC *stricto sensu*, as in (1). The same is true for French where NC in (9) coexists with the mutual exclusion between pas and n-items in (20). As conceptualized here, the process of NC itself is uniform in the various languages that display it, in the sense that the role of probe is always taken by a phase head and the role of goal by n-items. While we adopt the analysis of NC in terms of Agree, we reject the idea that parametrization in CNM patterns is connected to lexical assignment of Neg, *i*Neg, *u*Neg features. We also depart from Zeijlstra (2004, 2022) in not endorsing semantic parameters, for instance that French *pas* is a purely semantic negation. Instead, we propose an alternative syntactic analysis of CNM-related parameters, eliminating semantic explanations of the (in)compatibility between n-items and CNMs. Our account relies on three parameters, as detailed in what follows.

*Parameter I* - where are CNMs merged? Crosslinguistic variation depends on the phase where CNMs are merged. Typological and historical evidence (cf. Jespersen's cycle) shows CNMs are merged either/both in the *v* phase (such CNMs in Romance are adverbs) or/and in the C-I phase (such CNMs in Romance are inflectional/clitic). External (specifically, historical) reasons determine

whether negation is externalized in C, v or in both phases (Jespersen 1917).<sup>15</sup> In other words, this parameter of variation, namely whether the CNM is a clitic or an adverb, points at a phasal organization of NC. It is worth noting that the above bipartition holds true even if the exact position of CNMs within each phase may depend on further microparameters (Zanuttini 1997; but see Manzini and Savoia 2011 for extensive evidence against the cartographic approach). In languages exhibiting both, clitic and adverbial CNM may be characterized by different cooccurrence patterns; for instance French *ne* in (20) cooccurs with n-items, but French *pas* is systematically in complementary distribution with them.

*Parameter II* - Is [n] externalized at the phase edge? The customary view on the cooccurrence of CNMs and n-items (or lack thereof) is that n-items *block* the merger of CNMs. Instead, we follow Garzonio's (2021) intuition in assuming that CNMs *need not* be merged if negation is spelled out otherwise. External merge of CNMs is constrained on grounds of economy: since CNM are minimal n-elements (with no interpretation except that of negation), they are not merged if the same feature is carried by another goal in the probe's search space. This immediately accounts for CNMs like French *pas*.<sup>16</sup> On the other hand, the merger of a CNM may be forced by an edge (EPP) requirements that is parametrized, as in Chomsky's (2015) construal of the subject EPP: in certain languages, the EPP requirement must be fulfilled by a CNM even if other [n]-bearing goals are present in the probe's search space. This parametric setting yields strict NC languages like Romanian in (18) and Haitian Creole in (21).

The conception of the n-EPP mimics that of the original, subject EPP also extended to the Q feature (Cable 2010) or more generally to Force features by Chomsky (2015: 9). In the rest of this article, we will refer to the relevant constraint as the n-EPP, with only passing references to a precise implementation, since our focus is on accounting for the variation data not on developing technical proposals. Even so, it is crucial to the understanding of our Parameter II that we adopt Chomsky's (2015) suggestion that EPP requirements are language-specific. Recall that Chomsky (2013) suggests that the original, subject EPP can be subsumed by the Labeling Algorithm – in other words, raising of the subject to Spec, IP is necessary to label the resulting constituent  $\langle \phi, \phi \rangle$  by Agree. For Chomsky (2015), "in terms of labeling theory, Italian T, with rich agreement, can label TP and also {SPEC, TP}; for English, with weak agreement, it cannot, so that SPEC must be visible when LA applies". The n-EPP may be parametrized along similar lines – and result in some languages having no edge requirement (e.g. W. Lombard, see Section 5.1) and some of them requiring an n-expletive of sorts, i.e. the lexicalization of a specialized edge marker (e.g. the n-adverb in certain Occitan varieties discussed in Section 5.2). We will come back briefly to the implementation of the n-EPP in terms of labelling only in selected passages; any implementation (e.g. in terms of the Edge feature EF) is sufficient for our general purposes.

Parameter II and Parameter I combine, yielding four main logical possibilities: languages with/without EPP in v; languages with/without EPP in C-I. Further combinations may arise in

<sup>&</sup>lt;sup>15</sup> n-clitics, n-affixes and in general n-heads can be characterized as pure realizations of the n feature. n-Advs are known to belong to two major classes, both exemplified by the languages in the text. On the one hand they may be n-items, often homophonous with the n-item for 'nothing', cf. Occitan in Section 5.2 below. Removing the lexical restriction to 'thing', turns them into pure n-items. Alternatively, n-Advs may be minimizers, like French *pas* (< Lat. *passus* 'step', lit: not even a step), or Lombard *mia*/Emilian *briza* ('crumb') in Section 4 and ff. In this instance, the n-item may be construed as a covert D; what is overt is the lexical restrictor ('step', 'crumb' etc.), treated as an idiom.

<sup>&</sup>lt;sup>16</sup> An anonymous reviewer asks how CNMs are merged to satisfy the n-EPP if they are not in the numeration. If we understand the question correctly, Merge depends on the CNM being in the WS – and once the CNM is in the WS, it must be merged (i.e., the derivation converges if the workspace is cleaned up). If so, we must ensure that either no other n-item is present – or that the derivation converges but with a DN reading. In short, an account in terms of mutual exclusion has a form of backtracking (repair) built in – but the present account may be open to a criticism in terms of look-ahead. There is in fact another possible account that may avoid these two pitfalls. This consists in assuming that the CNM is always merged (as the traditional account) – however, at Transfer, Spell-Out occurs only in non-redundant cases. In this way, French *pas* reduces to an instance of 'morphological haplology' (Neeleman and van de Koot 2017) – and the No Transfer approach to ellipsis avoids the backtracking issue. The issue is highly relevant, but is left for further research.

languages with two CNMs: the parametric setting of the n-EPP may be harmonic (both v and C-I have/do not have an active nEPP requirement) or disharmonic (the n-EPP is active in one phase; standard French is a case in point).

To illustrate the effects of Parameter II with respect to the lower phase, let us consider the difference between French and Haitian Creole in (20)-(21) (Déprez 2000, 2011).<sup>17</sup> French is a simple ("n-drop") language where CNMs only ever appear when needed to trigger Agree as in (22).

(22) ... 
$$\begin{bmatrix} v_P & v_{[n]} & \begin{bmatrix} v_P \text{ mange rien}_{[n]} \end{bmatrix} \end{bmatrix}$$
 *n-Agree*

Haitian Creole in is a language where the CNM is always merged at phase edge ("n-EPP"), regardless of the occurrence of n-items in *v*'s complement, see (23b).

(23) a. ... 
$$\begin{bmatrix} vP \ v_{[n]} \ vP \ we \ pesonn_{[n]} \end{bmatrix} \end{bmatrix}$$
  
b. ...  $\begin{bmatrix} pa_{[n]} \ vP \ v_{[n]} \ vP \ we \ pesonn_{[n]} \end{bmatrix} \end{bmatrix}$   
 $\uparrow n-EPP$ 

Similarly, in Romanian, a so-called Strict NC language, the n-EPP in the C-I phase must be satisfied by the clitic CNM, cf. (16) above.

*Parameter III* – In languages with n-EPP, a third parameter specifies whether the n-EPP can be satisfied by Internal Merge. We have assumed so far that in n-EPP languages a CNM must systematically cooccur with n-items, yielding so-called Strict NC languages such as Romanian (16) or Haitian Creole (21). Conversely, in non n-EPP languages/phases, CNMs and n-items are in complementary distribution, e.g. French *pas* in (20). However, a third option is attested, namely non-Strict NC languages like Italian (14), cf. (24) below, where a CNM may cooccur with vP internal nitems (including post-verbal Subjects), but not with Spec,IP Subjects. Interestingly, the reverse (logically possible) pattern is not attested, i.e. no language exhibit NC exclusively with raised subjects. We propose that in so-called Non-Strict NC languages, the n-EPP can be satisfied by an n-item Internally Merged in a Spec-head configuration with the relevant phase head probe as in Italian (24a). Otherwise, the n-EPP is satisfied by a CNM, as in (24b).

(24)	a.	Nessuno (*non)	mangia
		n-one CNM	eats
		'Noone eats'	
	b.	Gianni *(non) mang	gia niente
		Gianni CNM eats	n-thing
		'Gianni eats nothing	g,

The parametric system introduced so far is summarized in Table 1. The effects of parametric setting will be thoroughly exemplified in sSections 4 and 5.

<sup>&</sup>lt;sup>17</sup> We are assuming that Haitian *pa* and Fr. *pas* are both adverbials. An uncontroversially adverbial CNMs satisfying the n-EPP is that of Occitan in Section 5.2.

Table 1 – Parameters o	)f	NC
------------------------	----	----

	C-I phase	v phase
Parameter I: where CNMs are merged?	YES/NO	YES/NO
Parameter II: n-EPP?	YES/NO	YES/NO
If n-EPP: YES, Parameter III: is n-EPP satisfied via IM?	YES/NO	YES/NO

According to an anonymous reviewer, the parametric system envisaged in Table 1 brings back into the theory the possibility of parameterizing properties of (null) functional heads. Our model would therefore depart from competing accounts of NC, including Zeijlstra's, that comply with the so-called Borer-Chomsky conjecture, i.e. the hypothesis that variation results from the features of functional elements. However, Zeijlstra-style analyses postulate silent negative operators, as in (15), (17), (18)-(19), which are realized by no overt lexical element. A proper discussion of this point would lead us deeper into theoretical matters – while our focus is mainly empirical. In any event, under standard ideas about lexical insertion as part of Spell-Out, it is evident that a syntactic terminal is just a bundle of features. Saying therefore that a phase head has rich [n] features that do not trigger merge of an n-item at its edge (or vice versa) seems a formulation of Parameter II entirely compatible with lexical parametrization. The same for Parameter III – essentially requiring merge of a minimal n-item, vs. satisfaction by IM.

More specifically, the anonymous reviewer argues that evidence from variation and change seems to comply with the idea that syntactic variation results from change in the feature specification of n-items and CNMs (Willis et al. 2013, Breitbarth et al. 2020). It seems to us that one could equally draw the opposite conclusion from the available evidence, namely that change in clausal negation marking (e.g. Jespersen's cycle) is largely independent from variation in the cooccurrence of CNMs and n-items. As previously mentioned, the varieties analyzed in this article display various patterns of negation marking (preverbal, discontinuous, postverbal) and various patterns of (in)compatibility between n-items and CNMs. Crucially, the only implicational relation that can be established between the two is that preverbal negation (C-I phase) always cooccurs with postverbal n-items (see Section 6). Besides this implication, however, anything goes: varieties with a very conservative, i.e. Latin-like, negation-marking system may allow CNMs to cooccur with n-items (e.g. Romanian), while the cooccurrence of CNMs and n-items is barred, as in Latin, in varieties with a very innovative negation-marking system such as spoken French.

#### 4. A novel pattern: Emiliano

Emilian varieties exhibit a pattern of discontinuous negation, whose relevance for the theoretical analysis of NC has not been noted before, to our knowledge. These varieties have two CNMs; the examples in (25) show that both the clitic CNM and the adverbial CNM *briza* are obligatory in negative clauses that do not contain other n-items.

(25)	a.	а	m	be:v	briza	viŋ		Finale Emilia
		Ι	CNM	drink	CNM	wine		
		'I don	't drink	wine'				
	b.	i	nn	a	briza	mapa	i biskət	
		they	CNM	have	CNM	eaten	the biscuits	
		'They	haven'	t eaten 1	the bisc			

The examples in (26) show that postverbal n-items cooccur with the clitic negation n, but not

with the adverb *briza*, again as in French. Unlike in French however, in the Finale Emilia language, the clitic CNM is mutually exclusive with preverbal subjects; as a result, a preverbal n-subject bars both CNMs, as shown in (26d).

(26)	a.	i	n	mapa	(*briz	a) pent		
		they	CNM	eat	CNM	n-thing		
		'They	don't e	eat anytł	ning'	-		
	b.	i	nn	a	mana	(*briza)	ne:nt	
		they	CNM ł	nave	eaten	CNM	n-thing	
		'They	'They haven't eaten anything'					
	c.	a	n	vjen ( <sup>;</sup>	*briza)	nicuŋ		
		it	CNM C	comes C	NM	n-one		
		'Nobc	dy con	nes'				
	d.	nicuŋ	a	(*n)	mana	(*briza)		
		n-one	he	CNM	eats	CNM		
		'Nobc	dy eats	,				

The *n* clitic in Emilian, being sensitive to the syntactic subject/object asymmetry, can hardly be inert morphological material. This makes it difficult, or impossible, to extend to it the treatment proposed in the literature for the French *ne* clitic, as semantically and syntactically inert. In fact Emilian varieties cast doubts on the treatment of French as well, since the distribution of the clitic in the two languages varies exactly along the lines of the Strict vs. Non-Strict NC parameter (cf. Italian and Romanian above) – a generalization which is not captured by current analyses.

We propose conceptualizing languages with two CNMs (clitic + adverb) like Emilian as languages with a disharmonic parametrization of the n-EPP. In Table 2, we provide an overview of the interplay of Parameters I-III in the derivation of Emilian negative clauses. We begin by displaying the parametric setting accounting for the Emiliano pattern.

	C-I phase	<i>v</i> phase
Parameter I: where CNMs are merged?	YES ( <i>n</i> ')	YES (briza)
Parameter II: n-EPP?	YES	NO
If n-EPP: YES, Parameter III: is n-EPP satisfied via IM?	YES	n.a.

Table 2 – Parametric setting of Emiliano

First, Emiliano has both CNMs, clitic and adverbial (Parameter I). The conditions under which they occur differ, i.e., we suggest that Parameter II has different values in the v and C-I phases. Emilian has no n-EPP in the v phase, while an n-EPP requirement is active in the C-I phase. The derivation of a negative clause is therefore as follows: v enters the derivation carrying [n], i.e. as  $v_{[n]}$ .  $v_{[n]}$  agrees with all n-items, if any, yielding NC via Multiple Agree (see Section 2). Recall that, with respect to n-Agree, we assume that external arguments are in the search space of v, as in (27a). Recall furthermore that possible goals include a CNM as in (27b).

(27) a. 
$$\begin{bmatrix} DP_{[n]} & v_{[n]} & [v_P \dots DP_{[n]}] \end{bmatrix}$$
  
b. 
$$\begin{bmatrix} briza_{[n]} & v_{[n]} & [v_P \dots] \end{bmatrix}$$
  
$$\begin{bmatrix} briza_{[n]} & v_{[n]} & [v_P \dots] \end{bmatrix}$$

Previous accounts of e.g. French have always aimed to explain why CNMs such as French pas are

barred in contexts like (27a). In contrast, the explanation is reversed in our account (see also Garzonio 2021): as far as the probe finds an appropriate n-goal, as in structure (27a), no CNM needs to be merged. In essence, nothing needs to be added to the general account of NC in Section 2 to explain the pattern in (25)-(26). What represents the most complex test case for most syntactic theories of NC, namely mutual exclusion of n-items and CNM adverbs, is taken here to be the baseline case, necessitating no explanation other than Economy. In other words, elements like French *pas* or Emilian *briza* are merged only if necessary; and if unnecessary, they are impossible. They do not display extra complexities of NC – on the contrary they represent the simplest type of CNM for NC languages. In short, since in Emilian, v has no n-EPP requirement (Parameter II), the adverb *briza* in (27b) is in complementary distribution with n-items in (27a), as indicated in (28).

(28) [\*briza  $v_{[+n]}$  [vp ... DP<sub>[+n]</sub>]]  $\uparrow_{no n-EPP}$ 

Next, I is merged. Since I *has* a n-EPP requirement (Parameter II), the clitic CNM must be merged regardless of the occurrence of other n-items in I's search space, cf. (29).

(29)  $\begin{bmatrix} n & I_{[n]} & \dots & [v_{[n]} & [v_P & \dots & DP_{[n]}] \end{bmatrix}$  $\uparrow_{n-EPP}$ 

Finally, with n-subjects, Parameter III comes into play. We propose that Emilian varieties allow the n-EPP be satisfied by IM of a n-item in spec, IP. If a n-item undergoes Internal Merge in Spec, IP, the CNM n is not needed (hence, it is barred by Economy), because the n-EPP is already satisfied, as in (30).

(31)  $[DP_{[n]} (*n) I_{[n]} \qquad [DP_{[n]} v_{[n]} \qquad [v_P \dots]]]$  $\uparrow_{n-EPP}$ 

Under this analysis, the *n* clitic in Emilian is not inert morphological material (which is the current treatment of the French *ne* clitic), being sensitive to the syntactic subject/object asymmetry. On the contrary, we propose that the clitic CNM is an EPP marker, playing a role in the satisfaction of a syntax internal condition (*contra* purely morphological characterizations, Déprez 2017 on French, but also Zeijlstra 2022, Deal 2022). On the other hand, the adverb CNM plays again a syntactic role in determining the application of n-Agree (not therefore a purely semantic role, contra Zeijlstra 2022 on French).

An anonymous reviewer points out that certain n-items, e.g. negative complementizers, may be merged outside the v phase, yet they are in complementary distribution with adverbial CNMs. Unfortunately, we do not have data illustrating this pattern in our corpus of Italo-Romance dialects. However, the data for Emilian are easily sourced, see (31).

(31)	1	3	parti	sɛinsa (*n) dir-m-el	(*briza)			
	he	is	left	without CNM tell=me=it	CNM			
	'He left without telling me'							

So far, we have seen that the clitic CNM, *n*, is merged to satisfy the n-EPP of the C-I phase (Parameter II); however, the n-EPP can be satisfied also by IM of an n-item in Spec,IP (Parameter III). We may now add that under phase inheritace from C to I (Chomsky 2008), merger of an n-item in C is also sufficient to satisfy the n-EPP of the C-I phase, preventing the realization of the clitic CNM on Economy grounds. This is not connected to Parameter III, since we will discuss the same conditions holding in French in Section 5. Rather, we take it to be an automatic consequence of phase head inheritance.

A different issue is the adverbial CNM, since its sensitivity to the negative complementizer raises the question of the interaction (if any) between the v and the C-I phase. Ledgeway and Schifano (2023) suggest the generalization that Romance languages with adverbial CNMs have a relatively high Spell-Out position of the verb. In terms of theories of phase sliding (Gallego 2010), verb movement to I triggers enlargement of the v phase (here, its edge) to IP. This means that the conditions for merging the adverbial CNM (or for realizing it, cf. fn. 16) can be sensitive to I (and by inheritance to C). We return to this point in relation to South Lombard (Pozzaglio variety, Section 5.3).

# 5. Other patterns

# 5.1. West Lombard

We consider next West Lombard (roughly Milan area) as exemplified in (32). As previously mentioned in the analysis of Emilian, at least one [n] goal must be probed by phase heads carrying [n] in order for [n] to be read at INT. If no n-item is found in the phase/clause, then a CNM is merged. We take CNMs to be minimal n-item (in the sense in which one speaks of minimal pronouns, cf. Kratzer 2009), or in other words, pure exponents of the n-feature. In this account, the set of n-items, that is, items carrying [n] (e.g. n-quantifiers, n-adverbs, n-complementizers, etc.) includes the subset of CNMs, which are [n]-items carrying no feature other than [n]. Lombard *mia* in (32) is a case in point.

(32)	a.	dərmi mia	West Lombard (Olgiate Molgora)	
		I.sleep CNM		
		'I don't sleep'		
	b.	o mia durmi:		
		I.have CNM slept		
		'I haven't slept'		

Under Parameter I the CNM is merged in the *v* phase. If a n-item is already merged in *v*P or elsewhere in the sentence, the negative setting of Parameter II comes into play, see Table 3.

U		
	C-I phase	v phase
Parameter I:	NO	VES (mig)
where CNMs are merged?	NO	TES (miu)
Parameter II:		NO
n-EPP?	n.a.	NO
If n-EPP: YES, Parameter III:		
is n-EPP satisfied via IM?	II.a.	n.a.

Table 3 – Parametric setting of West Lombard

Since Parameter II is negatively set, *mia* cannot cooccur with n-items, see (33), where (33a) displays an n-object, (33b-c) display an n-subject internal to vP, (33d) displays a preverbal n-subject.<sup>18</sup>

(33)	a.	la kapes negot	W. Lombard
		she understands n-thing	
		'She understands nothing'	

<sup>&</sup>lt;sup>18</sup> The pattern in (32)-(33) is the same described for colloquial French, lacking the *ne* clitic. Reference to Lombard varieties (which are not sociolinguistic dialects of Italian, but independent Italo-Romance varieties), allows us to cut out sociolinguistic discussion altogether.

b.	mənd	за	nesyn	
	eats		n-one	
	'Nobe	ody eat	s'	
c.	1	а	durmi	nesyn
	SCl	has	slept	n-one
	'Nobe	ody has	s slept'	
d.	nesyn	mənd	lza	
	n-one	eats		
	'Nobe	odv eat	s'	

The step-by-step derivation of the examples in (32)-(33) is as follows. v enters the derivation carrying [n]. The [n] feature is interpreted at INT if  $v_{[n]}$  finds a n-item in its search space, namely the CNM in (32) or the n-items in (33). In (32),  $v_{[n]}$  agrees with the CNM *mia*, as shown in (34a); in (33)  $v_{[n]}$  agrees with other n-items in v's search space, including external and internal arguments, see (34b) and (34c), respectively.

- (34) a.  $[\min_{n} v_{n}] [v_{P} \dots ]]$ 
  - b.  $[\operatorname{nesyn}_{[n]} v_{[n]} [_{VP} \dots ]]$  $\square$  n-Agree with an external argument
  - c.  $[\nu_{[n]} [\nu_{P} \dots DP_{[n]}]]$

Multiple n-items can cooccur, as in (35) – which means that n-items are subject to Multiple Agree, yielding NC. This shows that the mutual exclusion between CNM and n-items has nothing to do with NC. The NC pattern in (35) results from the Multiple Agree relation established between a phase head and any number of n-item(s), as illustrated in Section 2.

(35)	ge	do	negot	a nesyn		W. Lombard
	3Dat	I.give	n-thing	g to n-one		
	'I give	nothing	g to any	ybody'		

The distribution of the CNM is constrained because West Lombard, like Emilian in section 4, has no n-EPP requirement in v (Parameter II). For reasons of Economy, the merger of the CNM is therefore barred once the phase already contains at least one n-item and the adverb *mia* is in complementary distribution with n-items, as in (36).

(36)  $[* \min v_{[n]} \quad [v_P \dots DP_{[n]}]]$   $\uparrow_{no n-EPP}$ 

Finally, I is merged. Since there is no CNM in I, Parameters II and III do not apply.

# 5.2. Occitan

At this point, we need to explain why in languages such as Haitian Creole in (21) an adverbial CNM in *v* systematically appears in negative sentences even if other n-items are present. Other Romance varieties displaying the same pattern are Occitan varieties (Longobardi 2014, quoting data from P. Sauzet). We exemplify an Occitan variety of Eastern Piedmont, as opposed to the Haitian Creole

made familiar by Déprez (1997 and following works), for maximum uniformity and comparability with other (non-Creole) varieties considered here. In (37) we provide examples of the adverbial CNM *pent* 'not' negating the sentence by itself.

(37)	a.	i they 'They	drømu sleep don't sl	pent CNM eep'		Occitan (Piedmont, Fontane)
	b.	j they 'They	aŋ have haven't	nent CNM slept'	drymi slept	

Any n-item can cooccur with the CNM *nent*, including the object *nent* 'nothing' in (38a), the postverbal subject  $ny\eta(\partial)$  'nobody' in (38b-c) and the preverbal subject in (38d-e).<sup>19</sup>

(39)	a.	j	aŋ	nent	mandʒ	a pent	Occitan (Piedmont)				
		they	have	CNM	eaten	n-thing					
		'They	have ea	ten notl	ning'						
	b.	ui	vɛŋ	nent	ກyŋə						
		ClS	comes	CNM	n-one						
	'There comes nobody'										
	c.	uj	a	nent	vəŋgy	ກyກອ					
		ClS	has	CNM	come	n-one					
		'There	has con	ne nobe							
	d.	nyŋ	i	drømu	nent						
		n-one	ClS	sleep	CNM						
		'Nobo	dy sleep	os'							
	e.	nyŋ	i	aŋ	nent	drymi					
		n-one	ClS	have	CNM	slept					
		'Nobo	dy sleep	os'		-					

The data in (37) show that the CNM *pent* can serve as a minimal n-element (consisting entirely of an [n] content) capable of agreeing with a [n] probe in the absence of other n-items. By contrast, Occitan varieties display no C-I negator, as shown by the setting of Parameter I in Table 4. In regard to the cooccurrence of *pent* and n-items, we simply propose that Occitan's *v* carries an n-EPP feature (Parameter II), which must be checked against a CNM.

Table 4 – F	Parametric	setting	of	Occitan
-------------	------------	---------	----	---------

	C-I phase	<i>v</i> phase
Parameter I: where CNMs are merged?	NO	YES ( <i>pent</i> )
Parameter II: n-EPP?	n.a.	YES
If n-EPP: YES, Parameter III: is n-EPP satisfied via IM?	n.a.	NO

# 5.3. Pozzaglio

<sup>&</sup>lt;sup>19</sup> Notice that the CNM *pent* is homophonous with the n-item 'nothing'. The same lexical material may be involved, but in different positions in the sentence and/or with different internal structuring (Garzonio and Poletto 2010), cf. fn. 15.

Our parametric system predicts a third logical possibility for languages with adverbial CNM, beside those of Occitan and West Lombard, which results from crossing a *v*-phase CNM (Parameter I) with n-EPP in the lower phase (Parameter II), which can be satisfied by IM (Parameter III). A potential candidate for filling this pattern are languages like the South Lombard variety of Pozzaglio in (39). The same pattern has been described in the literature for Quebec French (Burnett, Tremblay and Blondeau 2015). Crucially, this variety displays an asymmetry between preverbal (ex situ) n-subjects vs. other n-items, comparable to that of clitic CNM languages like Italian (so-called Non-Strict NC languages). n-Subjects in Spec,IP are mutually exclusive with the adverbial CNM, *mia*, in (39d), which cooccurs obligatorily with vP-internal n-items in (39b-c). The adverbial CNM also negates the sentence by itself, in the absence of other n-items in (39a).

(39) Pozzaglio (Southern Lombardy)

				•
a.	εl	dərma	mia	
	he=	sleeps	CNM	
	'He do	esn't sl	eep'	
b.	dərma	mia	nisøŋ	
	sleeps	CNM	n-one	
	'Noboo	dy sleep	os'	
c.	εl	da	mia	nje:nt a nisøŋ
	he=	gives	CNM	n-thing to n-one
	'he giv	es noth	ing to a	nybody'
d.	nisøŋ	i	dərma	(*mia)
	n-one	SCL=	sleep	CNM
	'Noboo	dy sleep	os'	

A tentative parametrization for Pozzaglio is given in Table 5. Parameter I accounts for the position of the CNM. Parameter II yields the cooccurrence between said CNM and vP-internal n-items. Finally, we tentatively assume that Parameter III is responsible for the fact that the CNM *mia* cannot cooccur (ultimately for reasons of Economy) with IM-ed n-items (raised subjects). The problem with Parameter III in Table 5 is that though *mia* is an adverbial CNM of the *v* phase, the n-item that provides an alternative satisfaction of the n-EPP in (39d) is IM-ed in Spec, CP - i.e. at the edge of the higher phase head.

	C-I phase	v phase
Parameter I: where CNMs are merged?	NO	YES (mia)
Parameter II: n-EPP?	n.a.	YES
If n-EPP: YES, Parameter III: is n-EPP satisfied via IM?	n.a.	YES

Table 5 – Parametric setting of the variety of Pozzaglio

Consider the derivation for (39d) in (40). In step (40a), we Externally Merge the *v* head and the external argument *nisøŋ*; we take n-Agree to apply between them. In principle the n-EPP can be satisfied by the CNM *mia* modifying vP. With the *v* phase still open, I is merged, probing the EA in turn and entering  $\varphi$ -Agree with it. Following Agree, the subject can move to the edge of IP, yielding (40b). Movement of *nisøŋ* to the edge of IP satisfies the n-EPP relevant for this language – which by hypothesis is an n-EPP of the *v* phase. We assume that what is at play is a mechanism of phase extension (den Dikken 2007) or phase sliding (Gallego 2010). The fact that I probes into the edge of the embedded vP and/or that movement takes place from the edge of vP to the edge of IP implies that the phase being closed upon Merge of C is not the embedded vP, but rather the embedded IP, cf.

(40c). Gallego (2010), who discusses specifically Romance, ties phase sliding to movement of the verb to I. We take phase sliding to imply that the vP phase edge extends to IP, as indicated in (40c). This means that the n-subject in Spec,IP satisfies the n-EPP at the (IP) edge of the v phase via IM (Parameter III), preempting merger of the CNM.

(40)	a.	[ nisøŋ [n]	$\begin{bmatrix} vP & V[n] \end{bmatrix}$	
		<u> </u>		
	b.	[ nisøŋ [n]	$[_{IP} < i, dorma > [ nisgn [n] ] [_{vP} V[n] ]$	
	c.	[ nisøŋ <sub>[n]</sub>	"[ <sub>IP</sub> <i, dorma=""> [ <del>nisøŋ [n]</del> [<sub>vP</sub></i,>	V[n]
			phase extension	

At this point, the question arises why IM of the subject in Spec,IP is necessary to satisfy the n-EPP – while EM of the subject at the edge of vP is not sufficient to satisfy it. Now, in introducing Parameter II (Section 3), we endorsed the formalization of Chomsky (2013, 2015), in terms of Labeling. According to Chomsky (2013), IM of the subject into Spec,IP results in labelling of the constituent by Agree, namely  $\langle \varphi, \varphi \rangle$ . This movement is obligatory in a language like English with subject EPP, because I has not rich enough features to provide a label by itself (Chomsky 2015). Suppose we extend the same line of reasoning to the n-EPP. We may surmise that in (40c), the n-EPP is satisfied as represented in more detail in (41) – i.e. the constituent created by IM of the subject to the edge of IP is labelled  $\langle \varphi, \varphi \rangle$  as in Chomsky proposal, but also  $\langle n, n \rangle$ .

(41)  $[\langle \phi, \phi \rangle, \langle n, n \rangle \text{ nis} \phi \eta ]$   $[IP \langle i, dorma \rangle$ 

Vice versa, there is no Agree between the *v*P-internal subject and the *v* phase head, therefore no labeling and consequently no possible satisfaction of the n-EPP.<sup>20</sup>

# 5.4 Romanian

Moving away from adverbial CNMs, this section and the next one deal with languages endowed with preverbal/clitic CNMs. In this section we consider languages with so-called Strict NC. The relevant pattern is illustrated with Romanian *nu*. For ease of reference, we reproduce the Romanian NC pattern in (42a-b), adding an example of simple sentential negation in (42c). The latter shows that the CNM can negate alone, which means that it is the minimal n-item of the language.

(42)	a.	Nu vreau	nimic			Romanian			
		CNM I.wan	CNM I.want n-thing						
		'I want nothi	'I want nothing'						
	b.	Nimeni	nu a	ı	venit				
		n-one	CNM h	nas	come				
		'Nobody can							
	c.	Ion nu	cumpără	í	ziare				
		John CNM	buys		newspapers				
		'John doesn'	t buy news	spape	rs'				

It is natural to analyze Romanian on a par with Occitan as an n-EPP language – though in Romanian the CNM is a clitic and therefore associated with the (C-)I phase head (Parameter I). In

 $<sup>^{20}</sup>$  If Belletti (2009) is correct, the *v*P-internal subject of Romance languages is not *in situ* (where its constituent cannot be labeled) but is moved to a low peripheral position.

Occitan, a CNM is always required because of the n-EPP of the v phase head; similarly, the Romanian CNM is always required under the assumption that the I head is associated with an n-EPP requirement (Parameter II). Note further that in Romanian, as in Occitan, there is no complementary distribution of the CNM and the subject – which means that Parameter III is set on a negative value. The parametric setting is given in Table 6.

	C-I phase	<i>v</i> phase
Parameter I: where CNMs are merged?	YES	NO
Parameter II: n-EPP?	YES	n.a.
If n-EPP: YES, Parameter III: is n-EPP satisfied via IM?	NO	n.a.

Table 6 – Parametric setting of Romanian

In order to maintain this picture, we however need to further clarify the involvement of the C-I phase in the NC, i.e. n-Agree, system. In Section 2, in providing the basic mechanism of NC (independently of the cooccurrence or mutual exclusion patterns involving CNMs) we have identified the v phase head as the probe triggering n-Agree with arguments (and modifiers) in its complement and Spec position(s).

Consider then the derivation of Romanian (42a), is in (43). No negative Agree in the v phase takes place, see (43a), since Romanian has no CNM in v (Parameter I) and therefore no conclusive evidence that v is involved in NC. Then I is merged as in (43b). I probes for the n-item *nimic* in the lower phase before it is closed by the higher phase head C. The CNM *nu* is merged with I even if I has already found a goal to agree with. The merger of *nu*, in fact, is not triggered by Agree, but by the n-EPP (Parameter II), which forces the merger of the CNM although Economy would require otherwise.<sup>21</sup>

(43)	a.		. [v	[VP vreau nimic [n] ]]
	b.	[ I <sub>[</sub>	n] [V	[VP vreau nimic [n] ]]]
		L		
	c.	$[nu_{[n]}]$ I	n] [V	[VP vreau nimic [n] ]]]
		↑ n-EPP		

The same conditions hold if a n-item is Internally Merged in Spec,IP as in (42b). The Romanian n-EPP is parametrized in a way that requires the occurrence of the CNM *nu* even if a n-item is moved to Spec,IP, as shown in (44) (i.e. Parameter III is set negatively).

(44)  $[nimeni_{[n]} nu_{[n]} I_{[n]} [v_{[n]} [v_{P} venit nimeni_{[n]}]]]$  $\uparrow n$ -EPP

# 5.5. Italian

Languages with clitic CNMs exhibiting so-called Non-Strict NC include Italian (or Spanish). For ease of reference, in (45) we reproduce the Italian examples of NC, including the mutual exclusion of

<sup>&</sup>lt;sup>21</sup> Manzini and Pescarini (2022) take clitics to be Externally Merged as heads, adjoined to a phase head via Pair Merge, but the issue of cliticization is orthogonal to present concerns. We could equally well insert nu as phrasal adverbs in Spec,IP and cliticize it in the morphological component (à la Matushansky 2006); nothing hinges on this. The structure of nu in (42) is non-committal (though a Pair merge structure is indicated for subject clites, e.g. Pozzaglio's (40)).

preverbal subject and non in (45b);<sup>22</sup> non can also negate the sentence by itself, (45c).

(45)	a.	Non arriva	nessuno	Italian
		CNM arrive	s n-one	
		'Nobody arriv	ves'	
	b.	Nessuno	arriva	
		n-one	arrives	
		'Nobody arriv	ves'	
	c.	Non arriva	no	
		CNM they.a	rrive	
		'They are not	arriving'	

Consider the crucial Italian asymmetry in (45a) vs. (45b). The derivation of the Italian example (45a) reproduces that already reviewed for Romanian. Italian has no adverbial CNM merged in v (Parameter I, Table 7). In its absence, there is no direct evidence that the v phase head probes n-arguments, as shown in (46a). At the next phase up, I finds an n-complement in the WS, namely *nessuno* with which it enters n-Agree, as in (46b). Since Parameter II is positively set for the C-I phase (see Table 7), the CNM *non* must be merged regardless of the presence of other n-items in I's complement, as shown in (46c) (but see below for Parameter III).

(46) a. 
$$[v \quad [v_P arriva nessuno_{[n]}]]$$

b. 
$$[I_{[n]} [v [v_P arriva nessuno_{[n]}]]$$
  
c.  $[non_{[n]} I_{[n]} [v [v_P arriva nessuno_{[n]}]]$   
 $\uparrow_{n-EPP}$ 

$\mathcal{O}$		
	C-I phase	v phase
Parameter I: where CNMs are merged?	YES	NO
Parameter II: n-EPP?	YES	n.a.
If n-EPP: YES, Parameter III: is n-EPP satisfied via IM?	YES	n.a.

Table 7 – Parametric setting of Italian

We must then derive (45b), i.e. the crucial contrast between *v*P-internal and raised subjects that yields so-called Non-Strict NC languages like Italian. We conceptualize the subject/object asymmetry of so-called Non-Strict NC languages by reference to Parameter III. The parameter between Italian and a Strict NC language like Romanian does not at this point involve a different semantic status of the CNM in the two languages, contrary to the construal of the Strict vs. Non-Strict NC parameter in the Upward Agree model. It involves a different setting of Parameter III, which establishes the means of satisfaction of the n-EPP. Roughly speaking, in Romanian the n-EPP must be satisfied by EM of a specialized CNM. In Italian, IM of the subject is sufficient. By Economy, IM

(i) NESSUNO (<sup>%</sup>non) ho visto. (It.) n-one CNM I.have seen 'Noone, I saw'

 $<sup>^{22}</sup>$  The cancellation of *non* seen in (45b) is also observed with movement to the left periphery of C, notably Focus in (i). For some speakers, however, *non* can marginally occur in contexts such as (i) without yielding a DN reading. The omission may depend on the exact nature of the fronted constituent – perhaps on whether a true focus is involved (no CNM) or a contrastive topic. Further research is needed to clarify this issue.

(of the subject) is preferred to EM (of the CNM) whenever possible – whence the typical alternation of Italian.<sup>23</sup>

(47)  $[nessuno_{[n]} (*nu_{[n]}) I_{[n]} [v_{[n]} [v_{P} arriva nessuno_{[n]}]]]$  $\uparrow n$ -EPP satisfied by IM of nessuno

The Italian CNM is furthermore omitted in the presence of negative complementizers like *senza* 'without' in (48a). As suggested by an anonymous reviewer, one may hypothesize that *senza* can have the role of a CNM, which is therefore in complementary distribution with the CNM *non*. However, notice that *senza*, unlike *non*, is not in complementary distribution with a n-subject, see (48b), i.e. *senza* and *nessuno* enter regular NC.

(48)	a.	Parte	senza (*no	n) saluta	re nessuno		
		he.leaves	without CNN	A greet	n-one		
		'He leaves w	vithout greetin	g anyboo	ły'		
	b.	Parte	senza	che	nessuno	lo	saluti
		he.leaves	without	that	n-one	him	greets
		'He leaves w	vithout anybod	ly greetir	ng him'		-

The analysis put forth so far may account for the examples in (48) along the lines already discussed for Emilian. In standard minimalism, I inherits phase status from C, the actual phase head. In example (48a) the C head is modified by a negative element, roughly <not, with>, determining satisfaction of the n-EPP at C. Because of the inheritance mechanism, the merger of the CNM in I is therefore preempted. Note that this latter step depends on *non* being the minimal n-item of the language, containing no other feature than [n]. In (48b), however, both *senza* 'without' and *nessuno* 'n-body' are contentive n-items and therefore economy does not apply to exclude one or the other.<sup>24</sup>

#### 5.6. French

As is well-known, standard French combines an obligatory clitic *ne* (cf. Romanian) with an adverb *pas*, merged only in the absence of other n-items (cf. West Lombard). We refer here to the normative variant of French, where *ne* is mandatory.<sup>25</sup> *Ne* is often analysed as a "mere morphological marker" (Déprez 2017). We have seen above, in the discussion of Emilian (section 4) why this is not satisfactory even descriptively, in a crosslinguistic perspective.

In (49a) we reproduce an example showing that the clitic CNM *ne* and the adverbial CNM *pas* must cooccur in negative clauses in the absence of other n-items. (49b-c) show that the adverbial CNM is in complementary distribution with n-items, while the clitic CNM always cooccurs with n-items regardless of the position of the latter. We add an example of a post-verbal subject in (49d). The distribution of the n-items makes no difference for the patterning of the CNMs.

<sup>&</sup>lt;sup>23</sup> Given the parallel that we have been running between the n-EPP and other forms of EPP/edge requirement, we expect that there should be languages that necessarily satisfy the subject EPP by means of some dedicated item. We may think of North Italian varieties that obligatorily satisfy the subject EPP by a subject clitic (independently of the presence or absence of a preverbal subject) as satisfying this prediction.

<sup>&</sup>lt;sup>24</sup> It is useful to run the parallel with the subject EPP. Subject clitic languages of Northern Italy are a case in point. At least one subject clitic must be present to satisfy the relevant edge of phase requirement, but of course two clitics may equally be present (possible at the edge of IP and CP respectively, see Manzini and Savoia 2005).

 $<sup>^{25}</sup>$  Dialects/sociolects of French where *ne* is regularly omitted in favour of *pas* are like West Lombard (Section 5.1). Variation between standard French and its varieties follows from the setting of Parameter I.

(49)	a.	elle	ne	vient	*(pas)			French
		she	CNM	comes	CNM			
		'She is	not con	ning.'				
	b.	Je	ne	mange	rien			
		Ι	CNM	eat	n-thing	5		
		'I eat n	othing.	,				
	c.	Person	ne	n'	est	venu.		
		n-one		CNM	is	come		
		'Nobody has come'						
	d.	I1	ne	se	passe		rien	
		it	CNM	3refl	happen	IS	n-thing	
		'Nothi	ng happ	ens'				

As anticipated, a language like French results from combining a distribution of the clitic CNM similar to that of Romanian (so called Strict NC) with the distribution of the adverbial CNM seen for West Lombard (or indeed colloquial French, suppressing *ne*). The parametric setting is given in Table 8. The closest language is Emilian in Section 4, except that in French Parameter III is set on a negative value.

Table 8 – Parametric setting of French

	C-I phase	<i>v</i> phase
Parameter I: where CNMs are merged?	YES	YES
Parameter II: n-EPP?	YES	NO
If n-EPP: YES, Parameter III: is n-EPP satisfied via IM?	NO	n.a.

According to Table 8, normative French can be analyzed as a language with no n-EPP in v. Hence pas is not required (and barred by Economy) when v finds another n-item in it search space. Otherwise, pas will be merged to provide a goal to v probe. On the other hand, French has a n-EPP requirement in I, hence ne is mandatory. Unlike Emilian in Section 4, the n-EPP requirement in I cannot be satisfied via IM of a raised n-subject, whence the cooccurrence between n-subjects and the CNM ne in examples such as (49c).

Negative complementizers, merged outside the v phase, are in complementary distribution with the adverbial CNM in French, as well as with the clitic one, see (50).

- (50)Tu peux venir sans (\*ne) (\*pas) avoir reçu a. d'invitation you may come without CNM CNM have received an invitation 'You may come without having received an invitation' b.
  - ... sans que je (\*ne) t'invite (\*pas) expressement
    - ... without that I CNM you=invite CNM explicitly

'... without me inviting you explicitly'

The mutual exclusion between the sans complementizer and the *ne* clitic is as discussed for Italian – simply the n-EPP of the C-I phase is satisfied at C, the higher member of the C, I inheritance pair. As for the mutual exclusion between the sans complementizer and the pas adverb, it follows the lines discussed for Emilian. Under phase sliding/extension, the edge of the v phase head is extended to IP. Hence merger of an n-item in IP (or in the C member of the C,I inheritance pair) preempts merger of the adverbial CNM by Economy.

# 6. A restrictive typology of CNMs

At the beginning of the discussion we stressed the expectation that the analysis of languages very closely related (genetically, typologically), like the Romance ones, should yield an account of NC, or more properly CNM patterns responding to two basic requirements: completeness (no undergeneration) and internal consistency (a consistently syntax-internal account). In the previous sections, we have worked our way through five basic patterns of Romance languages (limiting the discussion to languages with a single CNM; as previously mentioned, languages with two CNMs can be considered as composite systems). In present terms, the relevant parameters for the definition of the five language types are

- I: Where CNMs are merged
- II: Whether an n-EPP does or does not hold.
- III: Whether the n-EPP can also be satisfied by IM.

As a first approximation, these three parameters (II and III are interlocked) yield Table 9.

	n	No n-EPP	
	Via EM	Via IM/EM	
CNM in the C-I phase	Romanian	Italian	*
CNM in the <i>v</i> phase	Occitan	Pozzaglio	W. Lombard

Table 9: CNM language-types

Table 9 raises various questions, the most important of which is whether the missing slot is just waiting to be filled by some new variety – or whether it is unattested. If the latter, then the analysis we have developed should be able to derive this.<sup>26</sup>

To the best of our knowledge, there is no Romance language where the clitic CNM occurs only if there is no other n-item. In other words, though n-clitics and n-adverbs have so far been treated on a par, n-clitics differ from n-adverbs in that they are always required to negate a sentence, even if some other n-item is present. As Zeijlstra (2004: 266) puts it, "if a language has a negative marker that is a syntactic head, the language exhibits NC" (recall that for Zeijlstra, the term NC refers to the cooccurrence of CNM and n-items, while we adopted a wider definition of NC, encompassing all patterns where n-items cooccur yielding a single semantic negation).

As a tentative approach to this issue, we suggest that the intrinsically expletive nature of clitic (i.e. inflectional) CNMs<sup>27</sup> may depend on the implementation of EPP-like requirements in terms of the Labelling Algorithm (LA). We briefly mentioned that Chomsky (2013) reduces the EPP to the LA, by assuming that IM of the subject to the edge of IP is due to the need to project I features via

<sup>&</sup>lt;sup>27</sup> The expletive-like nature of clitic CNM is probably related to the fact that, in languages with dual CNMs such as French, it is always the clitic CNM that must occur in non-negative contexts such as complements of predicates of 'fearing', cf. (i)-(ii), comparatives, etc.
(i) Je crains qu' elle ne vient French *ne* - expletive

(i)	Je	crains	qu'	elle	ne	vient		
	Ι	fear	that	she	CNM	comes		
	'I am	afraid she	is comi	ng'				
(ii)	#Je	crains	qu'	elle	(ne)	vient	pas	
	Ι	fear	that	she	CNM	comes	CNM	
	'I am	afraid she	is not c	oming'				

Examples like (i) provide the customary illustration of expletive negation as "corresponding to cases in which a... standard sentential negation is used... without providing, according to the received wisdom, any truth-conditional contribution to interpretation" (Delfitto 2020, we refer to Delfitto for review and discussion). The relation (if any) between the expletive negation as traditionally understood and expletive negation in present terms (merged to satisfy an n-EPP requirement) is left open for further research.

 $<sup>^{26}</sup>$  One of the limitations of the formal literature on NC seems to us to be the lack of discussion of logically possible but excluded languages – with one notable exception from Zeijlstra (2004), on which more below in the text.

Agree, producing the label  $\langle \varphi, \varphi \rangle$ . The proposal (not an uncontroversial one) is largely orthogonal to the rest of the discussion. Suppose we adopt it, so that an n-EPP language is a language where EM or IM of an n-items at the edge of a given phase head is required for the [n] feature to be projected onto the sentential spine.<sup>28</sup> Since n-clitics modify the I phase head, their [n] feature necessarily projects as part of the head. Otherwise put, it is impossible for a minimal n-clitic not to satisfy an n-EPP as well, since its [n] feature necessarily projects as part of the same complex head as I. This derives the impossibility of n-clitic languages with no n-EPP,<sup>29</sup> and it predicts the non-existence of a language filling the upper right slot in Table 9.

# 7. Conclusions

The above Table 9 summarizes the types of simple CNM systems attested in Romance. This is the test bed against which theories of negation should be verified.

We showed that previous accounts of negation marking fail to account for some of the patterns in Table 9. We then developed a twofold syntactic analysis that separately accounts for NC, i.e. the cooccurrence of multiple n-items, and for the (in)compatibility between n-items and CNMs. In previous analyses, the latter is seen as a special case of NC. In our analysis, conversely, the two result from two distinct mechanisms:

- NC results from multiple Agree. More specifically, we argued that downward multiple agree can capture NC patterns if Phase Heads C-I and *v* are regarded as probes. NC is uniformly attested across the Romance languages.
- The (in)compatibility between CNMs and n-items, which is subject to crosslinguistic variation across Romance, results from a concurrent mechanism. We elaborated on an EPP-like requirement that, under certain (language-specific) conditions triggers the merger of a CNM at the edge of the phase, either C-I or *v*, regardless of the occurrence of n-items in the same phase. Languages vary with respect to the conditions under which the merger of said CNM is preempted, e.g. occurrence of an IM-ed subject in Spec,IP.

By introducing an extra EPP-like requirement we enrich the theory of negative marking, but such enrichment is justified by empirical and theoretical reasons. Empirically, our model can account for all the patterns in Table 9 without resorting to any extra-syntactic stipulation. Theoretically, the cost of postulating an additional requirement is compensated by a simplification of the account of NC, which is eventually reduced to standard downward Agree, triggered by phase heads (no lexical apportioning of *i*Neg and *u*Neg values). Lastly, the involvement of Phase Heads in the explanation of negation patterns opens a promising avenue of research, to reconsider the diachronic evolution of negation systems (Jespersen 1917), an issue that deserves further elaboration in the light of the approach we proposed.

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<sup>&</sup>lt;sup>28</sup> This is of course reminiscent of NegP in Haegeman and Zanuttini (1991), Haegeman (1995) – and indeed Chomsky's (2013) LA explicitly seeks to model Rizzi's (2006) Criterial Freezing.

<sup>&</sup>lt;sup>29</sup> Again in the interest of keeping the parallel between the n-EPP and the subject EPP we may wonder whether the same type of implication follows for subject clitics. It seems to us that it does in subject clitic varieties, where the EPP requirement is automatically satisfied by the clitic. Note incidentally that the IM-ed subject may cooccur with the subject clitic (North Italian dialects) or they may be mutually exclusive (French).

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