

Article

Pas de Problème: The Distribution and Nature of Double Negation in French and Other Romance Negative Concord Languages

Hedde Zeijlstra

Seminar for English Philology, Goettingen University, Käte-Hamburger-Weg 3, 37073 Goettingen, Germany; hzeijls@uni-goettingen.de; Tel.: +49-551-397566

Abstract: Most Romance negative concord (NC) languages in particular configurations give rise to double negation (DN) readings. In this article, I discuss an intricate DN pattern in French. After discussing some previous accounts, I provide an analysis of French *pas* (and in its slipstream also of the French expletive negative element *ne*) that takes *pas* to be a purely semantically but not formally (i.e., syntactically) negative element. I then argue that the reason why French *pas* is so different from other negative markers lies in its diachrony and show that other attested asymmetries between the formal properties of negative markers and neg-words in Romance must receive a diachronic explanation as well.

Keywords: negation; double negation; negative concord; French; Romance; Jespersen's Cycle

1. Introduction

Most Romance negative concord (NC) languages, in particular configurations, give rise to double negation (DN) readings (cf. Longobardi 2014; Zeijlstra 2022, a.o.). For instance, Italian is a so-called non-strict NC language (cf. Giannakidou 2000, 2006) where postverbal neg-words must be accompanied by a negative marker or a neg-word in preverbal position (1a–b), but where preverbal neg-words cannot combine with the negative marker to yield NC readings (1c).¹

- | | | | |
|-----|----|--|-----------|
| (1) | a. | Gianni non ha telefonato a nessuno | (Italian) |
| | | Gianni neg has called to neg-body | |
| | | 'Gianni didn't call anybody' | |
| | b. | Nessuno (*non) ha telefonato a nessuno | |
| | | neg-body has called to neg-body | |
| | | 'Nobody called anybody' | |
| | c. | Nessuno (*non) ha telefonato | |
| | | neg-body neg has called | |
| | | 'Nobody called' | |

Whenever in such languages a preverbal neg-word appears to the left of the negative marker *non*, the only reading that is available is a DN one, as illustrated again for Italian.²

- | | | |
|-----|---------------------------|-----------|
| (2) | NESSUNO non ha telefonato | (Italian) |
| | Nobody neg has called | |
| | 'Nobody didn't call.' | |

What we see here is an instance of configurational or structural DN. Even though neg-words and negative markers can yield NC readings, in some particular configurations they do not do so. Following Zeijlstra (2004, 2008), who bases himself on Ladusaw (1992), this is due to the fact that neg-words carry an uninterpretable feature [uNEG] that needs to be checked off at surface structure by a higher, c-commanding interpretable feature



Citation: Zeijlstra, Hedde. 2023. Pas de Problème: The Distribution and Nature of Double Negation in French and Other Romance Negative Concord Languages. *Languages* 8: 118. <https://doi.org/10.3390/languages8020118>

Academic Editors: Denis Delfitto, Maria Vender and Liliana Sánchez

Received: 8 March 2022

Revised: 18 March 2023

Accepted: 18 April 2023

Published: 26 April 2023



Copyright: © 2023 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

[iNEG] (though other approaches have been presented in the literature, e.g., Haegeman and Zanuttini 1996; Giannakidou 2000; Herburger 2001; De Swart and Sag 2002; De Swart 2010; Haegeman and Lohndal 2010). In non-strict NC languages, such as Italian, only two elements carry such a feature [iNEG]: the negative marker (*non*) and a covert operator (Op^-). Given that sentential negation must always be overtly marked least as high as at the vP level, it follows that postverbal neg-words need to be accompanied by the negative marker (and have their [uNEG] feature checked off by it), or by a preverbal neg-word (both being checked by [iNEG] on Op^-), as shown below:

- (3) a. Gianni non_[iNEG] ha telefonato a nessuno_[uNEG]
- b. Op^- _[iNEG] Nessuno_[uNEG] ha telefonato (a nessuno_[uNEG])

Now, (2) follows as well. Since *nessuno*'s [uNEG] feature cannot be checked off by [iNEG] on *non*, it can only be checked off by the covert negative operator, but then a second semantic (i.e., anti-morphic) negation is present as well, hence the DN reading (4):

- (4) Op^- _[iNEG] Nessuno_[uNEG] non_[iNEG] ha telefonato

However, things are different in French. French is an exceptional Romance NC language in that it also exhibits *inherent* DN readings. Where the Italian negative elements can all establish NC readings, it appears at least prima facie that the French negative marker *pas* is not able to do so. Whenever *pas* appears in a clause with one or more neg-words, a DN reading emerges, irrespective of their relative positions (5).³

- (5) a. *Personne (ne) mange pas*⁴
neg-body ne eats neg
'Nobody doesn't eat.'
- b. *Je (ne) mange pas rien*
I ne eat neg neg-thing
'I don't eat nothing.'
- c. *Personne (ne) mange pas rien*
neg-body ne eat neg neg-thing
'Nobody doesn't eat anything.'

In this article, I discuss this intricate DN pattern in French. First, in Section 2, I present the relevant facts. In Section 3, after discussing some previous accounts, I provide an analysis of French *pas* (and in its slipstream also of the French expletive negative element *ne*) that takes *pas* to be a purely semantically but not formally (i.e., syntactically) negative element. In Section 4, I then argue that the reason why French *pas* is so different from other negative markers lies in its diachrony and show that other asymmetries between the formal properties of negative markers and neg-words must receive a diachronic explanation as well. Section 5 concludes the study.

2. French DN: The Facts

French is a language that exhibits two particular characteristics with respect to the expression of (sentential) negation. First, it is an NC language: a clause-internal combination of neg-words, which each can independently induce a semantic negation (as in (6a–b)), together only yield one semantic negation, as illustrated in (6c) below.⁵

- (6) a. Personne (ne) mange (French)
neg-body ne eats
'Nobody eats'
- b. Maria (ne) mange rien
Maria ne eats neg-thing
'Maria doesn't eat anything'
- c. Personne (ne) mange rien
neg-body ne eats neg-thing
'Nobody doesn't eat anything'

Apart from that, French also displays so-called embracing negation, the phenomenon where a language has not one, but two negative markers (in the case of standard French: the preverbal negative marker *ne* and the postverbal negative marker *pas* that normally “embrace” the finite verb, see (7)). Note, though, that *ne* is mostly a property of formal French; in colloquial registers, it is almost always dropped, in line with so-called Jespersen’s Cycle (see Section 4).⁶

- (7) Denis (ne) mange pas (French)
Denis ne eats neg
'Denis doesn't eat'

Interestingly, French *ne* and *pas* differ quite drastically from each other in the sense that, while *ne* may participate in NC constructions and can be combined with *pas*, thereby yielding a single semantic negation, no combination of *pas* and a neg-word may ever give rise to an NC reading (cf. De Swart and Sag 2002; Zeijlstra 2010b, 2022). Inclusion of *pas* in a sentence containing one or more neg-words always yields an additional semantic negation, as shown in (5), repeated below:

- (8) a. Personne (ne) mange pas
neg-body ne eats neg
'Nobody doesn't eat.'
- b. Je (ne) mange pas rien
I ne eat neg neg-thing
'I don't eat nothing.'
- c. Personne (ne) mange pas rien
neg-body ne eat neg neg-thing
'Nobody doesn't eat anything.'

This leads to the following questions: What are the properties of French neg-words, *ne*, and *pas*, such that *ne* can combine with both neg-words and *pas*, while still yielding a single semantic negation? Additionally, why can *pas* and neg-words not be combined in such a way?

3. Explaining the Facts

In this section, I first discuss two previous analyses that have dealt with this problem and show that they still face several challenges. After that, I present my own proposal. In short, I argue that *ne* should not be analyzed as a concordal element or as a negative marker, but rather as a plain negative polarity item (NPI). Then, I argue that once *ne* is taken to be an NPI, it naturally be explained that *pas* and neg-words do not establish an NC relation. Adopting Zeijlstra’s (2004, 2008) approach that takes NC to be an instance of syntactic agreement (see also Haegeman and Zanuttini 1996; Ladusaw 1992; Haegeman and Lohndal 2010), every element that can participate in an NC relation should carry a formal negative feature; however, that does not entail that every semantically negative element must carry such a formal feature too. I then conclude that that *pas* does not carry such a formal negative feature.

3.1. Previous Analyses

De Swart and Sag (2002) provide an account for the inability of French *pas* to participate in NC relations that does not rely on agreement but rather on the fact that, unlike neg-words, negative markers are not regular generalized quantifiers (pace Collins and Postal 2013). Instead, De Swart and Sag argue that negative markers should be thought of as zero-quantifiers, i.e., quantifiers that bind no variable. Being quantificational and negative in nature, negative markers can then participate in NC relations (as is the case in most languages). However, since negative markers in NC constructions do not bring in any new quantificational contribution (as they do not bind variables), languages may also choose to leave negative markers out of the NC system. French would then be an example of a language that forbids one of its negative markers, namely *pas*, to participate in NC relations.

Such an analysis of French *pas* faces a number of problems though. Apart from the general problems that it inherits from De Swart and Sag’s treatment of NC in terms of quantifier resumption (see Zeijlstra 2022 for discussion), the analysis appears too general, as it suggests that a salient subset of NC languages allows negative markers to be banned from NC constructions. However, to the best of my knowledge, only French exhibits this particular kind of behavior. No other NC languages or varieties, even those close to French (e.g., Quebecois), share this property. So, it appears to be just a characteristic of French that *pas* cannot participate in NC constructions. However, it is unclear, under De Swart and Sag’s proposal, why this is so. More importantly, the question arises as to how this property of French *pas* is lexically encoded. What is it that French *pas* has that all other negative markers in NC languages lack (or the other way round)?

Penka (2007, 2011) addresses these above-mentioned questions and argues that it is not so much a special property of French *pas* that it cannot establish NC relations with a neg-word, but rather a special property of French neg-words. Penka adopts the analysis of NC pursued above and takes NC to be an instance of syntactic agreement, but argues that such an analysis cannot extend to French: regardless of the featural status of *pas* ([iNEG] or [uNEG]), *pas* should be able to participate in at least some NC relations, contrary to fact. In order to solve this problem, Penka proposes that neg-words in French do not carry a feature [uNEG], but rather a feature [uNEGØ] that states that neg-words can only be checked by a covert negative operator (which, in French, she takes to carry the corresponding feature [iNEGØ]). French *ne*, in her system, carries a general feature [uNEG] that does not specify the phonological status of its checker. *Pas*, finally, is an overt negator, thus carrying [iNEG]. Now, the patterns follow: neg-words and *ne* can be checked by a single abstract operator, yielding an NC reading (9a); *ne* can have its [uNEG] feature checked against *pas*’ [iNEG] feature (9b); and, finally, a combination of (one or more) neg-words with *pas* yields a DN reading, as *pas* cannot check the neg-words’ [uNEGØ] features ((9)c), and thus an additional negative operator is required:

- (9) a. $Op_{\neg[iNEG\emptyset]} \text{Personne}_{[uNEG\emptyset]} (\text{ne}_{[uNEG]}) \text{mange rien}_{[uNEG\emptyset]}$
- b. $\text{Marie ne}_{[uNEG]} \text{mange pas}_{[iNEG]}$
- c. $Op_{\neg[iNEG\emptyset]} \text{Personne}_{[uNEG\emptyset]} (\text{ne}_{[uNEG]}) \text{mange pas}_{[iNEG]}$
 $\text{rien}_{[uNEG\emptyset]}$

Although Penka’s proposal is an improvement of the original [iNEG]/[uNEG] system, as it can handle the French patterns illustrated above, it is still problematic for at least two reasons. First, independent motivation is lacking for the existence of [iNEGØ] and [uNEGØ] features next to [iNEG] and [uNEG], especially since other NC languages do not appear to exhibit such features, and also since syntactic features should generally be blind for the phonological status of the elements carrying them. However, even more problematic is that Penka’s analysis makes a wrong prediction—namely that if *ne* can be licensed by Op_{\neg} , it should be able to negate a sentence by itself, contrary to fact (see (10), though see footnote 6). Given these problems of earlier analyses, the explanation for French *pas*’s behavior should lie elsewhere.

(10) *Marie ne mange (French)

The observation about (10) is important, as it shows that *ne* cannot be an NC item. Since NC is the phenomenon where elements that may induce a semantic negation by their own together only yield one semantic negation, *ne*, by definition, cannot appear in NC constructions (see also (Breitbarth 2009) for a similar observation for West Flemish *en/ne*). If NC is taken to be an instance of syntactic agreement, instantiated by an underlying feature system, it follows as well that *ne* cannot have any formal negative feature at its disposal. In fact, *ne* does not even count as a negative marker as it is not able to render a sentence negative by itself.

3.2. Proposal

Let me start my own proposal by addressing the question as to what properties *ne* exactly should have. Two properties immediately come to mind. First, *ne* is semantically non-negative, as it is unable to induce a semantic negation by itself, but may appear in sentences that are negative (see Corblin 1994, 1996). Hence, it can at best act as a scope marker (cf. Corblin et al. 2004; Godard 2004). Second, *ne*'s distribution is outside negation (mostly) restricted to non-negative (Strawson-)downward entailing or non-veridical contexts⁷, such as exceptives (11a), comparatives (11b), complement clauses of expressions of fear (11c), avoidance (11d), denial or doubt (11e), conditionals (11f), and temporal *before*-clauses (11g), as shown below (all examples have been taken from (Rooryck 2017, pp. 3–4)) and is much more restricted outside such usages. That renders it an NPI, as any element that is restricted such a limited distribution that includes negative contexts, by definition, is an NPI.⁸

- (11)
- a. Jean (ne) voit que Marie
Jean ne sees comp Marie
'Jean only sees Marie'
 - b. Jean est plus malin que Pierre (ne) l'est
Jean is smarter Pierre ne it is
'Jean is smarter than Pierre is'
 - c. Il a barricadé la porte de peur/crainte qu'on (n') entre chez lui
he has blocked the door of fear that they ne enter with him
'He blocked the door for fear that people might come in'
 - d. Jean a évité que Lucienne (ne) tombe
Jean has avoided that Lucienne ne fall.SUBJ
'Jean prevented Lucienne from falling'
 - e. Nie/doute-t-il que je (ne) dise la vérité?
denies/doubts he that I ne tell.SUBJ the truth?
'Does he doubt/deny that I am telling the truth?'
 - f. Je viendrai à moins que Jean (ne) soit là
I will-come to less that Jean ne is.SUBJ there
'I will come unless Jean is there'
 - g. Il est parti avant que nous (n') ayons mangé
he is left before that we ne have eaten
'He left before we ate'

The contexts where *ne* may appear without being supported by a neg-word or by *pas*, and without giving rise to a semantic negation, are all contexts that are known to license weak NPIs and where the usage of *ne* is either scope-marking or expletive.⁹ Even though it may not appear in every known NPI licensing context (*ne*, for instance, is not accepted in *if* clauses or restrictors of universal quantifiers, as are, for instance, modal NPIs such as English *need* or its Dutch counterpart *hoeven*), this does not run against the analysis. Not every NPI must be licensed in every NPI-licensing context (see Van der Wouden 1994; Zeijlstra 2022). Note that this furthermore implies that constructions containing *ne* and *pas* cannot count as NC constructions either; such constructions only show that *pas* is able

to license NPI *ne*—not surprising, given that *pas* is a semantic negation and thus an NPI licenser.

Focusing on French neg-words, as these can independently induce a semantic negation, but together only yield one semantic negation (as shown in (6)), these neg-words should be taken to be equipped with an uninterpretable formal negative feature that may be licensed by an abstract negation. Application of this mechanism to French neg-words is illustrated for the sentences in (12). Note that *ne* is not equipped with such a feature, as it is an NPI, not an NC element.¹⁰

- (12) a. Op_{-[iNEG]} Personne_[uNEG] (ne) mange (French)
 neg-body ne eats
 ‘Nobody eats’
 b. Op_{-[iNEG]} Jean (ne) mange rien_[uNEG]
 Jean ne eats neg-thing
 ‘Jean doesn’t eat anything’
 c. Op_{-[iNEG]} Personne_[uNEG] (ne) mange
 rien_[uNEG]
 neg-body ne eats neg-thing
 ‘Nobody doesn’t eat anything’

However, now the question arises again why, instead of the abstract operator Op₋, *pas* cannot be the checker of a neg-word’s [uNEG] feature. Why would (13) be impossible with an NC reading in standard French?

- (13) *Jean (ne) mange pas_[iNEG] rien_[uNEG] (French)
 Jean ne eats neg neg-thing
 Int: ‘Jean doesn’t eat anything’

Even though *pas* is a clear semantic negation, *pas*’ semantic status does not entail that *pas* must carry a formal negative feature as well. In fact, as *pas* appears to be unable to license any other negative element (except for *ne*), *pas* can actually not be said to carry an interpretable formal feature [iNEG]. *Pas* is only semantically, and not formally negative: it has the meaning of a negation but lacks a formal or syntactic negative feature.

Consequently, whenever a neg-word and *pas* co-occur in one and the same clause, it must be the abstract negative operator Op₋ that checks off the neg-word’s [uNEG] feature, and the sentence thus contains two semantic negations: one introduced by Op₋ and one by *pas*. When one neg-word precedes and one neg-word follows *pas*, there is still one abstract negative operator that checks off both neg-words’ [uNEG] features, whereas *pas* introduces a semantic negation of its own. This is illustrated below:

- (14) a. Op_{-[iNEG]} Jean (ne) mange pas rien_[uNEG]
 Jean ne eats neg neg-thing
 ‘Jean doesn’t eat nothing’
 b. Op_{-[iNEG]} Personne_[uNEG] (ne) mange pas rien_[uNEG]
 neg-body ne eats neg neg-thing
 ‘Nobody doesn’t eat anything’

French *pas* is thus semantically negative, but not formally equipped with any negative feature. In other words, morpho-syntactically, *pas* is not negative. French neg-words, on the other hand, form the mirror image of *pas*. They are semantically non-negative, but only formally equipped with a negative feature; they carry an uninterpretable formal negative feature, which needs to be checked off by an element that carries an interpretable formal feature. The fact that *pas* does not act as an intervener in the agreement relation between Op₋ and the two neg-words then follows straightforwardly. Since *pas* is morpho-syntactically not marked for negation, any morpho-syntactic process must be blind to *pas*’ negative semantics.

However, the idea that certain negative markers in NC languages do not carry a feature [iNEG] still needs independent motivation, as, otherwise, it may be as much of an

ad hoc explanation as the other accounts discussed above. Why would this not be the case in other languages? In the next section, I argue that certain particular properties of the diachronic development of negation in French motivate such an analysis where *pas* lacks any kind of formal negative feature.

4. The Diachronic Development of Negation in French

4.1. Jespersen's Cycle

It is a well-known fact that diachronic changes with respect to the negative markers that languages employ may have strong effects on the emergence of particular types of NC and DN. Let us therefore look at what kinds of changes in the domain of negative markers can be attested in the first place. Already in 1917, the Danish grammarian and philosopher Otto Jespersen observed a general tendency in the expression of negation in various languages:

The history of negative expressions in various languages makes us witness the following curious fluctuation; the original negative adverb is first weakened, then found insufficient and therefore strengthened, generally through some additional word, and in its turn may be felt as the negative proper and may then in course of time be subject to the same development as the original word. (Jespersen 1917, p. 4).

Jespersen supports this claim with a number of examples from different languages in which such a development can be found, including not only Romance languages but also Germanic and Slavic languages, Greek, and several varieties of Arabic (see a.o. Eckardt 2006, 2012; Van Gelderen 2008, 2009, 2011; Devos et al. 2010; Devos and van der Auwera 2013; Van der Auwera 2010, 2011; Chatzopoulou 2012; Willis et al. 2013; Gianollo 2016; Zeijlstra 2016 (from which (15) is taken); see also Greco (this volume)). Focussing at Romance, the way that the expression 'I don't say' changed from Old Latin to Colloquial French or French-based creoles is as follows:

(15)	a.	*Ne dico	Proto-Latin ¹¹
	b.	*Ne dico oinom/oenum	Proto-Latin
	c.	Non dico	Classical Latin
	d.	Jeo ne di	Old French
	e.	Je ne dis (pas)	Middle French
	f.	Je ne dis pas	Modern French
	g.	Je (ne) dis pas	Colloquial French
	h.	Je dis pas	Quebecois
	i.	Je pa di	Haitian French Creole

What we see is that, in Latin, the weaker form *ne* was strengthened by an additional minimiser **oinom/oenum* ('one (thing)'), which merged into Classical Latin *non*. In Old French, it got weakened to *ne* and emphasised by a second element *pas*, which originally meant 'footstep' and nowadays, in spoken colloquial French, fully replaces the original negative marker *ne*. In some French-based creole languages such as Haitian French Creole, *pas* has phonologically weakened yet again, displaying the same behaviour as Old Latin and Old French *ne*. Other examples, also from languages outside the Indo-European language family, and additional discussion can be found in, for instance, Eckardt (2006, 2012), Van Gelderen (2008, 2009, 2011), Devos et al. (2010), Devos and van der Auwera (2013), Van der Auwera (2010, 2011), Larrivé (2011), Larrivé and Ingham (2011), Chatzopoulou (2012), Willis et al. (2013), and Poletto (2016, 2020). See also Greco (this volume).

Now, two types of questions arise. First, why is it that such changes happen? What causes the original negative marker to weaken, such that it appears to require the additional support of a second negative marker? Additionally, relatedly, why does this new negative marker take over the role of the original one? Second, what is the source of these negative markers? In English, the negative marker stemmed from *nawiht*, a negative quantifier meaning 'nothing'. However, in French, *pas* originally meant 'footstep', a meaning that at

first seems quite remote from the meaning of ‘not’. Let us look at both questions in more detail.

Jespersen attributes the negative cycle to the tension between the phonological weakness of the old negative marker and the need to strongly mark the sentence as being negative. If a negative marker, such as English or French *ne*, becomes phonologically too weak to fully function as the negator of the sentence, a second, supporting negative marker jumps in. Jespersen’s explanation has raised some criticism, both empirically and theoretically. Empirically, second negative markers can also emerge in languages in which the original negative marker does not count as phonologically weak, as was the case in Greek (cf. [Kiparsky and Condoravdi 2006](#)). However, more importantly, phonological weakening in general does not drive morpho-syntactic change, but rather results from it. Even phonologically weak elements can be very robust markers of a particular semantics (e.g., *past-tense* morphology is quite often phonologically rather weak, but, nevertheless, does not fail in fulfilling its function). Partly for these reasons, [Kiparsky and Condoravdi \(2006\)](#) argue that something else must be at hand. These scholars argue that every language must be able to express both plain negation and emphatic negation. To get a feeling for the distinction, look at the minimal pair in (16).

- (16) a. I didn’t read
 b. I didn’t read anything

Truth-conditionally, the two sentences in (16) are identical: If somebody did not read anything, that person did not read; and if somebody did not read, she did not read anything. Yet, (16b) feels more emphatic than (16a), because (16b) puts a strong focus on the absence of anything that could have been read by the speaker. English is a language that expresses plain negation by means of a negative marker (often *n’t*, sometimes *not*) and has a number of additional means at its disposal to further emphasise negation (such as indefinites of the *any*-series, cf. [Haspelmath 1997](#)). In general, languages can add two types of elements to emphasise what would otherwise be a plain negation: *minimisers* and *generalisers*. Minimisers are elements that denote (extremely) small amounts of something. *A sip* in *I didn’t drink a sip* is a good example of a minimiser that gives rise to an emphatic effect in negative contexts. The reading that emerges is that the speaker did not even drink the smallest amount possible. Generalisers are elements that, in contrast, extend the domain of quantification. *Anything* in (16b) is a good example. It says that, of an extended set of things that could have been read, the speaker did not read even one of them. However, why would the requirement that negation can be expressed both emphatically and non-emphatically trigger syntactic change? Why could the two strategies in a particular language not remain constant over time?

Following work by [Dahl \(2001\)](#), [Kiparsky and Condoravdi \(2006\)](#) allude to a general semantic weakening mechanism, arguing that what is marked emphatically loses its emphatic power in the course of time. If a particular emphasising strategy is used more and more often, it tends to inflate and become less emphatic. As a result, it will be used even more frequently, given that the originally emphasised expression can also be used to describe situations that require less of a negative emphasis. If this trend continues, at some point, the original strategy for emphasising negation ends up being the plain way of expressing negation, and becomes obligatory. The old negative marker then loses its function of expressing plain negation and, being superfluous, will disappear. The new marker (and, originally emphasiser) of negation, then, has taken over the role of the plain negator, and new supportive elements to express emphatic negation may emerge, thus continuing the cycle.

A particular prediction of Kiparsky and Condoravdi’s proposal is that negative markers may have different diachronic sources: They could have developed out of minimisers or out of generalisers (generally, quantifiers). With this in mind, let us look at how the various changes in the system of negative markers triggered the emergence the NC system in French.

4.2. The Emergence of NC in French

As shown by Muller (1991), Larrivé (1996, 2010), Tovená et al. (2004), Eckardt (2006) a.o., and also discussed in detail in Roberts and Roussou (2003), French *ne* (and, before that, *non*) started out as a single negative marker that, in terms of Kiparsky and Condoravdi, was not able to yield emphatic negation anymore, and therefore required additional material to express increased negative force. Due to the unavailability of existing neg-words, in this language, positive generalisers, such as *personne* ('person') or *rien* ('thing'), or positive minimisers, such as *pas* 'footstep', *point* ('point'), or *mie* ('crumb'), were added to the negation to strengthen it.

While, originally, in Old French (appr. 900–1300) those expressions could only be literally interpreted, as shown in (17) below for *pas* ('step') and *rien* ('thing'), taken from Eckardt (2003), later on, they could also yield a more general interpretation. For instance, in (18), *pas* does no longer mean 'footstep', nor does *mie* mean 'crumb'.

- (17) a. Ne vus leist pas aler avant¹² (Old French)
 ne you is-allowed step to-go forward
 'You may not go forward a step'
 b. D'avanture ne sai je rien . . . ¹³
 of adventure ne know I thing
 'Of adventure, I don't know anything . . . '
- (18) a. N'i ot rei, prince ne baron, Qui pas m' i (Middle French)
 pöust contrestre¹⁴
 ne there has king prince ne baron who 'pas'
 me there could contradict
 'There is no king, prince or baron who
 could even/at all contradict me there'
 b. Quel part qu'il alt, ne poet mie cäir¹⁵
 which part that-he goes ne can 'mie' fall
 'Wherever he goes, he cannot fall a bit'

As Eckardt shows, minimisers that originally meant 'step', 'thing', 'crumb', etc., were used to strengthen the negation. However, in line with Kiparsky and Condoravdi (2006), such strengtheners became obligatory over time, lost their literal reading, and got semantically bleached into expressions meaning 'even', 'at all', or 'a bit'. As is well known from the literature on NPI-hood, minimisers or other indefinite expressions that are obligatorily focused tend to behave as NPIs (see Chierchia 2013). The new strengtheners all became NPIs with a bleached interpretation. The originally positive expressions *personne* and *rien* were reanalysed as 'anybody' and 'anything' accordingly.

At this stage, virtually every occurrence of *ne* should be accompanied by such NPIs that were either indefinites or pure strengtheners. Such NPIs could, in the earlier stages of the change, appear in all kinds of downward entailing contexts, and thus count as weak NPIs (see (19)), but were later on restricted to purely negative contexts—presumably an effect of the relative high frequency of negation as their licenser (cf. Roberts and Roussou 2003; Eckardt 2006)—and became strong NPIs.

- (19) a. Je doute que personne y réussisse. (Middle French)
 I doubt that anyone there succeed
 'I doubt that anyone might succeed at it'
 b. Suis je pas bele dame e gente, digne de
 servir un pseudome?
 am I 'pas' beautiful dame and gentle worthy
 to serve a gentleman
 'Am I not a beautiful dame and gentle
 worthy to serve a gentleman?'

Now, the following cocktail emerged. French *ne* could not be used without an additional strengthener, even though the strengthening effect has become obsolete itself, and these reinforcers of negation only appeared in sentences that were fully negative themselves; therefore, they all contained *ne*. In addition, the competition between the various possible strengtheners disappeared, basically leaving *pas* (and sometimes *point*, especially in the southern varieties) and the future neg-words as the only available candidates to be an additional negation.

Therefore, at this stage, language learners had to analyse *pas* as an obligatory part of the negation system. It only appeared in negative sentences and served no other function than co-expressing negation. This way, language learners assigned formal features [uNEG] to both *pas* and *ne* (as neither of the two could be taken to be the main negator). In the same vein, with *ne* no longer being able to act as a main negation itself, elements such as *personne* and *rien* were taken by language learners to be part of the negation system and got assigned [uNEG] as well—also because multiple occurrences of such elements would not add more semantic negations. When interpreting a sentence such as *Je ne dis rien* (I neg say thing ‘I don’t say anything’), a language-learning child could no longer assume that *ne* was the only source for the negation. The behavior of *ne* in the language input was no longer compatible with that of a plain negative marker. Consequently, the child should take *rien* (and *personne*, etc.) to contain formal negative features as well.

Crucially, now arriving in the Middle French era, the language was a strict NC language where *ne*, *pas*, and the neg-words could freely be included in a single clause and thus yield an NC reading, as the following example from Molière (taken from Zeijlstra 2010b) shows:

- (20) On ne veut *pas* rien faire ici qui vous (17th cent. Fr.)
 déplaie . . . ¹⁶
 we neg want neg neg-thing do that you
 displeases . . .
 ‘We don’t want to do anything that
 displeases you . . .’

The emergence of strict NC in Old/Middle French can thus be understood as the result of the need of a negative marker to be strengthened. This strengthening initially led to an emphatic negation reading, but the joint meaning contribution of the negative marker and the original strengthener shortly afterwards became the plain negation, the original strengthener being a second negative marker. Due to this, the language turned into an NC language, given that, now, two negative forms corresponded to one negative meaning. Strengtheners that contained an indefinite (such as elements meaning ‘person’ or ‘thing’) also became part of the negative system for the same reasons and got reanalysed as neg-words (after already having undergone a change from positive indefinites, via weak NPIs into strong NPIs). The French developments thus clearly show how the cause underlying Jespersen’s Cycle triggered the emergence of NC as an epiphenomenon. Naturally, however, this cannot be the full picture. As outlined earlier, French further developed from a strict NC language into some kind of a partial NC language where *pas* no longer participates in NC.

4.3. From Strict to Partial NC

So where do we stand? While Old French only had the negative marker *ne* at its disposal, during the period of Middle French, *ne* got more often combined with the additional minimiser *pas* (as well as various competitors, such as *point* ‘point’, etc.), until the embracing negation *ne . . . pas* became the standard way of expressing sentential negation. As described above (see also Roberts and Roussou 2003; Kiparsky and Condoravdi 2006; Eckardt 2006), in Middle French, *ne* was thus no longer felt to be able to express sentential negation by itself and should always be accompanied by an indefinite or minimiser. However, in cases where there was already an indefinite reinforcer present, there was no need for *pas* to further strengthen *ne*. Additionally, this was exactly the case with neg-words.

Hence, combinations of *ne* and neg-words did not need an additional reinforcer *pas*, and, therefore, combinations of *ne* with a neg-word and combinations of *ne* with *pas* have both been frequently attested, but combinations of *ne* with both a neg-word and *pas* less so. This does not entail, though, that it must have been forbidden by then to reinforce combinations of a neg-word and *ne* by an additional minimiser *pas*.

Early Middle French was a strict NC language. Additionally, later on, such combinations have also been attested. However, as the famous follow-up of the example in (20) shows, such combinations of *pas* with *ne* and a neg-word became increasingly rare/stigmatized:

- (21) a. ... de *pas* mis avec rien tu fais la récidive,
 et c'est, comme on t'a dit, trop d'une négative
 ... with *pas* put with rien you do the recidival,
 and it is as one you.has said too.many of.one negative
 '... with "*pas*" put together with "*rien*", you commit recidival,
 and it is as one says a negation too many'

Most cases of negation thus involved either the combination of *ne* and *pas* or *ne* and a neg-word. The reason for this rarity of combinations of *ne*, *pas*, and a neg-word is functional in nature. The need to reinforce *ne* was absent in cases where *ne* already had been reinforced by an additional indefinite, and could only lead to a very strong emphasis (see (Zeijlstra 2010a) for a discussion of a similar development in Dutch and German).

Now, given that in the course of time, the large majority of instances of negation either involved *ne* and *pas*, or *ne* and a neg-word, *ne* by itself was no longer able to render a sentence negative and started to be optionally dropped. Consequently, *ne* was no longer able to act as a cue for language learners to assign it a feature [i/uNEG], and had to be reinterpreted as an NPI. Hence, neg-words and *pas* were the only elements that could induce a semantic negation. Since neg-words could co-occur in the same clause and establish an NC relation, the loss of *ne* did not trigger a difference in their featural status. French neg-words remained carriers of [uNEG]. However, *pas*, which hardly ever co-occurred with any other neg-word in a clause, could only be analyzed as the sole marker of negation in a sentence, and consequently no longer be assigned a formal negative feature. Language learners had to take it to be a semantic negation and had no information present in their language input that would force to assign it a feature [iNEG] too. This way, the French partial NC system was born. The same development that led to *pas* becoming a NC item also caused its absence from NC in later stages.

4.4. A Note on Non-Strict NC Languages

If it is indeed the case that different types of NC systems are the result of the interplay of different diachronic forces, this should also hold for other cases of 'mixed' NC systems, including non-strict NC systems such as the one in Italian. One may wonder why languages would opt for the negative marker being semantically negative but not for neg-words. Again, the cause of non-strict NC is historical. At least for the Romance non-strict NC languages, it turns out that, at earlier stages, they were strict NC languages, as illustrated for Old Spanish in (22) and for Old Italian in (23).¹⁷

- (22) Qye a myo Cid Ruy Diaz, que *nadi no* diessen posada¹⁸
 that to my Lord Ruy Diaz, that neg-body neg gave lodging
 'that nobody gave lodging to my lord Ruy Diaz'
- (23) Mai *nessuno* oma *non* si più guarare¹⁹
 neg-ever neg-even-one man neg himself can protect
 'Nobody can ever protect himself'

Given the fact that the language input during L1 acquisition contained expressions of the forms in (22)–(23), the negative marker must have been assigned a formal feature

[uNEG] (see (Arshad 2023) for an depth study into the L1-acquisition of NC in Italian). However, at some point, speakers began to omit the negative marker *no* in such constructions (cf. Zanuttini 1997; Martins 2000). This change is not surprising, since the negative marker in these constructions did not contribute in any way to the semantics of the sentence, not even as a scope marker; it is semantically fully redundant. A negative marker preceding a neg-word, by contrast, can still function as a scope marker for negation (and therefore yield sentential negation), but the fact that there is an abstract negative operator located in a higher position than the preceding neg-word in examples such as (22)–(23) already follows from the presence of these preverbal neg-words themselves. It is therefore not surprising that this negative marker got dropped when it was preceded by a neg-word. Note that this effect is still visible in certain varieties of Catalan. In (Central Variety) Catalan, a strict NC language in the sense that preverbal neg-words can be followed by the negative marker but can also be optionally left out, as the example in (24) from Zeijlstra (2022) below shows (see also Espinal et al. 2016).

(24) *Ningú (no) ha vist res.* (Central Variety Catalan)
 nobody neg has seen neg-thing
 ‘Nobody has seen anything’

Now, if the L1 input included constructions such as (25) and an increasing relative frequency of examples such as (26), at a certain point, the absence of cases of *no(n)* following *nessuno/nadie* should become thus high that they can no longer form a cue for the negative marker to carry [uNEG]. As a result, *no(n)* must be reanalysed as [iNEG], leading to the standard non-strict NC patterns. Almost every instance of *no(n)* corresponds to a semantic negation. Hence, the reinterpretation of *no(n)* leading to the change from strict to non-strict NC thus again follows from the interplay of diachronic change and language learnability.

(25)	<i>Op_¬</i> [iNEG]	<i>nessuno/nadie</i> [uNEG]	<i>no(n)</i> [uNEG]	V
(26)	<i>Op_¬</i> [iNEG]	<i>nessuno/nadie</i> [uNEG]		V

5. Conclusions

In the beginning of this paper I raised the following question: what are the properties of neg-words, *ne* and *pas*, such that *ne* can combine with both neg-words and *pas*, while still yielding a single semantic negation, whereas *pas* and neg-words may not be combined in such a way?

In this paper, I have argued that French *pas* is semantically negative, but not equipped formally with a negative feature. In other words, morpho-syntactically *pas* is not negative. Neg-words, on the other hand, form the mirror image of *pas*: they are semantically non-negative, but only equipped formally with a negative feature. They carry an uninterpretable formal negative feature, which needs to be checked off by an element that carries an interpretable formal feature.

This also explains why *pas* and neg-words cannot yield any NC reading: since *pas* is formally non-negative, it can never check any neg-word’s [uNEG] feature. These features can thus only be checked off by an abstract negative operator, carrying an interpretable negative feature [iNEG], which has to be assumed to be present in the sentence as well. Consequently, combinations of neg-words and *pas* always induce two negations.

I have furthermore demonstrated that French *ne* is a plain NPI in the sense that it must always be licensed by some downward entailing licenser (though not every downward entailing operator proves to be a valid licenser). In negative sentences, *ne* can thus be licensed by the purely semantic negation *pas* or by the abstract negative operator *Op_¬* that carries an interpretable formal feature [iNEG].

Finally, I have argued that these assumptions concerning the nature of *ne*, *pas*, and neg-words are not postulated in order to make the system work, but rather follow from the

development of French negation (along the lines of Jespersen's Cycle) and from independent principles of language acquisition. I have also shown that the emergence of non-strict NC systems, such as the one in Italian, can be accounted for in similar terms.

This study has a few theoretical consequences. First, it provides more evidence for theories of NC in terms of syntactic agreement, such as Zeijlstra's (2004, 2008) approach. The French facts follow immediately once formal properties (such as the feature system underlying NC) are thought to be distinct from semantic properties (such as NPI licensing). Second, it also shows that there is no 1:1 correspondence between formal and semantic properties. Some lexical items, such as *pas*, can have a particular semantic property, which is not reflected in their formal representation, and vice versa, some lexical items, such as neg-words in most languages, have formal properties that are not reflected in their lexical semantics. Finally, it shows that attested cross-linguistic variation, here in the domain of negation, can be thought as a result of the interplay of functional forces applying to language change and formal properties in terms of language acquisition.

Funding: The APC was funded by DFG Research Training Group 2636 'Form meaning mismatches' (September 2021–March 2026).

Data Availability Statement: The data is from the discussed literature.

Conflicts of Interest: The author declares no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript; or in the decision to publish the results.

Notes

- ¹ Examples taken from Zeijlstra (2022).
- ² Examples taken from Zeijlstra (2022). It is not the case that all my informants accept these constructions, though most of them do, with focus or topic marking of the subject. For them, the usage signals mostly colloquial speech. Crucially, none of the consulted speakers accepted an NC reading.
- ³ At least in the standard language. In substandard French, occasionally NC utterances involving *pas* can be attested (see Godard et al. 2021).
- ⁴ For reasons that will become clear later, I gloss the optional negative marker *ne* as 'ne', and *pas* as 'neg'. Examples taken from Zeijlstra (2022).
- ⁵ Under special intonation, multiple negative constructions also allow DN readings. (6c) can thus also have the reading 'nobody eats nothing' (cf. Corblin et al. 2004), as focus can generally disrupt NC. However, crucial here is that (6c) allows for an NC interpretation.
- ⁶ Note that in combination combined with a few particular modals, such as *pouvoir* 'must', *savoir* 'know', or verbs such as *cesser* ('stop'), *ne* suffices to express negation. Collins and Postal (2013) present examples such as (i)–(iii).

- | | |
|-------|---|
| (i) | Je ne peux (<i>pas</i>).
I ne can not.
'I can't.' |
| (ii) | Il ne cessait (<i>pas</i>) de crier.
He ne stopped not of cry.
'He didn't stop crying.' |
| (iii) | Tu ne sais (<i>pas</i>).
You ne know not.
'You don't know.' |

However, such examples are restricted to only a handful of predicates and do not form a productive class. As will be discussed later on, Old French lacked the negative marker *pas* and only used the preverbal negative marker *ne* to express negation. Expressions such as (i)–(iii) then reflect instances of Old French negation and should be thought of as remnants of previous stages of the languages that have fossilized into frozen idiomatic expressions (see Haegeman 1995; Zeijlstra 2004, 2022 for an overview and discussion of such facts).

⁷ See Ladusaw (1979), Van der Wouden (1994), Giannakidou (1999) and Zeijlstra (2022) for a formal discussion of such contexts.

⁸ See Godard et al. (2021) for a discussion on distribution of *ne* outside (Strawson) downward entailing contexts.

⁹ For more discussion on expletive negation, see a.o. Yoon (2011), Makri (2013), Delfitto (2020), and Greco (2020).

- 10 The question arises (as pointed out by a reviewer) how the DN readings, which for most speakers are available as well, albeit under special intonation, of plain NC examples such as (6c) come about. One possible explanation is that French is currently undergoing a change from an NC to a DN language, rendering items as *personne* and *rien* lexically ambiguous between neg-words and negative quantifiers (Zeijlstra 2004). An alternative explanation is that a focus structure shields off the agree relation along the lines of Biberauer and Zeijlstra (2012).
- 11 The asterisk (*) here indicates that the examples are reconstructed. I put this asterisk in superscript to distinguish it from the plain asterisk (*) that marks ungrammaticality.
- 12 [Benedeit SBrendan 1793], TL 6, 411, 26.
- 13 [Ch. Lyon 368], TL 8, 1279, 38.
- 14 [Troie 16865], TL 7, 410, 31.
- 15 [Ch. Rol. 2034], TL 6, 15, 23.
- 16 Molière, *Les femmes savantes* (1672). II.6.
- 17 For an overview of the development of Spanish negation, see Herburger (2001) and references therein. See Martins (2000) on negation in Old Romance in general.
- 18 Example taken from Herburger (2001).
- 19 Examples taken from Martins (2000).

References

- Arshad, Sumrah. 2023. *The Acquisition of Sentential Negation and Negative Concord*. Ph.D. dissertation, Göttingen University, Göttingen, Germany.
- Biberauer, Theresa, and Hedde Zeijlstra. 2012. Negative Concord in Afrikaans: Filling the typological gap. *Journal of Semantics* 29: 345–71. [CrossRef]
- Breitbarth, Anne. 2009. A hybrid approach to Jespersen's Cycle in West Germanic. *Journal of Comparative Germanic Linguistics* 12: 81–114. [CrossRef]
- Chatzopoulou, Katerina. 2012. *Negation and Nonveridicality in the History of Greek*. Ph.D. dissertation, University of Chicago, Chicago, IL, USA.
- Chierchia, Gennaro. 2013. *Logic in Grammar: Polarity, Free Choice, and Intervention*. Oxford: Oxford University Press.
- Collins, Chris, and Paul Postal. 2013. *Classical NEG Raising. Logic in Grammar: Polarity, Free Choice, and Intervention*. Cambridge: The MIT Press.
- Corblin, Francois. 1994. Sémantique des négatifs multiples. *Linx—Revue des linguistes de l'université Paris X Nanterre* 5: 279–98.
- Corblin, Francois. 1996. Multiple Negation Processing in Natural Language. *Theoria* 17: 214–59. [CrossRef]
- Corblin, Francois, Vivienne Déprez, Henriette de Swart, and Lucia Tovenà. 2004. Negative Concord. In *Handbook of French Semantics*. Edited by Francis Corblin and Henriette De Swart. Stanford: CSLI Publications, pp. 417–55.
- Dahl, Östen. 2001. Inflationary effects in language and elsewhere. In *Frequency and the Emergence of Linguistic Structure*. Edited by Joan Bybee and Paul Hopper. Amsterdam: Benjamins, pp. 471–80.
- Delfitto, Denis. 2020. Expletive negation. In *The Oxford Handbook of Negation*. Edited by Viviane Déprez and M. Teresa Espinal. Oxford: Oxford University Press, pp. 443–64.
- Devos, Maud, Michael Kasombo Tshibanda, and Johan van der Auwera. 2010. Jespersen cycles in Kanincin: Double, triple and maybe even quadruple negation. *Africana Linguistica* 16: 155–82. [CrossRef]
- Devos, Maud, and Johan van der Auwera. 2013. Jespersen cycles in Bantu: Double and triple negation. *Journal of African Languages and Linguistics* 34: 205–74. [CrossRef]
- De Swart, Henriette. 2010. *Expression and Interpretation of Negation*. Dordrecht: Springer.
- De Swart, Henriette, and Ivan Sag. 2002. Negative Concord in Romance. *Linguistics and Philosophy* 25: 373–417. [CrossRef]
- Eckardt, Regine. 2003. *Eine Runde im Jespersen-Zyklus: Negation, Emphatische Negation und Negativ-Polare Elemente im Altfranzösischen*. Unpublished manuscript Zas-Berlin.
- Eckardt, Regine. 2006. *Meaning Change in Grammaticalization: An Enquiry into Semantic Reanalysis*. Oxford: Oxford University Press.
- Eckardt, Regine. 2012. The many careers of negative polarity items. In *Grammaticalization and Language Change: New Reflections*. Edited by Kristin Davidse, Tine Breban, Lieselotte Brems and Tanja Mortelmans. Amsterdam: Benjamins, pp. 299–326.
- Espinal, Maria Teresa, Susagna Tubau, Joan Borràs-Comes, and Pilar Prieto. 2016. Double negation in Catalan and Spanish: Interaction between syntax and prosody. In *Negation and Polarity: Experimental Perspectives*. Edited by Pierre Larrivé and Chungmin Lee. Cham: Springer, pp. 145–76.
- Giannakidou, Anastasia. 1999. Affective dependencies. *Linguistics and Philosophy* 22: 367–421. [CrossRef]
- Giannakidou, Anastasia. 2000. Negative . . . concord? *Natural Language and Linguistic Theory* 18: 457–523. [CrossRef]
- Giannakidou, Anastasia. 2006. N-words and Negative Concord. In *The Blackwell Companion to Syntax*. Edited by Martin Everaert, Rob Goedemans and Henk van Riemsdijk. London: Blackwell, pp. 327–91.
- Gianollo, Chiara. 2016. The Latin system of negation at the syntax-semantics interface. *Rivista Di Grammatica Generativa* 38: 115–35.
- Godard, Danièle. 2004. French Negative Dependency. In *Handbook of French Semantics*. Edited by Francis Corblin and Henriette De Swart. Stanford: CSLI Publications, pp. 351–389.

- Godard, Danièle, Françoise Gadet, and Marie-Thérèse Vinet. 2021. La négation. In *La Grande Grammaire du Français, Actes Sud*. Edited by Anne Abeillé and Danièle Godard. Arles: Actes Sud.
- Greco, Matteo. 2020. On the syntax of Surprise Negation Sentences: A case study on Expletive Negation. *Natural Language and Linguistic Theory* 38: 775–825. [CrossRef]
- Haegeman, Liliane. 1995. *The Syntax of Negation*. Cambridge: Cambridge University Press.
- Haegeman, Liliane, and Rafeaella Zanuttini. 1996. Negative concord in West Flemish. In *Parameters and Functional Heads*. Edited by Adriana Belletti and Luigi Rizzi. Oxford: Oxford University Press, pp. 117–79.
- Haegeman, Liliane, and Terhe Lohndal. 2010. A new approach to negative concord and multiple agree: A case study of West Flemish. *Linguistic Inquiry* 41: 181–211. [CrossRef]
- Haspelmath, Martin. 1997. *Indefinite Pronouns*. Oxford: Oxford University Press.
- Herburger, Elena. 2001. The negative concord puzzle revisited. *Natural Language Semantics* 9: 289–333. [CrossRef]
- Jespersen, Otto. 1917. *Negation in English and Other Languages*. Copenhagen: A. F. Høst.
- Kiparsky, Paul, and Cleo Condoravdi. 2006. Tracking Jespersen's Cycle. In *Proceedings of the 2nd International Conference of Modern Greek Dialects and Linguistic Theory*. Edited by Mark Janse, Brian Joseph and Angela Ralli. Mytilene: Doukas, pp. 172–97.
- Ladusaw, William. 1979. *Polarity Sensitivity as Inherent Scope Relations*. New York: Garland Publishing.
- Ladusaw, William. 1992. Expressing negation. In *Proceedings of SALT II*. Edited by Christian Barker and David Dowty. Ithaca: Cornell Linguistic Circle, pp. 237–59.
- Larrivé, Pierre. 1996. *Pas explétif*. *Revue Romane* 31: 19–28.
- Larrivé, Pierre. 2010. The Pragmatic Motifs of the Jespersen Cycle. Default, Activation and the History of Negation in French. *Lingua* 120: 2240–58. [CrossRef]
- Larrivé, Pierre. 2011. Is there a Jespersen cycle? In *The Evolution of Negation: Beyond the Jespersen Cycle*. Edited by Pierre Larrivé and Richard Ingham. Berlin and Boston: De Gruyter Mouton, pp. 1–22.
- Larrivé, Pierre, and Richard Ingham, eds. 2011. *The Evolution of Negation: Beyond the Jespersen Cycle*. Berlin and Boston: De Gruyter Mouton.
- Longobardi, Giuseppe. 2014. Theory and experiment in parametric minimalism. The case of Romance negation. In *Language Description Informed by Theory*. Edited by Rob Pensalfini, Myfany Turpin and Diana Guillemin. Amsterdam: John Benjamins, pp. 217–62.
- Makri, Maria-Margarita. 2013. Expletive Negation beyond Romance: Clausal Complementation and Epistemic Modality. Master's thesis, University of York, York, UK.
- Martins, Anna. 2000. Polarity Items in Romance: Underspecification and Lexical Change. In *Diachronic Syntax: Models and Mechanisms*. Edited by Susan Pintzuk, George Tsoulas and Anthony Warner. Oxford: Oxford University Press, pp. 191–219.
- Muller, Claude. 1991. *La Négation en français: Syntaxe, sémantique et éléments de Comparaison avec les Autres Langues Romanes*. Genève: Droz.
- Penka, Doris. 2007. Negative Indefinites. Ph.D. dissertation, University of Tübingen, Tübingen, Germany.
- Penka, Doris. 2011. *Negative Indefinites*. Oxford: Oxford University Press.
- Poletto, Cecilia. 2016. Negation. In *The Oxford Guide to the Romance Languages*. Edited by Adam Ledgeway and Martin Maiden. Oxford: Oxford University Press, pp. 833–46.
- Poletto, Cecilia. 2020. Variation to the microscope: The case of negative concord. *L'Italia Dialettale* 81: 277–94.
- Roberts, Ian, and Anna Roussou. 2003. *Syntactic Change. A Minimalist Approach to Grammaticalisation*. Cambridge: Cambridge University Press.
- Rooryck, Johan. 2017. *A Compositional Analysis of French Negation*, Unpublished manuscript. Leiden University.
- Tovena, Lucia, Vivienne Déprez, and Jacques Jayez. 2004. Polarity Sensitive Items. In *Handbook of French Semantics*. Edited by Francis Corblin and Henriette De Swart. Stanford: CSLI Publications, pp. 391–417.
- Van der Auwera, Johan. 2010. On the diachrony of negation. In *The Expression of Negation*. Edited by Laurence R. Horn. Berlin and New York: Mouton de Gruyter, pp. 73–101.
- Van der Auwera, Johan. 2011. The Jespersen Cycles. In *Cyclical Change*. Edited by Elly van Gelderen. Amsterdam: Benjamins, pp. 35–71.
- Van Gelderen, Elly. 2008. The Negative Cycle. *Linguistic Typology* 12: 195–243. [CrossRef]
- Van Gelderen, Elly. 2009. *Cyclical Change*. Amsterdam: Benjamins.
- Van Gelderen, Elly. 2011. *The Linguistic Cycle: Language Change and the Language Faculty*. Oxford: Oxford University Press.
- Van der Wouden, Ton. 1994. Negative Contexts. Ph.D. dissertation, University of Groningen, Groningen, The Netherlands.
- Willis, David, Christopher Lucas, and Anne Breitbarth. 2013. *The History of Negation in the Languages of Europe and the Mediterranean. Volume 1: Case Studies*. Oxford: Oxford University Press.
- Yoon, Suwon. 2011. 'Not' in the Mood: The Syntax, Semantics and Pragmatics of Evaluative Negation. Ph.D. dissertation, University of Chicago, Chicago, IL, USA.
- Zanuttini, Rafeaella. 1997. *Negation and Clausal Structure. A Comparative Study of Romance languages*. Oxford: Oxford University Press.
- Zeijlstra, Hedde. 2004. Negation and Negative Concord. Ph.D. thesis, University of Amsterdam, Amsterdam, The Netherlands.
- Zeijlstra, Hedde. 2008. On the syntactic flexibility of formal features. In *The Limits of Syntactic Variation*. Edited by Theresa H. Biberauer. Amsterdam: Benjamins, pp. 143–74.
- Zeijlstra, Hedde. 2010a. Emphatic Multiple Negative Expressions in Dutch. *The Linguistic Review* 27: 37–73. [CrossRef]

Zeijlstra, Hedde. 2010b. On French Negation. In *Proceedings of the 35th Annual Meeting of the Berkely Linguistics Society*. Edited by Iksoo Kwon, Hannah Pritchett and Justin Spence. Berkeley: BLS, pp. 447–58.

Zeijlstra, Hedde. 2016. Diachronic developments in the domain of negation. *Language and Linguistics Compass* 10: 284–95. [[CrossRef](#)]

Zeijlstra, Hedde. 2022. *Negation and Negative Dependencies*. Oxford: Oxford University Press.

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.