






RESEARCH ARTICLE

On the rescuing of *some*-indefinites

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Abstract

The experimentally backed and hitherto overlooked empirical observation of the paper is a contrast among indefinite Positive Polarity Items regarding their possibility of being rescued under certain operators with different rescuing potential. *If/surprise/only/don't think* can rescue *some*-indefinites, suspending their anti-licensing (i.e., their impossibility to occur in the scope of a clausemate negation): while *some*-pronouns (in English and French) and *des*-indefinites in French exhibit the expected rescuability, English *some*-NPs remain unexpectedly degraded. Our account relies on the hypothesis that ‘rescuing’ is due to sentential negation being interpreted as ‘external’ (vs. nullified as in most literature). The definition we propose for external negation is syntactic: rescuing operators allow sentential negation to raise to an illocutionary functional projection above Tense Phrase (TP). Thus at LF (Logical Form), the negation takes that higher projection (rather than TP) as complement and becomes harmless for *some*-indefinites. The semantic correlate of this syntactic proposal is the interpretation of external negation as a propositional operator. As it involves the illocutionary periphery, rescuing is pragmatic in nature. The different rescuing potential between *some*-pronouns and *some*-NPs arises from the interplay between their distinct LF-representations and a minimal-event pragmatic constraint on rescuing.

1. Introduction

Crosslinguistically, all positive indefinites are PPIs (Positive Polarity Items) – that is, they cannot occur in the local scope of negation (Horn 1989, 2001). This is illustrated for English with a ‘*some*-pronoun’ and a ‘*some*-NP’ in (1a) and (1b), respectively, and for French with a nominal built with the so-called ‘partitive article’ (henceforth *des*-NP) in (2):¹

¹ The examples in (1) are strongly degraded, unless *not* is an emphatic denial or *some* scopes over *not*. Example (2) could also be fine with an emphatic negation.

- (1) (a) ??John didn't hurt someone.
 (b) ??John didn't hurt some policemen.
- (2) ??Jean n' a pas blessé des policiers.
 Jean NEG has not hurt DES policemen
 'Jean did not hurt policemen.'

There are, however, various contexts in which PPIs occurring in the local scope of negation can be 'rescued' (Szabolcsi 2004: 419, Spector 2014: 3). Such contexts² include *if*-clauses (3a), the adversative predicate *surprise* (3b) and *only* (3c) (from Szabolcsi 2004, her ex. [35], [37] and [39]):

- (3) (a) If we don't call someone, we are doomed.
 (b) I am surprised that John didn't call someone.
 (c) Only John didn't call someone.

What is puzzling, however, is that not all PPIs are equally acceptable in these contexts. In particular, *some*-NPs (4) are severely degraded, as first observed by Dobrovie-Sorin (2020) and then discussed in Dobrovie-Sorin & Ihsane (2022). The French counterparts of (4) are, however, fully acceptable (5), thus patterning with *some*-pronouns and contrasting with *some*-NPs in English.

- (4) (a) ??If we don't call some policemen, we are doomed.
 (b) ??I am surprised that John didn't call some policemen.
 (c) ??Only John didn't call some policemen.
- (5) (a) Si nous n' appelons pas des policiers, nous sommes perdus.
 if we NEG call not DES policemen we are lost
 'If we don't call DES policemen, we are lost.'
 (b) Je suis surprise que Jean n' ait pas invité des policiers.
 I am surprised that Jean NEG has not invited DES policemen
 'I am surprised that Jean has not invited DES policemen.'
 (c) Seulement Jean n' a pas invité des policiers.
 only Jean NEG has not invited DES policemen
 'Only Jean has not invited DES policemen.'

The aim of this paper is to explain the puzzles observed in (3)–(5) – namely, the difference in distribution between, on the one hand, *some*-pronouns and *some*-NPs in English, and, on the other hand, between English *some*-NPs and French *des*-NPs. To reach this goal, we will first establish that the difference between *some*-pronouns and *some*-NPs illustrated in (3) and (4) is robust: an online-based Acceptability Judgment Task carried out in 2021 demonstrates that, in the rescuing contexts tested, there is a statistically significant difference in acceptability between these two types of PPIs in favor of *some*-pronouns

² Not to be confused with contexts in which the PPIs are not in the immediate scope of the negation (cf. Jespersen 1917, Szabolcsi 2004, Spector 2014). Examples (i) are from Szabolcsi (2004, her ex. [23] and [24]):

- (i) a. I don't think that John called someone.
 b. John didn't show every boy something.

(see Section 3). Our experimental study thus confirms that the *some*-NPs tested are degraded in rescuing contexts. The analysis we will develop relies on the assumption that rescuing constructions, in contrast to anti-licensing constructions, comprise several illocutionary functional heads above TP (Tense Phrase), one of which hosts the rescuing triggers (for example *surprise, if, only*). Given this assumption, the negation in anti-licensing constructions (1)–(2) is ‘internal’ to the extended projection of TP, whereas in rescuing examples like (3) and (5), it is ‘external’, in the sense that, at LF (Logical Form), it takes as an argument one of the illocutionary functional projections above TP. Given this syntactic analysis, the ‘rescuability’ of *some*-indefinites amounts to their being unaffected by external negation.

As for our puzzle (i.e. why *some*-pronouns [3] and *des*-NPs [5] are fully rescuable in contrast to *some*-NPs [4]), we propose that this is due to the interplay between the distinct semantic representations of these two classes of indefinites and a pragmatic constraint that requires the proposition expressed by the TP to describe a minimal event.

The paper is organized as follows. In Section 2, we evaluate whether previous accounts of rescuing can capture the facts under investigation here. The experiment is reported in Section 3. Section 4 is a preview of the explanation we will propose in the remainder of the paper. In Section 5, we explain the notion of ‘external’ negation and briefly review several constructions associated with this type of negation. In Section 6, we report the aspects of Krifka’s (2021, 2023) framework on which we will build our analysis – in particular, his hierarchy of illocutionary functional projections above TP and the selectional ambiguity of main verbs. Section 7 is devoted to the core issue of this paper: we provide different semantic representations for *some*-pronouns and *des*-NPs on the one hand, and for *some*-NPs on the other hand, and suggest a pragmatic constraint that is responsible for the unrescuability of *some*-NPs. Finally, we mention two contexts in which *some*-NPs may nevertheless be rescued and provide a few hints as to how our analysis could extend to those facts. Section 8 concludes the paper.

2. State of the art

In this section, we will review four analyses of RESCUING CONTEXTS (henceforth RC) in order to check whether any of them can account for the puzzles described in Section 1. We will see that none of them can.³

2.1. Szabolcsi (2004)

Szabolcsi (2004) investigates the similarities and differences in the distribution of PPIs and NPIs (Negative Polarity Items) like *any*-words, which have to be in the local scope of negation (*John *(didn’t) hurt anyone/any policemen*). In her account, PPIs are double NPIs in that they are endowed with two NPI features. These features are dormant but become active (in the sense that they need to be licensed) in the presence of a DOWNWARD ENTAILING

³ The distribution of *some*-indefinites w.r.t. negation has a long history going back to Jespersen and continuing with work by Baker (1970), Ladusaw (1979) and Schwarz & Bhatt (2006), a.o. We thank a reviewer for suggesting to include these references in our overview. However, because of space limitations, we cannot follow this suggestion. For a careful overview of this important literature, we refer the reader to Bar-Asher Siegal (to appear).

(henceforth DE) operator.⁴ Since the operator activating these features licenses only one of them, configurations of the type [Neg ... PPI] are ruled out for the same reasons that exclude NPIs from positive contexts—namely, the presence of an NPI feature that is not licensed. The PPI can be rescued if a second DE-operator is introduced, as this operator will license the second NPI feature of the PPI:

(6) I don't think that John didn't call someone.

Accordingly, (6) is grammatical because one of the NPI features of *someone* is licensed by *didn't* and the other one by *don't*. In the examples in (3), sentential negation licenses one of the NPI features of *someone* and another operator (*surprise, if, only*) licenses the second feature. The problem with this explanation of rescuing is that the analysis extends to the examples in (4), built with *some*-NPs (note that Szabolcsi herself exemplifies her theory only with *some*-pronouns) predicting that they should be acceptable, contrary to fact. Indeed, the sentences in (4) contain two operators that could license the NPI features of the PPIs: a negation and either *surprise, if* or *only*. Szabolcsi's analysis can therefore not explain why the examples in (4) are strongly degraded, in contrast with the ones in (3). This is because all indefinite PPIs—in particular, both *some*-NPs and *some*-pronouns—are PPIs (insofar as they are anti-licensed in the immediate scope of negation), and as such, elements of both of these types of PPIs would be endowed with two NPI features and should thus be equally rescuable. As for the grammaticality of the French examples in (5), it is expected: the above explanations for (6) and (3) extend to these sentences, since they contain a negation (*pas*) and another operator (*surprise* 'surprise', *si* 'if', *seulement* 'only') which can license the NPI features of the PPI *des policiers* 'policemen'.

2.2. Homer (2011)

In his analysis of the distribution of NPIs and PPIs, Homer (2011: 2–3) proposes that what matters is the monotonicity of the environments in which these polarity elements occur:

(7) A PI [Polarity Item] π is licensed in a sentence *S* only if it is placed in at least one constituent *A* of *S* which has the right monotonicity w.r.t. its position (i.e. upward for *some*, downward for *any*) and which is such that all other PIs in *A* are also licensed within *A*.

This means that a PPI is licensed in a sentence only if it is contained in at least one eligible constituent of the sentence that is not DE with respect to its position: in (6), the eligible constituent is the phrase headed by the matrix negation *don't* since this phrase is upward entailing with respect to *someone*. It is upward entailing because the two DE-operators in the phrase, *don't* and *didn't*, 'cancel' each other. The examples in (3) can be analyzed in the same way: they all comprise a negation and either *surprise, if, or only*, and the combination of the former with one of the latter leads to an upward entailing environment licensing *someone*. This, however, is also true of the sentences in (4), which minimally differ from the ones in (3)—only the PPIs are different (*some*-NPs vs. *some* pronouns, respectively)—thus

⁴ As the constructions we are interested in are not all downward entailing (for example, *only*), we will use the label 'rescuing operators' (rather than 'DE-operators') as a descriptive label for rescuing triggers.

predicting that these examples will also be acceptable, contrary to fact. To illustrate, in (4a), there is a rescuing operator and the negation *don't*, which create the environment needed for *some policemen* to be acceptable. This example is, however, strongly degraded, as already observed. This means that Homer's analysis cannot account for our data; it runs into the same shortcomings as Szabolczi's because it does not distinguish between different PPIs – in particular, *some-NPs* and *some-pronouns*. The French examples in (5) are unproblematic since they all contain two operators (*surprise* 'surprise', *si* 'if', *seulement* 'only', in addition to sentential negation) that give rise to the upward entailing environments licensing the PPI *des policiers* 'policemen'.

2.3. Nicolae (2012)

Nicolae (2012) proposes an analysis of PPIs based on Chierchia's (2011) alternative-based theory of NPIs. For Nicolae (2012), the restricted distribution of NPIs and PPIs is the result of the interaction between a syntactic requirement and a semantic requirement. The syntactic requirement is that these polarity items need to enter into an agreement relation with a covert exhaustifying operator, involved in the calculation of implicatures, often represented as ONLY and EVEN (covert counterparts of *only* and *even*, respectively). For instance, PPIs carry the feature [+D_E], which can only be checked by a c-commanding operator carrying the same feature (i.e. E for EVEN). As for the semantic requirement, it is imposed by the fact that PPIs (on a par with NPIs) activate alternatives that need to be integrated into meaning via exhaustification by the exhaustifying operator. The crucial difference between PPIs and NPIs, according to Nicolae, is the nature of the domain alternatives: NPIs activate sub-domain alternatives, whereas PPIs activate super-domain alternatives. This amounts to the hypothesis that the alternatives of PPIs are all entailed by the assertion (upward entailment from subsets to supersets). Since such alternatives are strengthened/exhaustified by EVEN in upward contexts, PPIs are legitimated by EVEN in upward contexts.

Nicolae's analysis for RCs like (3) is that the PPIs are licit in such examples because they are embedded under two DE-operators, since such an environment is equivalent to a positive environment. In (6), for instance, the requirements of EVEN are satisfied because the downward entailment of the embedded negative clause (*John didn't call someone*)⁵ is reversed by the higher DE operator (*don't*), thus yielding upward entailment, an environment allowing PPIs. As each example in (3) and (5), but also in (4), contains a negation and a rescuing operator (cf. Sections 2.1 and 2.2), these data should all be analyzed as (6) and should allow PPIs. However, this is not the case as discussed here. The problem comes from the fact that, in Nicolae's analysis, all PPIs have a feature [+D_E], implying that *some-pronouns* and *some-NPs* are treated on a par. As a result, her approach cannot explain the difference between the examples in (3) and the ones in (4).

2.4. Larrivée (2012)

The focus of Larrivée's (2012) paper is the question of PPIs under the scope of a clausemate negation, both when there is a single negation (e.g. *John doesn't often say something*) and

⁵ Nicolae's version of alternatives (2012: 486; her ex. [35b]):

(ii) Alternatives: $\{\neg(\neg\exists x \in D'[\text{saw}(\text{John}, x)]) : D \subset D'\}$

when there are two licensing elements, as in (3) or (6). To account for such data, Larrivéé formulates a proposal in terms of what Dryer (1996) calls ‘activated proposition’ – namely, a proposition accessible to the speaker and the hearer (Larrivéé 2012: 885). For instance, in (3b) (*I am surprised that John didn’t call someone*), the subordinate clause is presupposed; it is a *factive* presupposition. Crucially, in this analysis, the negation is not at the same level as the propositional contents (Horn 2001), and ‘[t]he activated proposition is thus treated as a whole to be rejected by negation’ (Larrivéé 2012: 892). Since the focus of negation is the complete *proposition*, the negation and the PPI do not interact, which explains why *some*-PPIs can co-occur with a clausemate negation. The proposal is not explicit enough though to determine whether it would account for the distributional difference between *some*-NPs and *some*-pronouns we are interested in. Larrivéé rather seems to allow his suggestions to cover both types of *some*-PPIs (although all the examples he uses contain a *some*-pronoun). A priori, since in our examples with a *some*-pronoun and their counterparts with a *some*-NP (cf. [3] vs. [4]), the PPIs occur in the same position and hence in the same proposition, there is no reason to assume that the activation process would affect these PPIs differently. The same observation holds for (5), the French data corresponding to (4): in terms of propositions, (4) and (5) do not seem to differ. If this were correct, Larrivéé’s analysis would not be able to account for the differences among the PPIs at the heart of this paper and would thus not fare better than the three proposals reported above.

2.5. Conclusion

In sum, none of the analyses briefly summarized above can explain the difference in rescuing among positive indefinites because all of them treat PPIs as a homogeneous class. Beyond their differences, Szabolcsi, Homer and Nicolae analyze rescuing as amounting to polarity reversal. In other words, the overall context in RCs is upward entailing, which would explain why the anti-licensing condition on PPIs is absent. This line of investigation cannot explain the difference in rescuing because PPIs are treated as a homogeneous class. For Larrivéé, PPIs are rescued because, although they occur in the scope of negation at surface structure, a positive proposition is activated by virtue of pragmatic processes. But no room is made for possible differences among PPIs.

The account we will develop in this paper is in line with Larrivéé’s (2012) view that rescuing operators are responsible for the activation of propositions (Dryer 1996). We will propose that the activation of positive propositions in the scope of NEG involves the LF raising of NEG to the illocutionary left periphery proposed by Cinque (1998) and further developed by Krifka (2021, 2023). We will view rescuing triggers – for instance *if*, *surprise* and *only* – as elements that activate the illocutionary left periphery (Section 7), thereby providing high syntactic slots that can be targeted by NEG.

3. Acceptability judgment task: The rescuability of *some*-pronouns vs. *some*-NPs

The acceptability contrast in RCs between *some*-pronouns as in (3) and *some*-NPs as in (4), repeated here for the sake of convenience as (8) and (9), respectively, has – to the best of our knowledge – gone unnoticed in the literature until very recently (Dobrovie-Sorin 2020, Dobrovie-Sorin & Ihsane 2022; cf. Section 1).

- (8) (a) If we don't call someone, we are doomed.
 (b) I am surprised that John didn't call someone.
 (c) Only John didn't call someone.
- (9) (a) ??If we don't call some policemen, we are doomed.
 (b) ??I am surprised that John didn't call some policemen.
 (c) ??Only John didn't call some policemen.

To further investigate the above-mentioned contrast, we conducted an online-based Acceptability Judgment Task (AJT) targeting the acceptability contrast under study. Section 3.1 describes the design of this AJT; Section 3.2 reports the results obtained. As will be shown, the experimental data reveal a statistically significant difference in naturalness between *some*-pronouns (8) and *some*-NPs (9) in favor of the former in all RCs tested.⁶

3.1. Experiment design

In order to empirically test the acceptability contrast between *some*-pronouns and *some*-NPs in RCs, we designed an online AJT with the help of the free-of-charge experimental software *OnExp 1.2* (Onea & Syring 2011–). The experiment was completed by 96 monolingual speakers of American English (51 females, 44 males, 1 diverse; mean age: 34.8 years), who, at the time the experiment was conducted (September 2021), lived in the United States of America. All participants were recruited via the platform *prolific.co* and were paid £1.25 for their participation (approximately \$1.70 at the time of the experiment). Prior to the experiment, participants only received the unspecific information that the experiment dealt with the use of English words in different contexts and that there were no right or wrong answers to the questions. The experiment itself was divided into two parts: a short warm-up phase and the main experiment. The warm-up phase consisted of five trial rounds and had the purpose of familiarizing the participants with the task to be fulfilled in the main experiment. The latter is described in detail in what follows.

The aim of the main experiment was to elicit acceptability judgments for *some*-pronouns and *some*-NPs in RCs – that is, in the local scope of negation with the additional presence of a further operator (cf. Section 1). As a starting point, four different rescuing operators were selected: *if*-clauses, adversative *surprise*, *only* and *don't think*. This procedure resulted in a total of eight conditions tested. However, in order to limit the length of the experiment (and, thus, to prevent the loss of participants during the experiment), not all 96 participants were presented with all RCs. Instead, the 96 participants were pre-divided into two groups of 48 participants each. Group₁ was assigned to subexperiment₁, which only targeted the RCs *don't think* and *surprised* and, thus, conditions 1–4. Group₂ was assigned to subexperiment₂, which only targeted the RCs *if* and *only* and, thus, conditions 5–8. The conditions tested in the two subexperiments are summarized in Tables 1 and 2, respectively.

Examples (10a)–(10h) illustrate all eight conditions by means of one example each. Note that every *test sentence* comes in four variants corresponding to the conditions in Tables 1 and 2, respectively. These variants are *test items*.

⁶ We talk about *naturalness* here because that is what we asked for explicitly in the experiment. In the rest of the paper, we use (*in*)*acceptability*.

Table 1. Rescuability of *some*-NPs vs. *some*-pronouns: conditions tested in subexperiment₁

	RC: <i>don't think</i>	RC: <i>surprised</i>
<i>some</i> -NP	condition 1	condition 3
<i>some</i> -pronoun	condition 2	condition 4
subexperiment ₁ (group ₁ , n = 48)		

Table 2. Rescuability of *some*-NPs vs. *some*-pronouns: conditions tested in subexperiment₂

	RC: <i>if</i>	RC: <i>only</i>
<i>some</i> -NP	condition 5	condition 7
<i>some</i> -pronoun	condition 6	condition 8
subexperiment ₂ (group ₂ , n = 48)		

(10) subexperiment₁ example test sentence *_ John didn't call _*

(a) (condition 1): I don't think that John didn't call some boys.

(b) (condition 2): I don't think that John didn't call someone.

(c) (condition 3): I am surprised that John didn't call some boys.

(d) (condition 4): I am surprised that John didn't call someone.

4 test items

subexperiment₂ example test sentence *_ John doesn't call _*

(e) (condition 5): If John doesn't call some boys, that's no problem.

(f) (condition 6): If John doesn't call someone, that's no problem.

(g) (condition 7): Only John doesn't call some boys when in trouble.

(h) (condition 8): Only John doesn't call someone when in trouble.

4 test items

In the main part of the experiment, participants were presented test items for conditions 1–4 (subexperiment₁) and for conditions 5–8 (subexperiment₂). Subsequently, they were asked to rate these test items for naturalness on a 7-point Likert scale, where the value '1' corresponded to 'completely unnatural' and the value '7' to 'completely natural'. The evaluation of the items was preceded by a single reminder that there were no right or wrong answers. In addition, we asked the participants to give their rating on the items individually and not to worry if they found some items to be very similar to other items already evaluated.

The experimental design followed the Latin Square method (2x2 Latin Square design; cf. Table 1 and 2) with five repetitions per condition (cf., for example, Abbuhl, Gass & Mackey 2013: 120–121). Thus, each subexperiment contained four lists with 20 different test items each, and participants were randomly and evenly assigned to one of the four lists,

meaning that every list was presented to a total of 12 participants (= 48 participants per four-list subexperiment). In line with the logics of the Latin Square method (for a nice visualization, see Zeugin 2021: 287–288), the 20 different test items per list were variants of 20 different test sentences. As every list also included 20 filler items (i.e. 50% fillers), every participant evaluated a total of 40 items. The total number of relevant answers retrieved in subexperiment₁ and subexperiment₂ was 1,920 (48 participants*20 test items*2 subexperiments). All test items and filler items are available as online supplementary materials to this paper and as an OSF repository at this link: https://osf.io/t27uw/?view_only=3bca8d72c7224eaba3338c6cc48fa764. The remainder of this section adds some information on the design of the test items and the filler items.

As described above, every subexperiment contained 20 test sentences coming in four variants (i.e. four lists of 20 test items), where every test item realized one of four conditions. Two example test sentences were given in (10). The 20 test sentences all contained different transitive verbs (in [10]: *call*) and different proper names (in [10]: *John*), the latter being balanced between male and female. The *some*-pronoun and the *some*-NP were held constant over all test sentences and corresponded to *someone* and *some boys*, respectively. The reason for this was to preclude a potential additional factor of variation (for the intuition that there are some nominal lexemes that make *some*-NPs in RCs less awkward, see Dobrovie-Sorin & Ihsane 2022: 219, fn. 2). The length of both the test items and the filler items was between ten and sixteen syllables. In addition, the mean length of the test items and the filler items was very similar (subexperiment₁: test items = 11.4 syllables, filler items: 11.9 syllables; subexperiment₂: test items = 12.4 syllables, filler items: 13.5 syllables). As for the filler items, which were different in the two subexperiments, these were designed in a way to superficially look very similar to the actual test items: the filler items contained 20 different transitive verbs and 20 different names (10 male and 10 female) not already used in the test sentences as well as the noun *boys*. Moreover, half of the filler items each contained *don't think* or *surprised* (subexperiment₁) and *only* or *if* (subexperiment₂). However, beyond the superficial similarity between the filler items and the test sentences, none of the filler items contained PPIs such as *some* + noun or *someone*. In addition, most filler items did not feature RCs either. The idea behind this decision – and the main purpose of including fillers (but also see below) – was to prevent participants from figuring out which items were test items and which ones filler items and, thus, to indirectly make them unable to identify RCs as the structure targeted by the experiment (cf. Schütze & Sprouse 2013: 39 for this idea).⁷ The procedure described was all the more necessary, as the test items themselves were very similar among each other. Without the inclusion of similar filler items it would have been very likely that participants would have figured out what structure we were trying to investigate.

Examples of filler items are given in (11). The filler items (11a, b) are superficially similar to the test items (10a, b), and the filler items (11c, d) are similar to the test items (10c, d):

⁷ At the end of the experiment, we asked participants to guess the exact purpose of the experiment and also instructed them to write down if they had no intuition. None of the 96 participants suspected that the experiment was about *some*-pronouns or *some*-NPs, let alone a comparison between the two. The answers closest to guessing the purpose of the experiment came from the only two participants who, in their reply, mentioned the word *boys*. The two replies were ‘if adding the word *boys* to sentences makes it weird’ and ‘for the *boys*’, respectively.

- (11) **subexperiment₁** **example filler items**
- (a) I don't think that James embarrassed my boys.
 - (b) I don't think that Mia have love my boys.
 - (c) I am surprised that Megan tickled the boys.
 - (d) I am surprised that Oliver the boys adored.

Of the 20 filler items, 10 were perfectly grammatical (i.e. of type [11a, c]), while the other 10 were ungrammatical (i.e. of type [11b, d]). The ungrammatical and the grammatical fillers were evenly distributed over the filler items containing *don't think* and *surprised* (subexperiment₁) and over those containing *only* and *if* (subexperiment₂). One reason for including both grammatical and ungrammatical filler items was to enhance the likelihood that the full Likert-scale range would be used by all participants and, thus, to prevent scale biases such as skewing and compression (cf. Schütze & Sprouse 2013: 39). This was the second purpose of including filler items in the experiment. The third and last reason was that the ungrammatical filler items served as a control: ratings from participants who rated more than two clearly ungrammatical fillers with '5' or higher were excluded from the data analysis, as we took this as sufficient evidence for a lack of attention during the experiment.

3.2. Experiment results

Figure 1 shows the distribution of naturalness ratings for the two types of PPIs embedded in different RC-operators. As it is evident, there is a clear contrast in naturalness between *some*-NPs and *some*-pronouns (plotted in light blue and light red, respectively) in favor of the latter. Interestingly, naturalness is variable across the different RC-operators: the judgments remain quite low in the *don't think*-RC, while they increase moving from left to right in the graph, with best judgments for the *surprised*-RC.

To analyze the data, we implemented a mixed-effects ordinal regression model with a logit link function, using the *clmm* () function in the *ordinal* package in R (Christensen 2019), which is the most suitable to treat ratings that cannot be assumed to represent equally spaced points in an interval scale (McCullagh 1980). Moreover, provided that our

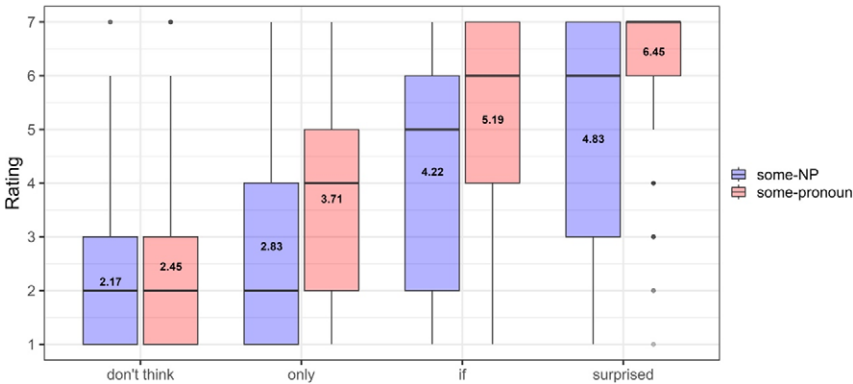


Figure 1. Rating for naturalness of *some*-NP (light red) vs. *some*-pronoun (light blue) in the four RCs tested. The black lines in each box represent the median of the ratings, the numbers represent the mean.

independent variable has four levels corresponding to the four RC-operators (*don't think*, *only*, *if*, *surprised*) and that the naturalness ratings across conditions increase moving from one level to the other (cf. Figure 1), we set a backward difference coding schema for factor variables with four levels to best capture the graded nature of the judgments. By means of the coding schema summarized in Table 3, the statistical model will allow us to determine if there are significant differences moving from level 1 of our variable (i.e. the *don't think*-operator) to level 4 (i.e. the *surprised*-operator), also considering all intermediate steps (level 2, the *only*-operator and level 3, the *if*-operator).

We modeled (naturalness) ratings as a function of (i) PPI (contrasting *some*-NPs to *some*-pronouns) and (ii) RC-operator (in the contrast schema detailed in Table 3), also considering, (iii), the interaction of these factors. Lastly, we included random intercepts for participants and items in the model. The output of the statistical analysis is presented in Table 4.

Firstly, line 1 of Table 4 reveals a general significant difference between *some*-pronouns (Mean=4.45, SD=1.03) and *some*-NPs (Mean=3.51, SD=1.22) over all RC-contexts tested but abstracting away from the different RC-operators. Secondly, a significant difference emerged across all contrasts set for the RC-operators in the case of *some*-NPs (set as reference level in all contrasts), compatible with the ascending trend observed in Figure 1: as a rescuing operator *only* is more effective than *don't think* (line 2), *if* is more effective than *only* (line 3) and *surprised* is more effective than *if* (line 4). The first finding means that *some*-pronouns are more rescuable than *some*-NPs in general; the second finding means that not all RC-operators display an equal rescuing ability of *some*-NPs. Thirdly, a significant interaction of PPI and RC is observed in the case of the first (comparing *only* and

Table 3. Contrast set for RC-operators by applying the function *contr.sdif(4)*

RC-operator	1 st contrast L1 vs. L2	2 nd contrast L3 vs. L2	3 rd contrast L4 vs. L3
don't think (Level 1)	-0.75	-0.5	-0.25
only (Level 2)	0.25	-0.5	-0.25
if (Level 3)	0.25	0.5	-0.25
surprised (Level 4)	0.25	0.5	0.75

Table 4. Output of fixed effects of the ordinal regression model

line	independent variable	coefficient	estimate	std. err	z-value	p-value
1	[PPI]	'some-pronoun' vs. 'some-NP'	1.3899	0.0920	15.106	< .001
2	[RC-operator]	'only' vs. 'don't think'	0.9589	0.3672	2.612	.009
3		'if' vs. 'only'	1.7651	0.1706	10.345	< .001
4		'surprised' vs. 'if'	0.7360	0.3672	2.005	.045
5	[interaction PPI*RC-operator]	PPI: 'only' vs. 'don't think'	0.6946	0.2381	2.918	.004
6		PPI: 'if' vs. 'only'	0.0730	0.2363	0.309	.758
7		PPI: 'surprised' vs. 'if'	1.5505	0.2620	5.917	< .001

don't think, line 5) and last (comparing *surprised* and *if*, line 7) contrast, but not in the second contrast (comparing *if* and *only*, line 6). The last result suggests a difference in the rescuing potential of the different operators, depending on the PPI. To further inspect this possibility, we set two ordinal models with nested contrasts of PPI and RC-operators (the detailed model outputs of the statistical analyses for all experiments are available as an OSF repository at this link: https://osf.io/t27uw/?view_only=3bca8d72c7224eaba3338c6cc48fa764). What emerges is a significant difference between *some*-NPs and *some*-pronouns in favor of the latter across all the four RC-operators, including *don't think*, for which the contrast returns a statistically significant difference despite the overall very low judgments (Est. = 0.445, SE = 0.168, $z = -2.646$, $p = .008$). This means that, across all operators, *some*-pronouns are always significantly more accepted than *some*-NPs, suggesting that the latter are indeed less rescuable across the board.

To check that this last observation was really due to the behavior of *some*-pronouns and *some*-NPs in RCs (and not, as would logically be possible, to a generally lower acceptability of *some*-NPs as compared to *some*-pronouns, regardless of rescuing), we conducted a follow-up experiment in which we compared *some*-pronouns and *some*-NPs in non-RC contexts (i.e. without any further operator). We tested 30 monolingual American English speakers, using the same platform, the same demographic criteria, the same experimental design and procedure of the main experiment. Each participant evaluated a total of 40 items on a 7-point Likert scale: 10 were experimental sentences like *John called someone on the phone* (*some*-pronoun) or *John called some friends on the phone* (*some*-NP), presented on two lists in a Latin square design; 20 were grammatical and ungrammatical control sentences to control for participants' attention to the experiment. Additionally, we also included a set of 10 stimuli sentences with the RC-operator *only*, similar to those used in the original experiment reported in the present paper. This was done in order to verify whether the pattern observed in the original experiment with RC-contexts could be replicated with a new group of participants. After inspecting participants' responses on clearly grammatical and ungrammatical control sentences, 8 participants were excluded. The mean ratings of the 22 remaining participants show that participants' judgments were below 2 ($M = 1.6$, $SD = 0.48$) for the ungrammatical control sentences and above 5 ($M = 5.62$, $SD = 0.87$) for the grammatical control sentences, as expected. Importantly, judgments were almost at ceiling both for *some*-NPs ($M = 6.67$, $SD = 0.55$) and *some*-pronouns ($M = 6.72$, $SD = 0.44$) when no RC operator was involved, and no statistical difference emerged in this case (Est. = 0.53, SE = 0.44, $z = 1.21$, $p = .225$). This suggests that the statistical difference observed in the main experiment between *some*-NPs and *some*-pronouns in RCs cannot be reduced to a general dispreference of the former over the latter. In addition, the participants of the follow-up experiment also fully replicated the pattern observed in the main experiment when *some*-NPs and *some*-pronouns appeared in sentences with an RC operator (*only* in this case), showing more degraded judgments in the case of *some*-NPs ($M = 3.19$, $SD = 1.51$) compared to *some*-pronouns ($M = 3.89$, $SD = 1.52$). Statistical analyses by means of mixed-effects ordinal regression models confirmed a significant difference in the acceptability of the two PPIs with *only* (Est. = 1.15, SE = 0.27, $z = 4.28$, $p < .0001$), already observed in the main experiment.

Returning, again, to this main experiment, some further aspects of the results reported in Table 4 are worth commenting on. While a significant difference emerges between *each* operator pair (all $ps < .001$), the magnitude of the effect, which reflects the rescuing potential

within each contrast, is always greater in the case of *some*-pronouns compared to *some*-NPs.⁸ For instance, the statistical difference between *don't think* and *only* is much reduced in the case of *some*-NPs compared to *some*-pronouns (the z score in the former is 2.612, as attested in Table 4, line 2, while it is 4.502 in the latter, which is compatible with a larger difference in the mean ratings of these two operators in the case of *some*-pronouns). Similarly, the difference between *surprised* and *if* is much reduced in the case of *some*-NPs compared to *some*-pronouns (the z score in the former is 2.005, as attested in Table 4, line 4, while it is 5.982 in the latter). These differences explain the significant interactions observed in the first and third contrasts in the main analysis (Table 4, lines 5 and 7): in the case of *surprised*, the naturalness ratings are consistently higher with *some*-pronouns than with *some*-NPs, and crucially, they are also significantly higher than the judgments for *some*-pronouns under the *if*-operator. In turn, in the case of *some*-NPs, although the judgments remain subject to significant variability, the rescuing potential remains much reduced in this case, even when moving from *if* to *surprised*, for which the highest rescuing potential is attested. Nested comparisons in this case clearly show a great difference ($z = 13.311$) between the rescuing potential of *surprised* in the case of *some*-pronouns, for which the acceptability ratings approach 6.5, compared to *some*-NPs, for which mean ratings remain below 5. At the other end of the scale, while all participants tend to dislike both PPis under the *don't think*-operator, their judgments are still significantly higher with *some*-pronouns than with *some*-NPs, as noted above. Also, while *only* can rescue *some*-pronouns significantly more than *don't think*, there is little sign of rescuing improvement of *only* in the case of *some*-NPs. In sum, all results obtained clearly indicate that, despite some variability in the judgments – which is expected given the complexity of these constructions – rescuability of *some*-pronouns is much higher than that of *some*-NPs. In addition, some operators have a greater rescuing potential than others, a fact that might well be due to other factors to be investigated in future work (cf. fn. 10). Finally, the rescuing ability of an operator also varies as a function of the PPI.

4. Preview of the explanation: External negation and the rescuing of *some*-PPIs

In Section 2, we have briefly reviewed some of the current theories of rescuing and shown that they were unable to account for the non-rescuability of *some*-NPs (as opposed to the rescuability of *some*-pronouns). Our own analysis of rescuing will rely on the distinction between ‘external’ and ‘internal’ NEG:⁹

- (12) (a) *Some*-PPIs cannot occur in the scope of internal NEG (anti-licensing).
 (b) *Some*-PPIs can occur in the scope of external NEG (rescuing).¹⁰

⁸ The question why certain items are generally rated higher with some RC-operators than with others needs to be left for future work. Note already, however, that the low *naturalness* ratings of the *don't think*-items may be due to the fact that double negations are both infrequent in everyday English and stigmatized by many (prescriptive) grammars. This, then, could explain the considerably lower overall ratings of *don't think* for *naturalness* in Figure 1 as compared to the other RCs tested.

⁹ See Horn (1989, 2001), De Clercq (2020) and references quoted there.

¹⁰ A similar generalization was proposed in Dobrovie-Sorin & Ihsane (2022):

- (iii) *Some*-indefinites cannot occur in the scope of *quantificational* NEG ($\neg\exists x$) but can occur in the scope of *propositional* NEG.

Bar-Asher Siegal's (2015, to appear) characterization of the distinction between internal and external negation is stated in *semantic* terms, as a lexical ambiguity between two distinct NEGS:

- (13) (a) Internal NEG is a predicate negator.
 (b) External NEG is a propositional negator.

As it is not clear to us how Bar-Asher Siegal's semantic approach would handle the empirical data reported in Section 3.2, we will assume that the distinction between internal and external negation is represented *syntactically* (see Garzonio & Poletto 2015,¹¹ Bar-Asher Siegal & De Clercq 2019) and develop our own analysis:

- (14) (a) Internal NEG takes TP as a complement.
 (b) External NEG takes as a complement a functional projection higher than TP.

Our implementation will rely on the view that the left periphery of the clause is enriched with illocutionary functional categories (Cinque 1998, Speas & Tenny 2003, Krifka 2021, 2023, Wiltschko 2021).¹²

External negation is instantiated in several syntactic configurations (see Section 5), among which preposed/high negations in questions. The contrast in (15) illustrates the generalization in (12):

- (15) (a) *Did John not meet someone yesterday?
 (b) Didn't John meet someone yesterday?

These examples qualify as rescuing contexts because a clausemate negation of *someone* is embedded inside a question operator. However, the theories reviewed in Section 2 cannot explain the contrast in (15) because in both examples, NEG is a clausemate of *someone* and is embedded inside a question. We conclude that the current theories need to be revised not only because they cannot explain the contrast between *some*-pronouns and *some*-NPs but also because they fail to explain why preposed/'high' negations in questions are potential rescuers, whereas 'low' negations are not.

As they stand, (12a) and (12b) are empirical generalizations. Some theoretical motivation for the hypothesis that PPIs are immune to external NEG comes from a syntactic approach to anti-licensing. According to Collins & Postal (2014), the anti-licensing of *some*-indefinites can be explained as follows (this is a non-technical restatement of Collins & Postal's proposal, due to Dobrovie-Sorin 2020): (i) internal NEG¹³ translates at LF as a polyadic Q ($\neg\exists e, x$); (ii) Polyadic negative Q is syntactically constrained by what Collins & Postal call 'Determiner-sharing', which amounts to requiring that indefinites that correspond to argument-variables bound by $\neg\exists e, x$ be NEG-marked. This explains why indefinites that are narrow-scoped with respect to NEG cannot be expressed as positive indefinites. Depending on the language, they can surface either as NPIs (e.g. in English) or as NEG-words (in Negative

¹¹ These authors/this article do not, however, use the terms external/internal NEG.

¹² Compare Garzonio & Poletto (2015) and Bar-Asher Siegal & De Clercq (2019), who rely on Rizzi's (1997) Left Periphery.

¹³ Dobrovie-Sorin's (2020) analysis was stated in terms of sentential vs. propositional NEG, a distinction that corresponds to internal vs. external NEG.

Concord languages). Summarizing, the anti-licensing of *some*-indefinites can be viewed as being due to their lack of NEG-marking, which is required by internal NEG. Granting that the NEG that appears in rescuing contexts is external NEG, the rescuing of *some*-indefinites amounts to non-sensitivity to external NEG. This non-sensitivity is a correlate of Collins & Postal's (2014) analysis of anti-licensing as involving a polyadic negative existential Q. Indeed, an external NEG translates as a unary propositional operator and as such does not require (viz., blocks) the NEG-marking of the indefinites that occur in its scope.

We may now wonder about the role of the rescuing triggers. In a nutshell, we will propose that rescuing triggers are illocutionary heads (or Spec of illocutionary heads) that extend the sentential domain and thereby provide illocutionary positions that can be targeted by NEG-raising at LF, yielding a configuration in which NEG is external (takes as a complement a functional projection higher than the TP). In the absence of rescuing triggers, a sentential negator that is internal (takes the TP as a complement) at surface structure will be unable to raise at LF. In sum, according to our proposal, the rescuing of *some*-PPIs amounts to the LF-raising of NEG, which thereby becomes 'external'. Compare the previous accounts reviewed in Section 2, which (to the exception of Larrivé 2012) implement the hypothesis that rescuing reduces to the cancellation of NEG.

Our syntactic proposal should be complemented by a one-by-one examination of the semantics of rescuing triggers that should explain why they can function not just as run-of-the-mill illocutionary heads but, moreover, as allowing the raising of NEG (there is no reason to believe that all illocutionary heads allow for NEG to raise at LF). We believe that our syntactic proposal can be complemented with Bar-Asher Siegal's semantico-pragmatic characterization of the contexts that allow for *external* negation, but we need to leave this for future work.

In the remaining part of the paper, we will implement the line of analysis outlined above. In Section 5, we will briefly summarize some of the literature that describes phenomena in which external negation is involved. In Section 6, we will present Krifka's (2021, 2023) illocutionary periphery and show how external negation can be analyzed against that background. Section 7 is devoted to rescuing. In Section 7.1, we show that a theory of rescuing stated in terms of external negation can explain the rescuing of *some*-pronouns in English (and probably across languages) and of *des*-indefinites in French. In Section 7.2, we address the problem that is at the origin of our investigation of rescuing. In (16), this problem is restated in terms of external NEG:

- (16) *Some*-pronouns across languages (as well as *des*-indefinites in French) can occur in the scope of external NEG but *some*-NPs cannot do so.

Solving this puzzle requires two further ingredients: on the one hand, a distinction between two types of weak indefinites (Section 7.2.1) and, on the other hand, a pragmatic constraint on rescuing (Section 7.2.2).

5. External negation

This section is devoted to the evidence in favor of external negation found in the previous literature:¹⁴ negators that are specialized for external negation (Section 5.1), the high

¹⁴ Note that some authors may not talk about 'external' negation, but rather about 'high' negation or 'rhetorical negative questions'. It is our observation that such phenomena can be analyzed in terms of external negation (see also Bar-Asher Siegal to appear).

position of negation in questions (Section 5.2) or in declaratives (Section 5.3). These phenomena are independent of rescuing, and as such they will not be critically examined. They are, however, crucial for our own proposal insofar as they constitute independent evidence for the existence of external negation.

5.1. Dedicated external negators

Some languages have dedicated external negators – for example, *neca* in Sicilian or *law* in Jewish Babylonian Aramaic (see Bar-Asher Siegal 2015, Garzonio & Poletto 2015, Bar-Asher Siegal & De Clercq 2019, respectively) – which are crosslinguistically relatively rare:¹⁵

- (17) *neca* arrispunni a tri dumanni ncapu a deci
 NECA answered.3SG to three questions on to ten
 ‘It is not the case that he answered three questions out of ten.’ (n≠3)
 (from Bar-Asher Siegal & De Clercq 2019: 245, their ex. (47))

External and internal sentential negators differ in the positions in which they are merged. On their sentential use *not* and (*ne*) *pas* take TP as a complement, whereas – according to Garzonio & Poletto (2015) and Bar-Asher Siegal & De Clercq (2019) – *neca* in Sicilian and *law* in Jewish Babylonian Aramaic are base-generated in a high functional projection, the Focus of Rizzi’s (1997) Left Periphery. In Section 6, we will suggest that Cinque’s (1998) Epistemic head or Krifka’s (2023) Judge head constitute a better fit than Focus. But for the time being, the crucial point is the existence of external sentential negators.

Sentences built with dedicated external negators are arguably semantically equivalent to sentences of the type in (18), which are, however, clearly different from the syntactic point of view:

- (18) It’s not true/the case that...

5.2. Yes/no questions with preposed negation

Let us next consider *yes/no* Questions with Preposed Negation (QPN):

- (19) (a) Didn’t John meet some boys yesterday?
 (b) Didn’t John meet any boys yesterday?

As shown in (19), QPNs allow for both PPIs and NPIs (*some* boys and *any* boys, respectively). According to Ladd (1981), (19a) and (19b) rely on two distinct underlying structures, which differ as to whether NEG is outside or inside the questioned proposition, respectively conveying a question about *p* or a question about $\neg p$.¹⁶ Beyond this difference,

¹⁵ Horn believed that natural languages lack markers dedicated to external NEG. Bar-Asher Siegal (2015) demonstrated that the Jewish Babylonian Aramaic *law* was such a NEG marker, and Bar-Asher Siegal & De Clercq (2019) made the same point with regard to *neca* in Sicilian.

¹⁶ Ladd (1981) does not provide any structures for these data; he notes that ‘it is not clear what it means to speak of the NEG [=negation] as being outside the questioned proposition, nor is it clear, if the NEG is indeed outside, what it is doing in the sentence at all’ (Ladd 1981: 165), quoted from Romero & Han (2004: 621).

these two types of QPNs are alike in that they contribute the same epistemic implicature: the speaker believes or expects that the positive answer is true (Ladd 1981, Han 1998, Büring & Gunlogson 2000, Romero & Han 2004). This epistemic implicature has the opposite polarity of the question (Romero & Han 2004: 640)¹⁷ and is triggered by VERUM, an epistemic conversational operator, which in (19) is triggered by the preposed negation (ibid., 633–634).¹⁸

Building on previous literature on the VERUM operator (Höhle 1992), Romero & Han (2004) propose the following:

- (20) (a) The epistemic-implicature effect is due to the fact that both types of QPNs necessarily trigger an epistemic conversational operator VERUM.
 (b) The difference between the two types of QPNs (evidenced by the presence of NPIs vs. PPIs) is due to the relative scope of VERUM and NEG – that is, NEG > VERUM and VERUM > NEG, respectively.

Romero & Han do not propose a syntactic analysis of QPNs and acknowledge that their analysis does not explain why it is that QPNs trigger the VERUM operator.¹⁹ In Section 6.1, we will see that Krifka's (2021) hierarchy provides an adequate host for the high NEG in QPNs. More precisely, we will analyze (19a) as involving external NEG at LF, as a result of the LF-raising of NEG to the illocutionary section of the Left Periphery.

5.3. Declaratives with preposed negation

The following examples illustrate declaratives with preposed negative elements:

- (21) (a) Never has John lied. (ex. [121a] in Romero & Han 2004)
 (b) Never would Mary reveal the secret. (ex. [122a] in Romero & Han 2004)

The interpretation of examples of this type involves the kind of epistemic implicature that is present in QPNs, whereas the corresponding examples without NEG-raising (*John has never lied, Mary would never reveal the secret*) do not convey any epistemic bias. According to Romero & Han, (21a) can be paraphrased as 'It is for sure that we should add to CG [Common Ground] that John never lied', and they propose that declaratives with preposed NEG rely on the same VERUM as QPNs. Now, one may wonder whether the paraphrase given by Romero & Han is the only possible one, or whether – on a par with QPNs – declaratives with preposed NEG also allow for a NEG > VERUM scope reading, which would yield the

¹⁷ According to Romero & Han (2004: 612), this can be explained by the interplay between general conversational principles and the intent of the question: 'The LFs for the PI-question and the NI-question interact with the general semantics and pragmatics of *yn*-questions to derive the *positive* content *p* of the epistemic implicature. In the NI-question, the speaker asks the addressee for conclusive evidence for $\neg p$; hence, $\neg p$ is the addressee's proposition and *p* is the speaker's original belief. In the PI-question, the speaker asks the addressee for any possible (weak or strong) doubts about *p*; hence, the speaker's original belief is *p* and the addressee's proposition (if any) is $\neg p$ '.

¹⁸ In addition to negation preposing, the VERUM operator may be triggered by the use of one or the other of a number of markers – for example, Focus, signalled on a polarity item by phonological stress or adverbs such as *really*.

¹⁹ As an answer to this question, Romero & Han (2004: 655) suggest that 'it could be that there is a functional projection for VERUM in the CP domain (in the spirit of Rizzi 1997) which triggers preposing of negation'.

paraphrase ‘It is not for sure that we should add to CG that John ever lied.’ This possibility is expected if VERUM (which according to Romero & Han is triggered by a preposed NEG) can scope both above and below NEG.²⁰

6. Illocutionary functional heads and external negation

Krifka (2015, 2021, 2023) provides a syntax-based semantics of the illocutionary layers of the sentence. The syntactic part of Krifka’s proposal is briefly summarized in Section 6.1. Section 6.2 is devoted to Krifka’s observation that certain verbs may be selectionally ambiguous, being able to take as a complement either a TP (as in the traditional view) or one of the higher illocutionary projections.

6.1. Krifka’s (2021, 2023) illocutionary heads

Krifka (2021, 2023) proposes a hierarchy of three illocutionary functional heads that can generate abstract configurations such as the one in (23), which may be assumed to underlie the English example in (22).²¹ J°, Com° and Act° are the heads of the JUDGE PHRASE, COMMITMENT PHRASE and ACT PHRASE.²²

(22) Seriously, Max probably arrived.

(23) [ActP [Act° [Act° [ComP *seriously* [Com°[Com°⁺] [JP *probably* [J°[J° J-]][TP Max arrived]]]]]]]]]

In this structure, the most embedded constituent is the TP, which denotes the ‘communicated proposition’. The head J° introduces a judge argument *j*, and adverbs such as *probably* are JP-internal modifiers that indicate the strength of the certainty of *j* to the truth of the proposition *p* communicated by TP. The ‘public commitment’ to a proposition is contributed by a silent commitment operator (notated ⁺) inserted in Com°, which is present both in declaratives and questions.²³ This latter distinction is encoded at the level of ActP, the head of which hosts an assertion or a question operator.

²⁰ Romero & Han do not bring up this issue in connection with declaratives with preposed NEG, but they quote Höhle (1992: 124–126), who proposes that German declaratives with Verum Focus show scopal ambiguity w.r.t. NEG (see Romero & Han 2004, their fn. 16–17).

²¹ In the introductory part (pp. 63–70) of Krifka (2021), representations are not paired with examples. We provided the example in (22) in order to facilitate the reader’s comprehension of Krifka’s syntactic representations. The representation in (23) is also not explicitly given. We constructed it by embedding Krifka’s (2021) ComP given in his ex. (8) under an Act° headed by the assertive head.

²² This hierarchy is close to Cinque’s (1998) hierarchy of Mood levels (Speech Act < Evaluation < Evidentiality < Epistemics) but differs from it as follows: (i) in Krifka’s system, evidential and epistemic operators are both related to a single functional projection, the JP; (ii) Krifka has a ComP but no distinct structural position for Evaluation. Krifka’s (2021, 2023) three-layered structure is an enriched version of Krifka’s (2015) system, which had only ActP and ComP above TP.

²³ ‘In an assertion, a speaker makes public a commitment to a proposition, whereas in a question, the speaker restricts the possible continuations of a conversation so that the addressee makes a public commitment to a proposition’ (Krifka 2015: 6). For Krifka, in a question, the speaker is the instigator, and the addressee the committer of the projected commitment (2015: 343).

Given Krifka's illocutionary projections, we may expect Neg^o to be able to attach to TP, JP or ComP. Thus, in the representation of example (24) shown in (25) – see Krifka's (2021) (37) and (39), respectively – NEG scopes above Com^o.²⁴

(24) Didn't Max arrive?

(25) [[[ActP [[Act^o ? Did] [ComP n't [[Com^o┐] [TP Max ~~did~~ arrive]]]]]]]²⁵

Note that according to Krifka, the position of *n't* shown in (25) is that of a negative modifier, the scope of which is ambiguous w.r.t. Com^o (Com^o > *n't* or *n't* > Com^o).

In line with syntactic approaches (Zanuttini 1997, Zeijlstra 2004, 2006), we may assume instead that sentential Neg^{o26} is a functional head that takes as a complement various functional projections. The resulting Neg-headed constituents may be viewed as extended projections of their complements, which we can label Neg/TP, Neg/JP and Neg/ComP, respectively. To illustrate, the representation in (25) can be written as in (26), in which the relevant part is Neg/ComP:

(26) [[[ActP [[Act^o ? Did] [Neg/ComP [NEG^on't] [ComP [Com^o┐] [TP Max ~~did~~ arrive]]]]]]]

As we will see below, our analysis of rescuing will make crucial use of the lower negative extended projection allowed by Krifka's system, Neg/JP, in addition to the currently assumed Neg/TP. We will refer to them as 'external' and 'internal' NEG, respectively.

6.2. On the selectional ambiguity of certain verbs

Krifka (2023: 155–163) argues that embedded clauses, which are traditionally given a uniform analysis as CPs (Complementizer Phrases), need to be distinguished depending on whether the complement of *that* (the Complementizer head) is a TP (as in the traditional view) or one of the higher illocutionary projections. The choice between these possibilities is determined by the selectional properties of the main verb. The following examples correspond to Krifka's (16)–(18):

(27) Unsere Nachtruhe hängt davon ab, dass [TP niemand *ehrlich/*sicherlich laut schnarcht].

'Our good night's sleep depends on that nobody truly / certainly snores loudly.'

(28) Anna glaubt, dass [JP jemand ??ehrlich / sicherlich laut geschnarcht hat].

'Anna believes that somebody truly / certainly snored loudly.'

(29) Anna sagte, dass [ComP jemand ehrlich / sicherlich laut geschnarcht hat].

'Anna said that somebody truly / certainly snored loudly.'

Following Krifka (2023, Section 4), we will further assume that certain main verbs allow for double selection, being compatible (depending on the context and intention of the speaker)

²⁴ The JP level does not appear in this representation because this JP was absent in Krifka's (2015) framework.

²⁵ In our examples, strike through means 'trace of raising'. In (25) and (26), for instance, *did* raised from a TP-internal position to Act^o. The lower occurrence is therefore struck through.

²⁶ To be distinguished from constituent NEG (which can take predicates or QPs in its scope).

with either a *that*-TP or a *that*-JP complement). This possibility may be assumed for predicates such as *regret*, *think* or *be stupid*:

- (30) (a) [_{TP} I regret/do not think/am surprised [that [_{TP} John arrived.]]]
 (b) [_{ComP} I [_{Com°}regret/do not think/am surprised] [that [_{JP} J°[_{TP} John arrived.]]]]

Note that in (30b) the main verb is assumed to sit in Com°. This is in line with Krifka (2023: 144), who says that ‘it is a natural assumption that verbs that are used performatively do not originate in the TP, but as heads of the ComP, where they express a specific type of assertive commitment’. Moreover, in (30b), the judge, who is the speaker, is responsible for the truth of the proposition communicated in the embedded TP (Krifka 2023: 125). The corresponding interpretation could be ‘I am surprised that it is true that the arriving of John happened’, whereas for (30a), it would be ‘I am surprised that the arriving of John happened’. Which interpretation is in use depends on the intention of the speaker, which may be difficult to determine without a specific context.

7. Back to rescuing

Canonical sentential negation is by default interpreted as ‘internal’. The examples of external negation reviewed in Section 5 above involve overt markers (negators specialized for external negation or the overt high placement of negators that normally occur in a lower position) that override this default interpretation. The core hypothesis of the present proposal is that rescuing triggers induce the LF-raising of NEG outside the TP-domain. In Section 7.1, we observe that Krifka’s (2021, 2023) structuring of the illocutionary domain at the left periphery provides positions for both the rescuing operators and for the external negator. This configuration explains the rescuing of *some*-pronouns in English and of *des*-indefinites in French. In Section 7.2, we go back to the PPIs with reduced rescuability (*some*-NPs in English). Our explanation will rely on the interplay between two ingredients: a distinction between two types of weak indefinites (Section 7.2.1) and a pragmatic constraint on rescuing (Section 7.2.2).

7.1. When PPIs are rescuable

Let us now consider an example of rescuing:

- (31) I am surprised that John didn’t invite someone/anyone.

It is interesting to observe that examples like (31) – and more generally, all examples built with rescuing triggers – allow not only for ‘rescued’ PPIs but also for NPIs (as indicated, both *someone* and *anyone* are allowed in [31]).

Under our proposal, the compatibility with both PPIs and NPIs can be explained if we assume, as already proposed in Section 6.2 above, that *surprise* may take as a complement both a *that*-TP and a *that*-JP. The ActP level is left aside because it does not interfere with our argumentation.

- (32) (a) [_{TP} I am surprised [_{CP} that [_{Neg/TP} [_{Neg°}NOT] [_{TP} John did **not** invite anyone.]]]]
 (b) [_{ComP} I [_{Com°} am surprised] [_{CP} that [_{Neg/JP} [_{Neg°}NOT] [_{JP} J° [_{TP} John did **not** invite someone.]]]]]

In (32a), the polarity item is realized as an NPI because it is in the scope of an internal NEG (Neg/TP). In (32b), however, the polarity item surfaces as a PPI because it is in the scope of an external NEG (Neg/JP). The intuitive interpretations corresponding to these two representations could be paraphrased as ‘I am surprised that inviting did not happen’ and ‘I am surprised that it is not true that inviting happened’, respectively.

A parallel analysis would explain why in RCs both *des* (which is a PPI) and *de* (which is an NPI) are possible in French:

- (33) Je suis surprise que Jean n’ait pas invité de policiers/des policiers.
 ‘I am surprised that Jean has not invited DE policemen/DES policemen.’

When (33) contains *de*, its structure is parallel to (32a); when it contains *des*, its structure is parallel to (32b).

In both English and French, the RCs contrast with the ‘anti-licensing’ contexts illustrated below (also recall [1] and [2]):

- (34) ??John didn’t invite someone.
 (35) ??Jean n’a pas invité des policiers.
 ‘Jean has not invited DES policemen.’

The unacceptability of (34)–(35) can be explained as being due to the fact that, in the absence of rescuing triggers, the Com level is not projected, which in turn prevents the projection of the lower functional head J° itself.²⁷ Because there is no higher constituent (in particular no JP) NEG can only head the Neg/TP negative projection. This configuration is the defining context of anti-licensing, hence the acceptability of *de* (a strict NPI) and the unacceptability of *des*, which qualifies as a PPI (see Dobrovie-Sorin 2020). Because the French *quelqu’un* behaves on a par with the English *someone*, we have not illustrated its behavior here. As for *some-NPs*, they are also ruled out in ‘anti-licensing’ contexts like (34)–(35). Why they are not rescued is due to a further constraint, which will be proposed in Section 7.2.2.

Let us now briefly consider the other RCs mentioned in Section 1 – in particular, constructions with *if* and *only* as in (3a) and (3c), repeated below as (36a) and (36b), respectively.

- (36) (a) If we don’t call someone, we are doomed.
 (b) Only John didn’t call someone.

It seems natural/plausible to assume that *if* is selectional-ambiguous, on a par with *surprised*. Thus, *if* could take either TP or JP (or Neg/TP as in (37) or Neg/JP as in (38)) as a complement:

- (37) [CP if [_{Neg/TP} [_{Neg^o} NOT] [_{TP} we do ~~not~~ call anyone.]]]
 (38) [CP [_{ComP} [_{Com^o} if] [_{Neg/JP} [_{Neg^o} NOT] [_{JP} J° [_{TP} we do ~~not~~ call someone.]]]]]

²⁷ This is in line with observations regarding the VERUM operator mentioned in footnote 19. In the absence of markers triggering VERUM (e.g. preposed negation), we do not get the biased epistemic readings characteristic of VERUM (Höhle 1992, Romero & Han 2004).

In (37), *if* expresses conditional relations between events (if an event e_1 of non-calling occurs, then an event e_2 will occur), whereas in (38), the relations hold between propositions (if a proposition non- p is true, then a proposition q will be true). A similar proposal can be made for *only*:

(39) [_{Neg/TP} [_{Neg°}NOT] [_{TP} Only John did ~~not~~ call anyone.]]

(40) [_{ComP} Only John [_{Com°}[_{Com°}┐] [_{Neg/JP} [_{Neg°}NOT] [_{JP}J° [_{TP} did ~~not~~ call someone.]]]]]]

Example (39) says that ‘the non-occurrence of calling was instantiated only for John’ and (40) that ‘the non-truth of someone calling someone holds only for John’.

7.2. On the reduced rescuability of some-NPs

Let us now go back to the starting point of this article, the reduced acceptability of *some*-NPs (as opposed to *some*-pronouns and *des*-NPs in French) in rescuing contexts:

- (41) (a) I am surprised that Mary didn’t read something.
 (b) Je suis surpris que Marie n’ait pas lu des livres.
 (c) ??I am surprised that Mary didn’t read some books.

We need a further constraint, which rules out (41c) but not (41a) and (41b). But before formulating that constraint (Section 7.2.2), we first need to propose differentiating analyses of indefinites (Section 7.2.1).

7.2.1. Types of weak indefinites

On their unmarked interpretation, *some*-pronouns can be viewed as placeholders for a certain argument position of the main predicate. The individuals referred to by means of such pronouns are not introduced independently from the event to which they participate: there is no way of identifying the referent of *someone* otherwise than by the fact that he/she is singing. This type of interpretation can be analyzed as involving polyadic existential quantification over events and individuals:

(42) [[someone]] = $\lambda Q \exists e, x (\text{human}(x) \wedge Q(x)(e))$

(43) Someone was singing in the street.

(44) $\exists e, x (\text{human}(x) \wedge \text{sing}(x)(e))$

A similar type of analysis is appropriate for *des*-NPs in French:

(45) [[des]] = $\lambda P \lambda Q \exists e, x (P(x) \wedge Q(x)(e))$

(46) Des enfants étaient en train de chanter dans la rue.
 DES children were in the process of singing in the street
 ‘DES children were singing in the street.’

(47) $\exists e, x (\text{children}(x) \wedge \text{sing}(x)(e))$

The interpretation of *some*-NPs is different. In an example such as (49), we assert the existence of a group of students, and we attribute to them the property of ‘singing’:

(48) $[[\text{some}]] = \lambda P \lambda Q \exists x (P(x) \wedge Q(x))$

(49) Some students were singing in the street.

(50) $\exists x \text{ students } (x) \wedge \text{singing } (x)$

In a situation-semantic framework, existential quantification over individuals can be viewed as asserting the existence of individuals – that is, stating that an entity exists in a certain situation *s*. Furthermore, it is possible to combine existential quantification over individuals with existential quantification over events,²⁸ hence the following representation:

(51) $\lambda s \exists x [\text{students}(x)(s) \ \& \ \exists e [e \leq_p s \ \& \ \text{sing}(x)(e)]]$

Independent evidence demonstrating the need for distinguishing the weak readings of English *some*-NPs on the one hand and the French *des*-NPs and *some*-pronouns on the other comes from their (in)compatibility with *for*-adverbials. As (52b) and the French (52c) show, *something* and *des sandwiches* ‘sandwiches’ are acceptable (on a par with the English bare plural in (52a)), in contrast to *some sandwiches* and *that sandwich* in (52d) and (52e), respectively.

- (52) (a) John ate sandwiches for 10 minutes.
 (b) John ate something for 10 minutes.
 (c) Jean a mangé des sandwiches pendant 10 minutes.
 Jean has eaten DES sandwiches for 10 minutes
 ‘Jean ate sandwiches for 10 minutes.’
 (d) *John ate some sandwiches for 10 minutes.
 (e) *John ate that sandwich for 10 minutes.

Arguably, the differentiated representations suggested above for *some*-pronouns, *des*-NPs and *some*-NPs may allow us to explain the (un)acceptability observed in (52a–e). But of course, the ongoing debate around the sticky issues related to *for*-adverbials (see, in particular, Chierchia 2023) goes far beyond our present purposes. In what follows, we show that the differentiated representations of weak indefinites may explain their contrasting behavior in rescuing contexts.

7.2.2. Constraining rescuing

Given the analysis of rescuing proposed in previous sections, a possible formulation of the relevant constraint, which needs further empirical support, goes as follows:

- (53) A $[_{TP} p]$ embedded under NEG J must convey existential quantification over a minimal event.

²⁸ This is modelled on Kratzer’s (2021) representation of the antecedent of *Whenever a man rides a donkey, the man gives a treat to the donkey* ((i) is Kratzer’s formula (62)):

(iii) $\lambda s \exists x \exists y [\text{man}(x)(s) \ \& \ \text{donkey}(y)(s) \ \& \ \exists e [e \leq_p s \ \& \ \text{ride}(y)(x)(e)]]$

(53) could be due to some kind of general constraint on what is (proposed to be) inserted in the Common Ground: the more ‘minimal’ events are, the easier it is for them to be introduced in the Common Ground by the hearer.

Let us now consider again the examples in (41) and explain why *some*-pronouns, as well as *des*-NPs, satisfy the constraint in (53), in contrast to *some*-NPs:

- (54) (a) I am surprised that Mary didn’t read something.
 (b) Je suis surpris que Marie n’ait pas lu des livres.
 (c) ??I am surprised that Mary didn’t read some books.

After the raising of NEG above JP, the embedded TPs are represented as below:

- (55) (a) $\exists e, x (\text{thing}(x) \wedge \text{read}(x)(m)(e))$
 (b) $\exists e, x (\text{books}(x) \wedge \text{read}(x)(m)(e))$
 (c) $\lambda s \exists x [\text{books}(x)(s) \wedge \exists e [e \leq_p s \wedge \text{read}(x)(m)(e)]]$

The LF in (55a) asserts the existence of a reading of something by Mary. This event can be kept as short as possible, and as such it will satisfy the minimality constraint formulated above.

The LF in (55c) asserts the existence of the reading of several books by Mary, which violates (53): events are individuated w.r.t. the atomic individuals that participate in the event, which means that (54c) refers to a plural event the cardinality of which is identical to the cardinality of the books.

Note now that (55b) resembles (55c) in that several books are involved in the event, and yet the corresponding example in (54b) is acceptable. The reason is already represented in (55b) vs. (55c). In the latter case, the plural entity referred to by *some books* is introduced as occurring in the situation *s* separately from the event of reading itself; because of this independent identification, the plural individual referred to by *some books* forces the event of reading to be split up in as many atomic events as there are atomic books. In (55b), however, the books are not introduced separately from the event, and as such, they do not multiply the event to which they participate and minimality is satisfied.

7.3. When *some*-NPs are rescuable

In this section, we will consider several examples in which *some*-NPs seem rescuable. We plan to verify our judgments by means of experiments. Here, we will simply provide some examples and suggest a possible explanation for the indicated acceptability. The first type of example involves *some*-NPs built with mass nouns:

- (56) (a) I am surprised that John didn’t hear some noise last night.
 (b) I regret that Mary didn’t read some poetry.
 (c) Only John didn’t eat some cake.

It seems plausible to suggest that the acceptability observed here is due to the fact that in unmarked contexts, mass entities are not made up of atoms, and as such, they cannot be individuated and introduced separately from the event to which they participate. Such examples are therefore represented as involving polyadic quantification over atomic events

(individuated by the shortest time interval that allows the completion of an event of the relevant kind), thus obeying the minimality constraint.

(57) $\exists e, x (\text{noise}(x) \wedge \text{hear}(x)(j)(e))$

Note, finally, that even *some*-NPs built with plural nouns seem rescuable in certain examples:

(58) I am surprised that John didn't call some musicians/meet some immigrants/help some fugitives.

We would like to suggest that in this case, the acceptability is due to the fact that the verb together with the plural noun phrase convey the description of one event of calling, meeting, helping, etc. involving a group-participant. Such examples are also represented as involving polyadic existential quantification:

(59) $\exists e, x (\text{musicians}(x) \wedge \text{call}(x)(j)(e))$

According to this formula, the example in (59) asserts the existence of an atomic event of a group of musicians being simultaneously called by John. The minimality constraint is satisfied. Compare the examples that we had considered previously – for example, (54c): since books are in general read one after the other, *some books* is not interpreted as a group participating to an atomic event but rather as a plurality of atoms that split up the event in a plurality of sub-events.

We may thus conclude that *some*-NPs and *des*-NPs differ regarding their default representations: the former introduce a plural entity individuated separately from the event denoted by the main verb, whereas the latter cannot do so on their unmarked reading, which is weak,²⁹ but instead introduce a variable over individuals that gets unselectively bound by a binary existential Q (over event, individual pairs). But the descriptive content of the verb combined with that of the noun may override the default representation of *some*-NPs, yielding polyadic quantification over events and individuals.

8. Conclusion

In this paper, we have investigated the empirical observation that there is a contrast among different indefinite PPIs regarding their rescuing potential (Dobrovie-Sorin 2020, Dobrovie-Sorin & Ihsane 2022). By means of an Acceptability Judgment Task, we confirmed that *some*-NPs are less rescuable, in contrast to *some*-pronouns (in both English and French) and *des*-indefinites in French, and showed that this difference is statistically significant. We also established that the rescuing ability of the various tested operators (*if*, *surprise*, *only*, *don't think*) varies as a function of the PPI.

To explain the different distribution between *some*-pronouns and *some*-NPs in English, and between English *some*-NPs and French *des*-NPs in RCs, we have proposed that the left periphery of RCs differs from the left periphery of anti-licensing constructions: the former, in contrast to the latter, comprise several illocutionary functional heads above TP, one of which

²⁹ For the specific interpretation of *des*-indefinites, see Ihsane (2020).

hosts the rescuing operator (for example, *surprise, if, only*). Correlatively, the negation involved in RCs is ‘external’ in the sense that, at LF, it takes as an argument JP, one of the illocutionary functional layers above TP: as a result, PPIs can scope under NEG, because they are insensitive to external negation (Neg/JP). In this setup, anti-licensing is a phenomenon that relates only to internal NEG (Neg/TP).

RCs also admit NPIs as in *I am surprised that John didn't invite anyone*. To account for this possibility, we have assumed that certain main verbs display a selection ambiguity (Krifka 2023): they may take as complement either one of the illocutionary projections above TP (hence, NEG is external and polarity items are realized as PPIs) or the TP (hence, NEG is internal and polarity items are realized as NPIs).

As for our initial puzzle – namely, the difference in rescuing potential between *some*-pronouns and *des*-NPs on the one hand and *some*-NPs on the other hand – we have proposed that this is due to the interplay between two assumptions, the distinct LF representations of these two classes of indefinites and a minimal-event constraint on propositions embedded under Neg/JP. The minimal-event constraint is satisfied by the use of *des*-indefinites and *some*-pronouns because their LF involves polyadic existential quantification over events and individuals, which amounts to asserting the existence of a single event. *Some*-NPs, on the other hand, assert the existence of plural individuals, and this will yield a plural event (comprising as many atomic sub-events as there are atomic individuals in the sum denoted by the referent of the *some*-NP), which will violate the minimal-event restriction. Hence, the degraded acceptability of *some*-NPs in RCs. It is, however, fully clear to us that these assumptions are in need of further investigation and are, as they stand, a first tentative approach to capture the data patterns observed.

In sum, unlike previous work on RCs (cf. Section 2), our analysis accounts for a contrast between two types of *some*-PPIs (*some*-pronouns and *some*-NPs) that has largely gone unnoticed in the literature so far and explains why both PPIs and NPIs are possible in RC contexts. Our proposal is syntax-based and builds on an assumption in line with Larrivée (2012) – namely, that the negation involved in rescuing is external to the propositional content. However, in contrast to Larrivée, we *implement* the fact that it is the ‘activation’ of the proposition by rescuing triggers that enables the negation to be external: it is because rescuing triggers occupy a TP-external illocutionary functional projection that the negation itself can be TP-external. We have also extended the proposal to cross-linguistic data, showing that *des*-NPs in French pattern with *some*-pronouns (in English and French), not with English *some*-NPs as one may expect. This difference is explained as being due to the distinct LF representations of *des*-NPs and *some*-NPs, which are independently supported by their differentiating behavior when combined with *for*-adverbials. Finally, we have observed that in some contexts the default representation of *some*-NPs may be overridden: when a mass noun or a group-participant is involved, the descriptive content of the nominal combined with that of the verb may yield polyadic quantification over a single event. As a result, the minimality condition is satisfied and the *some*-NP is rescued.

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References

- Abbuhi, Rebekha, Susan Gass & Alison Mackey. 2013. Experimental research design. In Robert J. Podesva & Devyani Sharma (eds.), *Research methods in linguistics*, 116–134. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9781139013734.008>
- Baker, C. Lee. 1970. Problems of polarity in counterfactuals. In Jerrold M. Sadock & Anthony L. Vanek (eds.), *Studies presented to Robert B. Lees by his students*, 1–15. Edmonton: Linguistic Research.
- Bar-Asher Siegal, Elitzur A. 2015. The case for external sentential negation: Evidence from Jewish Babylonian Aramaic. *Linguistics*. 53. 1031–1078. <https://doi.org/10.1515/ling-2015-0025>
- Bar-Asher Siegal, Elitzur A. to appear. How can history inform semantics: A formal study of external negation. In Elitzur Bar-Asher Siegal, Nora Boneh, Eitan Grossman & Aynat Rubinstein (eds.), *Language change: Theoretical and empirical perspectives*. Cham: Springer.
- Bar-Asher Siegal, Elitzur A. & Karen De Clercq. 2019. From negative cleft to external negator. In Miriam Bouzouita, Anne Breitbarth, Lieven Danckaert & Elisabeth Witzenhäuser (eds.), *Cycles of language change*, 228–248. Oxford: Oxford University Press. <https://doi.org/10.1093/oso/9780198824961.003.0012>
- Büring, Daniel & Christine Gunlogson. 2000. Aren't positive and negative polar questions the same? Presented at *Linguistic Society of America (LSA) Annual Meeting*, University of Chicago.
- Chierchia, Gennaro. 2011. *Meaning as inference: The polarity system*. Ms., Harvard University.
- Chierchia, Gennaro. 2023. Kinds, properties and atelicity. *Proceedings of SALT*. 33. 62–87. <https://doi.org/10.3765/q4xap035>
- Christensen, Rune H. B. 2019. Ordinal—Regression models for ordinal data. R package version 2019.12–10, <http://www.cran.r-project.org/package=ordinal/> (8 May 2025).
- Cinque, Guglielmo. 1998. *Adverbs and functional heads: A cross-linguistic perspective*. Oxford: Oxford University Press. <https://doi.org/10.1093/oso/9780195115260.001.0001>
- Collins, Chris & Paul M. Postal. 2014. *Classical NEG raising: An essay on the syntax of negation*. Cambridge, MA: MIT press. <https://doi.org/10.7551/mitpress/9780262027311.001.0001>
- De Clercq, Karen. 2020. Types of negation. In Maria Teresa Espinal & Viviane Déprez (eds.), *The Oxford handbook of negation*, 58–74. Oxford: Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780198830528.013.2>
- Dobrovie-Sorin, Carmen. 2020. Negation, *des*-indefinites in French and bare nouns across languages. In Tabea Ihsane (ed.), *Disentangling bare nouns and nominals introduced by a partitive article*, 187–226. Leiden: Brill. https://doi.org/10.1163/9789004437500_007
- Dobrovie-Sorin, Carmen & Tabea Ihsane. 2022. On the rescuing of PPIs: *some*-NPs vs. *some*-pronouns in English. In Gabriela Alboiu, Daniela Isac, Alexandru Nicolae, Mihaela Tănase-Dogaru & Alina Tigău (eds.), *A life in linguistics: A festschrift for Alexandra Cornilescu on her 75th birthday*, 217–225. Bucharest: Bucharest University Press.
- Dryer, Matthew S. 1996. Focus, pragmatic presupposition, and activated propositions. *Journal of Pragmatics*. 26. 475–523. [https://doi.org/10.1016/0378-2166\(95\)00059-3](https://doi.org/10.1016/0378-2166(95)00059-3)
- Garzonio, Jacopo & Cecilia Poletto. 2015. On preverbal negation in Sicilian and syntactic parasitism. *Isogloss*. 18. 133–149. <https://doi.org/10.5565/rev/isogloss.18>
- Han, Chung-hye. 1998. Deriving the interpretation of rhetorical questions. *Proceedings of West Coast Conference in Formal Linguistics*. 16. 237–253.
- Höhle, Tilman. 1992. Über Verum Fokus im Deutschen. *Linguistische Berichte Sonderheft*. 4. 112–141. https://doi.org/10.1007/978-3-663-12176-3_5
- Homer, Vincent. 2011. *Polarity and modality*. UCLA dissertation.
- Horn, Laurence. 1989. *A natural history of negation*. Chicago: CSLI.
- Horn, Laurence. 2001. The logic of logical double negation. *Proceedings of the Sophia Symposium on Negation*. 79–111.
- Ihsane, Tabea. 2020. Telicity, specificity, and complements with a plural “partitive article” in French. In Tabea Ihsane (ed.), *Disentangling bare nouns and nominals introduced by a partitive article*, 227–261. Leiden: Brill. https://doi.org/10.1163/9789004437500_008
- Jespersen, Otto. 1917. *Negation in English and other languages*. Copenhagen: A. F. Høst.
- Kratzer, Angelika. 2021. Situations in natural language semantics. In Edward N. Zalta (ed.), *The Stanford encyclopedia of philosophy* (Winter 2021 Edition), <https://plato.stanford.edu/archives/win2021/entries/situations-semantics/> (8 May 2025).
- Krifka, Manfred. 2015. Bias in commitment space semantics: Declarative questions, negated questions, and question tags. *Proceedings of SALT*. 25. 328–345. <https://doi.org/10.3765/salt.v25i0.3078>

- Krifka, Manfred. 2021. Modelling questions in commitment spaces. In Moritz Cordes (ed.), *Asking and answering*, 63–95. Tübingen: Narr. <https://doi.org/10.24053/9783823394808>
- Krifka, Manfred. 2023. Layers of assertive clauses: Propositions, judgements, commitments, acts. In Jutta M. Hartmann & Angelika Wöllstein (eds.), *Propositionale Argumente im Sprachvergleich: Theorie und Empirie / Propositional arguments in cross-linguistic research: Theoretical and empirical issues*, 116–183. Tübingen: Narr. <https://doi.org/10.24053/9783823394105>
- Ladd, Robert D. 1981. A first look at the semantics and pragmatics of negative questions and tag questions. *Papers from the Regional Meeting of the Chicago Linguistic Society*. 17. 164–171.
- Ladusaw, William A. 1979. *Polarity sensitivity as inherent scope relations*. University of Texas at Austin dissertation.
- Larrivé, Pierre. 2012. Positive polarity items, negation, activated propositions. *Linguistics*. 50(4). 869–900. <https://doi.org/10.1515/ling-2012-0027>
- McCullagh, Peter. 1980. Regression model for ordinal data (with discussion). *Journal of the Royal Statistical Society B*. 42. 109–127.
- Nicolae, Andreea. 2012. Positive polarity items: An alternative-based account. *Proceedings of Sinn und Bedeutung*. 16(2). 475–488.
- Onea, Edgar & Alexander Syring. 2011–. *OnExp 1.2*, <https://www.lingexp.uni-tuebingen.de/OnExp2/index.php> (8 May 2025).
- Rizzi, Luigi. 1997. The fine Structure of the left periphery. In Liliane Haegeman (ed.), *Elements of grammar*, 281–337. Dordrecht: Kluwer. https://doi.org/10.1007/978-94-011-5420-8_7
- Romero, Maribel & Chung-hye Han. 2004. On negative yes/no questions. *Linguistics and Philosophy*. 27. 609–658. <https://doi.org/10.1023/B:LING.0000033850.15705.94>
- Sadock, Jerrold. 1974. *Toward a linguistic theory of speech acts*. New York: Academic Press.
- Schaebicke, Katharina, Heiko Seeliger & Sephie Repp. 2021. The diverse landscape of negative polarity items: On the use of German NPIs as experimental diagnostics. *Journal of Psycholinguistic Research*. 50. 1461–1486. <https://doi.org/10.1007/s10936-021-09793-0>
- Schütze, Carson T. & Jon Sprouse. 2013. Judgment data. In Robert J. Podesva & Devyani Sharma (eds.), *Research methods in linguistics*, 27–50. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9781139013734.004>
- Schwarz, Bernhard & Rajesh Bhatt. 2006. Light negation and polarity. In Raffaella Zanuttini, Héctor Campos, Elena Herburger & Paul H. Portner (eds.), *Crosslinguistic research in syntax and semantics: Negation, tense, and clausal architecture*, 175–198. Washington, DC: Georgetown University Press.
- Speas, Peggy & Carol Tenny. 2003. Configurational properties of point of view roles. In Anna-Maria di Sciullo (ed.), *Asymmetry in grammar*, vol. 1, 315–344. Amsterdam/Philadelphia: John Benjamins. <https://doi.org/10.1075/la.57.15spe>
- Spector, Benjamin. 2014. Global positive polarity items and obligatory exhaustivity. *Semantics & pragmatics*. 7. 1–61. <https://doi.org/10.3765/sp.7.11>
- Szabolcsi, Anna. 2004. Positive polarity–negative polarity. *Natural Language and Linguistic Theory*. 22(2). 409–452. <https://doi.org/10.1023/B:NALA.0000015791.00288.43>
- van der Sandt, Rob. 1991. Denial. In *Papers from CLS 27(2): the parasession on negation*. Chicago: Chicago Linguistic Society, 331–344.
- Wiltschko, Martina. 2021. *The grammar of interactional language*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/9781108693707>
- Zanuttini, Raffaella. 1997. *Negation and clausal structure. A comparative study of Romance languages*. Oxford: Oxford University Press.
- Zeijlstra, Hedde. 2004. *Sentential negation and negative concord*. University of Amsterdam dissertation.
- Zeijlstra, Hedde. 2006. The ban on true negative imperatives. *Empirical Issues in Formal Syntax and Semantics*. 6. 405–424.
- Zeugin, Senta. 2021. DOM in modern Catalan varieties. In Johannes Kabatek, Philipp Obrist & Albert Wall (eds.), *Differential object marking in Romance. The third wave*, 279–314. Berlin/New York: de Gruyter. doi:<https://doi.org/10.1515/9783110716207-010>