

NEGATIVE POLARITY LICENSING, FACTIVITY AND THE CP FIELD

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1. Introduction¹

There are a number of asymmetries in the behavior of sentential complement clauses embedded under non-factive versus factive (Kiparsky & Kiparsky 1971) predicates.² The primary goal of this paper is to examine one of these asymmetries; the licensing of Negative Polarity Items (NPIs) in sentential complements when they are embedded under these different classes of predicates with matrix negation.³ The NPI *a red cent* needs to be licensed by negation, as shown in (1).

- (1) (a) *Jon has **a red cent** to his name.
(b) Jon doesn't have **a red cent** to his name.
- (2) (a) I don't **believe** that Jon has **a red cent** to his name.
(b) *I don't **regret** that Jon has **a red cent** to his name.

In (2a), matrix negation licenses *a red cent* in the embedded clause of non-factive *believe*. However, in (2b) matrix negation fails to license *a red cent* in the clause embedded under factive *regret*. This difference is puzzling, given that the only apparent difference between the sentences is in the choice of verb.

In addition to the NPI licensing facts above, a semantic difference is also found when complement clauses are embedded under factive versus non-factive predicates. Only under factives are the complement clauses presupposed to be true. This is illustrated in (3) and (4).

- (3) (a) George **believes** [that there are WMDs in Iraq]
(b) George doesn't **believe** [that there are WMDs in Iraq]

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² Note that I use the terms *factive* and *non-factive* for ease of exposition. In fact, a predicate classification along the lines of *stance verbs* as presented in Cattell (1978), and modified by Hegarty (1992) is more accurate. In this paper, when I use the term *factive* I am referring to *response-stance* and *non-stance* predicates, while *non-factive* refers to *volunteered-stance* predicates. See also footnote 3.

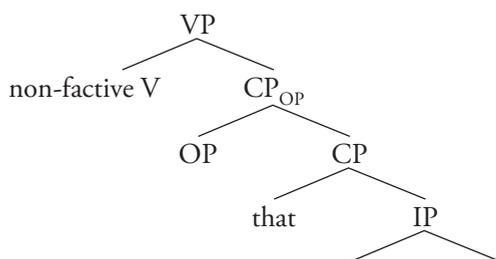
³ Two other asymmetries, namely the availability of embedded verb second in Mainland Scandinavian, and factive island constraints, will be discussed in sections 3 and 4 respectively.

- (4) (a) #George **regrets** [that there are WMDs in Iraq]
 (b) #George doesn't **regret** [that there are WMDs in Iraq]

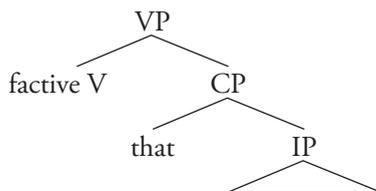
If we assume that there are no weapons of mass destruction (WMDs) in Iraq, the sentences in (3) are fine, while those in (4) are out. Non-factive predicates do not presuppose that their complements are true, while factive predicates do.

In this paper, I argue that these two asymmetries, (a) in NPI licensing, and (b) in presupposition, can be explained with a unified analysis. The main proposal involves the difference in structure shown in (5).

- (5) (a) **non-factives** (*believe, think, assume, claim, deny, doubt*)



- (b) **factives** (*regret, resent, hate, realize, forget, notice*)



I propose that there is an extra projection in the CP field selected by non-factive verbs like *deny* and *believe*, and that this projection is not present under factive verbs like *regret*.⁴ The extra projection, present in the non-factive structure in (5a) but not in the factive structure in (5b), is headed by an operator that licenses NPIs when embedded under a matrix negative verb or negated non-factive predicate, as in (2a). The lack of the operator under factives, as in (2b), leaves the NPI without a local licenser, crashing the sentence.

In addition to licensing NPIs, I propose that the operator is necessary to serve the important function of separating the speaker from responsibility for the truth content of the embedded sentence. This is in line with work by Nichols (2001), who proposes an ‘assertive operator’ associated with non-factive predicates, and Progovac (1994), who proposes an operator in Comp that is licensed by ‘unfixed truth-values’. The proposed operator in the non-factive structure in (5a) allows for the non-factive interpretations in (3), while its absence in (4) ensures a factive reading. The present

⁴ The idea of CP-recursion being possible under non-factive predicates as in (9a) is not new. Holmberg (1986), Platzack (1986) Iatridou & Kroch (1992) and de Cuba (2002), among many others, propose CP-recursion to account for embedded verb second phenomena in many Germanic languages. See further discussion in section 3.

proposal differs from Nichols and Progovac in arguing that the operator creates syntactic structure.

The paper is organized as follows. In section 2, I present Laka's (1990) negative complementizer analysis of non-local NPI licensing. It is superficially similar to the current proposal but, as will be seen, it faces certain problems not faced by the operator analysis. Section 3 presents syntactic and semantic motivation for the proposed structure. In section 4, I briefly present an analysis of factive island phenomena, exploiting the presence of extra structure in non-factives to open an escape hatch for adjunct extraction. In section 5, I argue that the proposed operator and its associated syntactic projection are sometimes optional, and that the so-called negative complementizer in Basque can be decomposed into two separate morphemes, with the second being associated with the operator. Section 6 presents more data from Basque, examining two types of factive complementation. Section 7 is the conclusion.

2. Laka's Negative Complementizer Analysis

Laka (1990) argues that NPIs in sentential complement clauses are licensed by a negative complementizer. She gives the data in (6) to provide evidence that there is an intermediate licenser available to license NPIs interclausally.

- (6) (a) *The witnesses denied **anything**
 (b) I deny [**that**_{NEG} the witnesses denied **anything**] (Laka 1990: 169)

In (6a) the NPI *anything* fails to be licensed by the negative verb *deny* in its own clause, but in (6b) *deny* selects a negative complementizer that in turn licenses *anything* in the embedded clause. Laka shows that in Basque, unlike English, negative complementizers differ morphologically from their declarative counterparts. In (7a) the declarative complementizer (*e*)*la* appears, while the negative complementizer (*e*)*nik* appears under the negative verb *deny*. (7b) also shows that the NPI *anyone* is licensed interclausally, just like English *anything* in (6b).

- (7) (a) [Galapagoak muskerrez beterik daudela] diote
Galapagos lizards-of full are-that say-they
 'They say that the Galapagos are full of lizards'
 (b) Amaiak [**inork** gorrotoa dionik] ukatu du
Amaia anyone hatred has-that_{NEG} denied has
 'Amaia denied that anybody hated her' (Laka 1990: 204-5)

While at first blush Laka's analysis seems to account for the data, problems arise when we look more closely at English. First, complementizers are optional under non-factive verbs like *believe*.

- (8) (a) *I believe [(that) Jim **slept a wink** last night]
 (b) I **don't** believe [(that) Jim **slept a wink** last night]

(8a) confirms that the NPI *slept a wink* is unlicensed in the absence of negation, while in (8b), it is grammatical in the presence of matrix negation. The grammaticality of (8b) is not affected in the absence of *that*. This is unexpected under Laka's

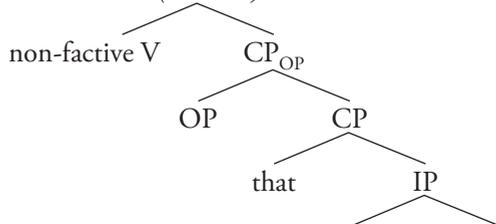
analysis, as for her the negative complementizer is the licenser of polarity items in embedded clauses.

The above problem may be solved with a PF deletion or null complementizer analysis, but a second, more serious problem arises in the complements of factive verbs in English. The NPI licensing that seems to occur interclausally in sentences like (6b) and (8b) does not take place in their factive counterparts.

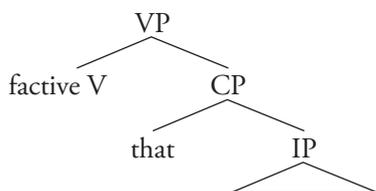
- (9) (a) *I regret [(that) Jim **slept a wink** last night]
 (b) *I don't regret [(that) Jim **slept a wink** last night]

Under a Laka-style analysis, we would expect (9b) to be grammatical, with the NPI *slept a wink* licensed by a negative *that*_{NEG} selected by the negated matrix verb, as in (8b). The fact that (9b) is ungrammatical brings the negative complementizer analysis into question. Given this problem, I argue for a modification to the negative complementizer analysis that maintains the attractive points of Laka (1990), and moreover, accounts for the difference between (8) and (9). The structures in (5), repeated below, provide a difference in the syntax, with (8b) corresponding to non-factive (5a), and (9b) corresponding to factive (5b).

- (5) (a) **non-factives** (*as in 8b*)



- (b) **factives** (*as in 9b*)



Crucially, the operator is a separate entity from the complementizer. Only in non-factive (5a) is there an operator available to license the NPI in the embedded clause.

3. Motivation for the Extra Structure and Operator

The clausal/non-clausal asymmetry in NPI licensing by inherently negative verbs like *deny* and *doubt*, was illustrated in (6). There is no such asymmetry induced by overt negation, as illustrated in (10).

- (10) (a) The witnesses **didn't** say **that**_{NEG} **anybody** left the room before dinner.
 (b) The witnesses **didn't** say **anything**. (Laka 1990: 179)

However, Laka's analysis of (10a) is the same as (6b). The negative complementizer is selected by the negated matrix verb, and the NPI *anybody* is licensed by the complementizer. In Basque, matrix negation also licenses an NPI in a non-negative embedded clause, as in (11). As in (10a), *anybody* is licensed by the complementizer.

- (11) **Ez** du Zurinek [**inor** etorriko **denik**] esan
no has Zurine anybody come will AUX-that_{NEG} said
 'Zurine has not said that anybody will come' (Laka 1990: 209)

Laka's proposal follows Progovac (1988, 1994) in arguing that the syntax of sentential clauses embedded under inherently negative verbs differs from the syntax of those embedded under non-negative verbs. While Laka proposes that a different complementizer is selected under negated or negative matrix verbs, Progovac argues for an operator in the head of Comp, as in (12).

- (12) I doubt [_{CP} [_C that **OP** [_{IP} **anyone** has come.]]] (Progovac 1994: 67)

For Progovac, this operator is licensed in a clause whose truth-value is not set positively. The operator also appears in other contexts with unfixed truth-values, as in (13-16), which are all non-negative polarity contexts. The NPIs in these sentences are all licensed by the operator in the absence of negation.

- (13) Yes/no questions:
 [_{CP} [_C Has **OP** [_{IP} **anyone** come?]]]
- (14) Conditionals:
 [_{CP} [_C If **OP** [_{IP} **anyone** comes]]], let me know.
- (15) Universal Quantifiers:
 [_{NP} Every man [_{CP} who [_C has **OP** [_{IP} read **anything** by Chomsky]]]]
 will attend the lecture.
- (16) Counterfactual Conditionals:
 [_{CP} Had **OP** [_{IP} **anyone** misbehaved], we would have left.]
 (Progovac 1994: 67)

Progovac argues against a Downward Entailing (DE) analysis of NPIs (Ladusaw 1980), pointing out that yes/no questions like (13) license NPIs without being DE environments. In embedded contexts the operator must be selected by the matrix predicate, as in (12), or by a quantifier, as in (15). Progovac provides further motivation for the existence of this operator. With the proper intonation, a question without Subject Auxiliary Inversion (SAI) is possible, as in (17a).

- (17) (a) He complained about his salary?
 (b) ?*He complained about **anything**?
 (c) Did he complain about **anything**? (Progovac 1994: 76-7)

If we suppose that SAI is triggered by the operator in Comp, then the contrast between (17b) and (17c) falls out: (17b) is out because there is no operator there to trigger movement, and if there is no operator in the structure, there is no licenser for *anything*.

3.1. Embedded Verb Second

The main claim of this paper is that there is an extra syntactic projection in the CP field under non-factive predicates. More evidence for this projection comes from cases of embedded verb second (EV2) in Germanic. EV2 is possible under a complementizer in the Mainland Scandinavian languages, among others (Vikner 1995: 66). This is shown in the Swedish examples in (18), where optional EV2 takes place in (18b), with the finite verb moving above negation.

- (18) (a) Rickard sa att han **inte var** hemma [Swedish]
*Rickard said that he **not was** home*
 (b) Rickard sa att han **var inte** hemma
*Rickard said that he **was not** home*
 ‘Rickard said that he was not home.’

Vikner follows many others in arguing for a recursive CP structure to accommodate the presence of an overt complementizer (in the higher CP) and verb second movement (in the lower CP). It is notable that CP-recursion is only possible under non-factive predicates.⁵ This is illustrated in (19), where EV2 is not available under factive *regret*.

- (19) (a) Rickard ångrade att han **inte var** hemma [Swedish]
*Rickard regretted that he **not was** home*
 (b) *Rickard ångrade att han **var inte** hemma
Rickard regretted that he **was not home*
 ‘Rickard regretted that he was not home.’

The proposed structures in (5) accommodate these facts easily, as there are two CP layers under non-factives to accommodate both the overt complementizer (in the upper CP) and EV2 (in the lower CP) in (18b), but only one CP available under factives, ruling out (19b).

4. Factive Islands

Nichols (2001) examines the syntax and semantics of propositional attitude reports, focusing on extraction facts. Adjunct extraction is allowed from under a non-factive predicate like *believe*, but not from under a factive like *regret* (20).

- (20) (a) How do you think that you behaved *t* ?
 (b) *How do you regret that you behaved *t* ?

⁵ Vikner (1995: 71-2) gives lists of verbs that allow and don't allow EV2 in Danish and German. Vikner found no properties shared by all the verbs in either of the lists. However, Hegarty (1992) shows that the lists can be easily categorized in terms of a slightly modified version of Cattell's (1978) *stance verbs*. The verbs that allow EV2 are *volunteered-stance*, and those that do not allow EV2 are either *response-stance* or *non-stance*. These classifications fit the data much more precisely than the standard *factive/non-factive* distinction.

Nichols argues for the special status of non-factives as opposed to factives, and that there is an operator associated with non-factives that is not present under factives. She states:

A consideration of the semantic properties of the factivity classes in terms of the character of evaluation sets of worlds reveals that the factivity problem as currently stated (e.g. “Why is extraction blocked out of factive complements?”) has been conceptualized the wrong way around, essentially backwards.

(Nichols 2001: 121)

Nichols proposes that there is an ‘assertive operator’ associated with non-factive verbs. The contribution of the operator is summarized briefly in (21).

- (21) (a) CPs have associated context variable sets $C \langle \text{speaker (source), time, world} \rangle$ needed for interpretation, as in (Schlenker 1999).
 (b) value $\langle + \text{ current speaker} \rangle$ – the actual world is necessarily included in the evaluation set – main clauses.
 (c) Factives – do not supply a $\langle \text{speaker} \rangle$ value to the context variable set – the default value is specified $\langle + \text{ current speaker} \rangle$.
 (d) Non-factives – have an assertive operator that can supply a different value for $\langle \text{speaker} \rangle$.

Nichols assigns no position in the syntax to the assertive operator. For her, syntactic differences derive from semantic properties.⁶ Factive islands like (20b) are considered the norm—in other words, adjunct movement is not allowed in normal circumstances. Only under the special condition in which the assertive operator is present, changing the $\langle \text{speaker} \rangle$ value in the evaluation set of the embedded clause, do we get an extension of the domain of movement. For Nichols, this is what allows adjunct movement in (20a) as opposed to (21b) where there is no domain extension.

A full discussion of factive islands is beyond the scope of this paper. However, I will briefly show that there is a syntactic alternative to the Nichols (2001) semantic domain extension analysis presented above. The additional CP structure I proposed in non-factive (5a) plays a crucial role in allowing for adjunct extraction from non-factive complements. McCloskey (2005), following Chomsky (1986), proposes the ‘Adjunction Prohibition’, banning adjunction to any lexically selected phrase.

- (22) Adjunction to a phrase which is s-selected by a lexical (open class) head is ungrammatical.

Adjunction to a lexically selected phrase is argued to interfere with the selectional relationship between the selecting verb and its complement. Following the Adjunction Prohibition, adjunction to a CP that is directly selected by a matrix verb (or adjective) is impossible, while adjunction to a CP selected by a functional head is possible.

⁶ Nichols (2001) does not analyze the cases of non-local NPI licensing that are presented in this paper, or cases of embedded verb second under non-factives in Germanic, two cases in which clear syntactic differences appear to go along with the semantic differences in predicate classes. I takes these cases as evidence for the structural difference proposed in (5).

sible. A CP-recursion structure like that in non-factive (5a) opens up the lower CP for adjunction, as the lower CP is not lexically selected. In the present analysis, CP-recursion is only available in non-factives, and this adjunction position provides the escape hatch for adjunct extraction. Factives, which I argue are lexically selected, as in the factive structure in (5b), do not have this adjunction possibility, and are thus islands for adjunct extraction.⁷

The work of Laka (1990) and Progovac (1994), in addition to the Mainland Scandinavian EV2 facts discussed above, provides evidence that there is a syntactic component to NPI licensing in non-negative contexts, as opposed to a purely semantic treatment. The present analysis follows the analyses of Laka and Progovac in proposing an operator that facilitates NPI licensing across a CP boundary, but departs from them by arguing that this operator creates syntactic structure. In the next section, I argue that the proposed operator and its associated syntactic projection are sometimes optional.

5. Optional extra structure?

The availability of a factive/non-factive reading correlates with syntactic structure cross-linguistically. In fact, some normally non-factive verbs can allow a factive reading of their complement, and some normally factive verbs can allow a non-factive reading. I propose that what is crucial is not whether or not the verb itself is factive or non-factive, but whether or not the extra structure is present. Basque, English and Hungarian all show syntactic and semantic effects that provide evidence that the optional interpretations are due to the presence or absence of the proposed extra structure in non-factive (5a), not to the semantics of the particular verb.

5.1. Basque

Basque shows a very interesting complementizer alternation with syntactic and semantic effects relevant to the present discussion. Laka (1990) presents a pair of sentences that are identical except for the choice of complementizer.

- (23) (a) *Iñigok ez du sinisten [lurrak eztanda egingo duela]*
Iñigo no has believed earth explode do will AUX-that
 ‘Iñigo does not believe that the earth will explode’
- (b) *Iñigo ez du sinisten [lurrak eztanda egingo duenik]*
Iñigo no has believed earth explode do will AUX-that_{NEG}
 ‘Iñigo does not believe that the earth will explode’ (Laka 1990: 211)

In (23a) the declarative complementizer (*e*)*la* is present, while in (23b) the negative complementizer (*e*)*nik* appears. Laka describes the semantic difference between the two in the following way: in (23a), *that the earth will explode* is taken to be a fact,

⁷ An argument in the specifier of CP does not affect selection the way an adjunct does. The idea I am pursuing here is that argument and adjunct movement are essentially different, with arguments moving through spec CP while adjuncts re-adjoin to CP. The methods of attachment to CP differ, with conditions on adjunct extraction being more restrictive (due to the Adjunction Prohibition). I leave a more detailed spelling out of this hypothesis to future work.

one that *Inigo* happens not to believe. In (23b), *that the earth will explode* is not taken to be a fact; it could be true or false. I argue that this is evidence for the optionality of the operator, and that when it is not present, even under a non-factive verb like *believe*, a default factive reading results. In (23a) there is no operator, while in (23b) the operator is present, resulting in the non-factive reading.⁸

In an investigation of the syntax and semantics of unselected embedded questions, Adger & Quer (2001), following Laka (1990, 1994) and Uribe-Etxebarria (1994), argue that the Basque negative complementizer can be decomposed into two constituents, as in (24).

- (24) $-(e)n + ik$
 C Partitive (Adger & Quer 2001: 116)

The first is a bound C morpheme that appears in several complementizer uses (relative clauses, embedded questions, etc.), while the second corresponds to what Basque grammars traditionally label as partitive case marking. This proposal can be straightforwardly adopted to the present analysis if we take *ik* in (24) to be associated with the proposed operator.⁹ When it is absent in (23a), a factive reading results, and when it is present in (23b) a non-factive reading results.

5.2. English

A similar example to (23) can be found in English when non-factive *believe* is stressed, as in (25).

- (25) (a) I don't believe [that Liverpool won last night].
 (b) I don't BELIEVE [that Liverpool won last night].

As in (23), the sentences in (25) use the same traditionally non-factive verb *believe*. The truth of the complement clause in (25a) need not be determined, but (25b) forces a factive reading. The fact that complements of the same verb can have two different semantic interpretations provides more evidence that factivity is not provided by the verb alone.

5.3. Hungarian

Hungarian embedded clauses also exhibit two different patterns, one for non-factives and one for factives (de Cuba & Ürögdi 2001).

- (26) (a) Azt hiszem hogy Mari okos.
 it-ACC I-think Comp Mary smart-is
 'I think that Mary is smart.'

⁸ Laka analyzes the difference in meanings in (23) as a result of *(e)nik* needing to be interpreted under the scope of the negation that selects it, while *(e)la* is interpreted outside the scope of matrix negation. Sentences headed by *(e)nik* remain in the scope of matrix Infl and V, while those headed by *(e)la* undergo Quantifier Raising at LF.

⁹ I am exploring a different line of analysis than Adger & Quer, who analyze the partitive case marker in (24) as a polar sensitive determiner like English *any*.

- (b) (*Azt) sajnálom hogy Mari okos.
it-ACC I-regret Comp Mary smart-is
 'I'm sorry that Mary is smart.'

In (26), the pronominal element *azt* can be argued to come from the lower clause, since it represents the object of the matrix verb, which is the lower CP itself.¹⁰ This pronoun is only present in cases where the matrix predicate is non-factive.¹¹ The fact that *azt* bears accusative case provides evidence that it comes from below the verb. One could imagine that *azt* is the overt realization of the operator that I am proposing, present in the non-factive case but missing with factives. When *azt* is not present in non-factive context, a factive reading results, as in (27).

- (27) (a) Azt mondta Péter, hogy későn kezdődik a meccs.
that-ACC said Peter Comp late begins the match
 'Péter said that the match will begin late' (but we don't know if it's true)
 (b) Mondta Péter, hogy későn kezdődik a meccs.
said Peter Comp late begins the match
 'Péter told (me) that the match will begin late' (and in fact it will)

These facts are consistent with those in Basque and English in (23) and (25). If the operator is not present, even under a non-factive verb, a factive reading results.

The semantic effects of the pronominal element in Hungarian can also be seen with some factive verbs. The pronominal *Úgy* (*so*) shows similar semantic effects to *azt* in Hungarian (Enikő Tóth, Barbara Ürögdi, p.c.).¹² When *úgy* appears with a factive verb like *know*, as in (28b), a non-factive reading results.

- (28) (a) Tudja János, hogy Mari okos,
knows John that Mary smart-is
 'John knows that Mary is smart'
 (fully factive reading)
 (b) Úgy tudja János, hogy Mari okos.
so knows John that Mary smart-is
 'John knows that Mary is smart'
 (to the best of John's knowledge, Mary is smart)

The presence of *úgy* in (28b) removes the factive interpretation of the embedded clause, while in the absence of *úgy*, the default factive reading results (28a). I take the facts from Basque, English and Hungarian in this section to provide evidence that

¹⁰ For an analysis along these lines, see Lipták (1998), as discussed in Kiss (2002: 234-5).

¹¹ If the sentences have neutral intonation, then factive predicates don't allow *azt*, while non-factives do. However, if *azt* is in focus position and heavily stressed, it then becomes grammatical, as in (i) (Enikő Tóth, Barbara Ürögdi, p.c.).

(i) AZT sajnálom, hogy Mari megbukott a vizsgán.
 'It's that Mari failed the exam that I'm sorry for.'

At present I have no account for this. I leave this case of focused *azt* to future research.

¹² Kiss describes *úgy* as an alternative to the demonstrative pronoun *azt*, serving the semantic function of expressing a reservation concerning the truth of the subordinate proposition (Kiss 2002: 233).

the proposed operator is optional under some verbs. The observed semantic differences in factivity are due to the presence or absence of the operator, not simply the lexical semantics of the verb.

5.4. NPI Licensing in Optional Cases

The analysis presented thus far predicts that NPI licensing should only take place when the operator is present, which is signaled in Basque by *(e)nik*. Confirmation of this is found in (29).

- (29) (a) **Íñigok ez du sinisten [ezerk eztanda egingo duela]*
**Íñigo no has believed anything explode do-will AUX-that*
 ‘Íñigo does not believe that anything will explode’
 (b) *Íñigok ez du sinisten [ezerk eztanda egingo duenik]*
Íñigo no has believed anything explode do-will AUX-that
 ‘Íñigo does not believe that anything will explode’ (Laka 1990: 211)

As in (23), the only difference between the two sentences in (29) is in complementizer choice. Under the present analysis, this difference in NPI licensing possibility results from the lack of an operator in (29a) and its presence in (29b).¹³ In non-factive cases where there is no matrix negation or inherently negative verb, the operator is present, but has no phonological realization, as is the case in English.

More support for the analysis in this section comes from English, where the Basque NPI licensing facts in (29) also seem to carry over to (30).

- (30) (a) I **don't** believe [that Jon smokes **anymore**.]
 (b) *I **don't** BELIEVE [that Jon smokes **anymore**.]

Recall from example (25), that when stressed, *believe* forces a factive interpretation of the embedded clause. The present analysis predicts that the operator is responsible for both the non-local licensing of NPIs, and the availability of a non-factive interpretation. The ungrammaticality of (30b) is thus expected, as there is no operator available to license the NPI *anymore*, even though *believe* is typically non-factive.

The data in this section provides evidence that semantic effects of the operator on truth-value evaluation go along with visible differences in the syntax, in the form of NPI licensing in Basque and English, and extra morphosyntax in Hungarian. I argue that these syntactic licensing and semantic interpretation differences are a result of the presence or absence of the proposed operator and its related structure in (5).

6. Factive Cases in Basque

As was shown in section 2, in English, non-local NPI licensing is available in non-factive contexts, but not in factive ones. This was illustrated in (8b) and (9b) above, repeated below in (31a) and (31b) respectively.

¹³ This is essentially the same as Laka's (1990) analysis, where the negative complementizer *(e)nik* licenses the NPI in (29b). My analysis differs in that the operator and the complementizer are separate, accounting for the factive/non-factive NPI licensing asymmetry in English in (2).

- (31) (a) I don't believe [(that) Jim **slept a wink** last night]
 (b) *I don't regret [that Jim **slept a wink** last night]

In Basque, 'true factive' verbs (*regret, resent, hate*) don't take finite complements, but a nominalization construction similar to the English NP-gerund, as in (32).¹⁴ Constructions using the complementizers (*e*)*la* or (*e*)*nik* under true factives are ungrammatical in Basque.

- (32) (a) Zuriñek Jon joan **izana** deitoratu du
Zuriñe-ERG Jon gone have-ART regret AUX
 'Zuriñe regrets that John left' (lit: John having left)
 (b) Zuriñek ez du Jon joan **izana** deitoratu
Zuriñe-ERG no AUX Jon gone have-ART regret
 'Zuriñe doesn't regret that John left' (lit: John having left)

Unlike true factives, 'semi-factives' do take finite complements (*notice, realize, forget*), as in (33).¹⁵

- (33) (a) Zuriñe [Jon joan **dela**] ohartu da.
Zuriñe Jon go AUX-that notice AUX
 'Zuriñe has noticed that John has already left'
 (b) Zuriñe ez da konturatu [gaur astelehena **dela**]
Zuriñe no AUX realize today Monday AUX-that
 'Zuriñe hasn't realized that today is Monday'
 (c) Zuriñek ez du ahaztu [gaur bere egun-a **dela**]
Zuriñe no AUX forget today her day-ART AUX-that
 'Zuriñe hasn't forgotten that today is her birthday'

All of the grammatical sentences in (33) use the complementizer (*e*)*la*. However, if the complementizer is switched to (*e*)*nik*, as in (34), the sentences all become very awkward, if not totally out.¹⁶

- (34) (a) ?Zuriñe ez da ohartu Jon joan **denik**.
Zuriñe no AUX notice Jon go AUX-that
 'Zuriñe has not noticed that John has already left'
 (b) *?Zuriñe ez da konturatu [gaur astelehena **denik**]

¹⁴ *True factives* are also referred to as *emotive factives* in the literature.

¹⁵ It is interesting to note the different behavior here of so-called *emotive* or *true factives* like *regret, resent, and hate* vs. *semi-factives* like *realize, forget* and *notice*. Icelandic has a related phenomenon.

(i) Ég hata að Jón skuli hafa barið Maríu (ii) Ég veit að Jón hefur barið Maríu
I hate that John should have hit Mary I know that John has (ind.) hit Mary
 (iii) Ég tel að Jón hafi barið Maríu
I believe that John has (subj.) hit Mary

The true factives, which use the nominalization structure in Basque, correspond to true factives in Icelandic, which take complement clauses with the modal *skuli* (i). Semi-factives in Icelandic take complement clauses in the indicative mood (ii), while non-factives take the subjunctive mood (iii) (Thráinsson 1979: 211-13).

¹⁶ p.c. Xabier Artiagoitia and Nerea Madariaga.

- Zuriñe no AUX realize today Monday AUX-that*
 ‘Zuriñe hasn’t realized that today is Monday’
- (c) *?*Zuriñek ez du ahaztu [gaur bere egun-a denik]*
Zuriñe no AUX forget today her day-ART AUX-that
 ‘Zuriñe hasn’t forgotten that today is her birthday’

The fact that the (*e*)*la* examples in (33) are fine, while the (*e*)*nik* examples in (34) are degraded conforms to what we would expect given the present analysis; the (*e*)*nik* examples in (34) are all out because (*e*)*nik* cannot appear in a factively evaluated CP.¹⁷ Finally, (35) illustrates the expected result that an NPI should not be licensed under factive *realize*, regardless of the complementizer chosen.

- (35) (a) **Zuriñe ez da konturatu [inor etorriko denik]*
Zuriñe no AUX realize anybody come-FUT AUX-that
 ‘Zuriñe hasn’t realized that anybody will come’
- (b) **Zuriñe ez da konturatu [inor etorriko dela]*
Zuriñe no AUX realize anybody come-FUT AUX-that
 ‘Zuriñe hasn’t realized that anybody will come’

In (35a), (*e*)*nik* cannot be selected by a factive verb like *realize*, while in (35b), non-local NPI licensing is not possible in the absence of the operator, signaled by the choice of (*e*)*la*.

7. Conclusion

In this paper, I have argued that there is an extra syntactic projection in the CP field that is associated with what have traditionally been called non-factive verbs. This extra structure houses an operator that when under matrix negation licenses negative polarity items non-locally. The operator is also responsible for licensing unfixed truth-values in embedded clauses by allowing for a change of the <speaker> (source) value in the evaluation set, allowing the actual world to be excluded. I have provided cross-linguistic evidence that this extra structure is sometimes optional—when it is missing, a factive interpretation results, and when it is present a non-factive interpretation results. The presence or absence of the structure also affects the availability of non-local NPI licensing.

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¹⁷ In some Basque dialects however, (*e*)*nik* is possible under factives (Urtzi Etxeberria, p.c.). At this point I will only consider the dialects that disallow factive (*e*)*nik*, and leave these cases to future research.

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