# RESEARCH

# To wish or not to wish: Modality and (metalinguistic) negation

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This paper examines the interaction between negation and some expressions of bouletic modality. Whereas most other types of modals may scope below negation, expressions of bouletic modality in the form of hortative and optative markers never do. The distribution of high adverbials, as well as co-occurrence possibilities with a negative head, such as French *ne*, reveal that hortatives and optatives do not target the same position: they occupy two different heads within the left peripheral structure. However, it is argued that the syntax of the bouletic operator, which is analyzed as involving high left-peripheral positions, prevents the negative marker from syntactically and semantically scoping over it. This is shown to also correlate with access to metalinguistic negation interpretations. While with the adequate context, the bouletic operators examined here are compatible with metalinguistic negation, no wide scope interpretation above the bouletic modal content is accessible. This is exactly the contexts in which the negative head is syntactically banned. It is proposed that these observations constitute evidence for the fact that metalinguistic negation requires specific syntactic conditions, namely access to a high contrast-related position. Metalinguistic negation is obviously triggered by contextual input, but, at least in the cases examined here, is not blind to syntax.

**Keywords:** bouletic modality; descriptive negation; metalinguistic negation; scope; syntaxpragmatics interface

# 1 The problem

This paper stems from the observation that some expressions of bouletic modality behave in an unexpected way with respect to negation in its metalinguistic interpretation. Further investigation also reveals that the syntactic behavior of negation seems to be affected, to some extent at least, in exactly the same situations. The tentative conclusion one is led to draw is that, as far as some expressions of modality such as bouletic modality are concerned, metalinguistic negation is not a purely autonomous pragmatic phenomenon, but is (partly) syntax driven.

Negation and modality are known to interact in various ways. Many expressions of modality can scope above and below negation (see e.g. de Haan 1997 for discussion and references):

- (1) a. Abby may not run for president.
  - b. It is not the case that Abby may (=is allowed to) run for president.
     [NEG > DEONT ]
  - c. It is the case that Abby may (= according to the speaker's knowledge) not run for president.
     [EPIST > NEG]

The English modal *may*, for example, can either occur in the scope of negation, as shown in the paraphrase in (1b), or have negation in its scope (1c). The great bulk of the discussion in the literature concerns epistemic and deontic/root modality. This might be linked to the highly grammaticalized form these modal markers take in many languages, as modal verbs or auxiliaries. It turns out that another type of modality, bouletic modality, has received far less attention. Examples of bouletic modality are given in (2) below:

- (2) a. Let's go to the movies!
  - b. May you find what you were looking for!

(2a) is an example of *hortative*, and (2b) of *optative* "mood". Hortatives, which resemble imperatives, involve a tensed verb or auxiliary which inverts with the subject in French, English, Hungarian and other unrelated languages. Optatives occur in various guises, such as a fronted modal (English), fronted subjunctive verb form (French, for example), or dedicated mood markers (as in Hungarian for example). Both hortatives and optatives are expressions of the speaker's desire that some situation be brought about, and as such, can be viewed as expressions of bouletic modality (see section 3 for a detailed discussion).

Instances of bouletic modality also reveal unexpected interactions with negation:

- (3) a. Let's not go to the movies!
  - b. May Blerina not be late!
    - [BOUL > NEG; \*NEG > BOUL]
  - c. May Blerina 'not be brave (but extremely brave)
    [BOUL > NEG ; \*NEG > BOUL ]

A first observation, stemming from data such as (3) above, is that bouletic modality encoded both in the hortative verb forms (3a) and in the optative modal *may* (3b) has negation in its scope. The reverse pattern is, on the other hand, not accessible. Another observation is that, in the same circumstances, a metalinguistic reading of negation is restricted to narrow scope with respect to the modality marker (3c). This is a rather unexpected situation, given that metalinguistic negation is standardly assumed to be a pragmatic phenomenon, in which the relevant readings are inferred with respect to a context and are not constrained by the syntactic form of the utterance.

The question this paper seeks to answer is thus the following: why do expressions of bouletic modality as instantiated in hortatives and optatives escape the scope of metalinguistic negation?

The paper is organized as follows: Section 2 presents the theoretical framework assumed in this paper. While Section 2.1 introduces the theoretical framework adopted in this paper, namely Cartography, Section 2.2 presents a more detailed picture of modality, Section 2.3 discusses the background on negation, and Section 2.4 gives a brief overview of the interactions between the two. This leads us to the hypotheses that the paper will propose to verify (2.5). Section 3 discusses bouletic modality as expressed both in optative (3.1) and hortative (3.2) constructions. It is proposed that the syntax of these constructions involves a modality-related functional projection above the clause-typing C head, and that the observed interactions with negation can be derived from the syntactic properties of negation and modality. Section 4 turns to the metalinguistic negation readings in environments containing the optative and hortative markers. It is shown that while metalinguistic readings are available, they can never scope over the modal component. It is therefore proposed that wide-scope metalinguistic negation is constrained by the syntax of optatives and hortative, and more specifically of their bouletic component. Section 5 concludes the paper.

#### 2 Theoretical framework

#### 2.1 A cartographic approach

Initiated by Pollock's (1989) seminal paper on an enriched inflectional system, research in generative grammar has gradually developed into the study of a more and more fine-grained clausal structure. The empirical basis for such an enterprise lies in the observation that cross-linguistically, different functional categories such as Aspect, Mood, Tense, display very similar organizations, as shown by word order. This has led to the highly articulated clausal functional sequence proposed in Cinque (1999). On the basis of observable word order variations that involve the left edge of the clause, one line of research within the generative framework, developed by Cinque (1990), Rizzi (1997) and subsequent work within the Cartographic approach, proposes a rich left periphery, with functional projections hosting hierarchically constrained discourse-related elements (on a motivation for syntactic positions for discourse-related elements, see Rizzi 2014). In such an approach, the left periphery is composed of at least a C (or Force) head, which encodes the type (or force) of the clause, a (possibly iterative) Topic head, a Focus head and a Fin(iteness) head related to finiteness which occurs at the junction with the temporal domain. Note that in this paper, I will use the label C, rather than Force, to refer to the highest functional projection of the left-periphery:

(4) C (=Force) > \*Top > Foc > Fin > T

A growing bulk of research has shown that from one language to the next, discourserelated elements, that is, topics and foci, occur in clause-initial positions, and that these positions are occupied through movement (see Rizzi 1997 for discussion and references).

- (5) a. Hungarian
   A gyerekek a könyvet ANNÁNAK adták.
   the children.NOM the book.ACC Anna.DAT give.PAS.3PL
   'As for the children, they gave the book to ANNA.'
  - b. *Gungbe* (Aboh 1999: 95)
    ún do` do` [ dàn l'o] yà, [Kòfí] wɛ` ún hù ì ná
    1.SG say.PERF that snake the TOP Kofi FOC 1.SG kill.PERF.3SG prep 'I said that as for the snake, I killed it for KOFI'

While Hungarian (15a) can freely move several tropicalized elements to a clause-initial position, only one focus-marked constituent is allowed to move to a position structurally below the topics.<sup>1</sup> In Gungbe (5b), the order of preposed constituents is identical; in addition, topic and focus are signaled by specific morphological marking.

It is thus proposed that different elements target specific functional projections, rather than moving to an underdetermined edge position. While empirical methods enable to identify the relevant projections and their hierarchical organization, the movement of constituents to (the specifiers of) specific functional projections is claimed to be a syntactic operation triggered by the need to check features. These features, which act as scope markers, are present on the functional heads, and identified by the interpretation

<sup>&</sup>lt;sup>1</sup> That the position is reached via movement is attested by identifiable syntactic properties, such as weak crossover effects for example, associated in generative grammar with movement.

they are associated with, via movement of elements whose featural make up includes the relevant feature. Interpretations are thus assigned on a strictly structural basis.<sup>2</sup>

#### 2.2 The syntax of modality

In this framework, a syntax of modality will condition parts of the interpretation of modal constructions. While we do take resulting interpretations as *clues*, the underlying assumption is that scope relations (and interpretations) are the result of syntactic operations which have their source in feature-checking mechanisms.

In some languages, modal expressions take the form of modal verbal/auxiliary-like elements which encode different *kinds* of modality (or modal strength). Below are examples from English and French:

- (6) a. Désirée might go to New York. (*poss*)b. Désirée must go to New York. (*necess*)
- (7) a. Désirée peut aller à New York. (*poss*) Désirée can go.INF to New York 'Désirée can go to New York.'
  - b. Désirée doit aller à New York. (necess)
    Désirée must go.INF to New York
    'Désirée must go to New York.'

While (6a), (7a) express possibility, (6b) and (7b) express necessity. The difference is often lexically encoded. On the other hand, in many Indo-European languages including English (8), but also in Hungarian (9) or Chinese (10), modal expressions may be ambiguous between different *modal categories*, for example deontic and epistemic readings.<sup>3</sup>

- (8) a. Désirée must go to New York. (*deont*)b. Désirée must really like New York! (*epist*)
- (9) Hungarian

a.

- a. Dórának New-Yorkba kell mennie. (*deont*) Dóra.DAT New-York.ILL must go.INF.3SG 'Dóra must got to New-York.'
- b. Dórának nagyon kell szeretnie New-Yorkot! (*epist*) Dóra.DAT much must like.INF.3SG New-York.ACC
   'Dóra must really like New-York!'
- (10) *Chinese* (Tsai 2015)
  - Huoche yiding<sup>D</sup> yao<sup>D</sup> kai le,
    Train obligatorily YAO start Inc
    women dei yizhao shijian-biao fache. (*deont*)
    we have.to according.to time-table launch
    'The train must<sup>D</sup> leave, so it has to launch according to the time table.'

<sup>&</sup>lt;sup>2</sup> An alternative line of research builds on the assumption that the structure of the clause is minimally simple, and whatever occurs at the edge is motivated by some pure syntactic property, an Edge feature, which may target any single (or multiple) element(s). The motivation for movement is thus a unique syntax-internal trigger, which yields a given word order. This approach leaves the question of the interpretation of these structures, i.e. the effect of the movement, to some independent component (see also Rizzi 2014 for discussion).

<sup>&</sup>lt;sup>3</sup> Other typologically unrelated languages also exhibit such ambiguities (see Palmer 2001). However, languages may also exhibit ambiguity along another axis, namely modal strength (see Matthewson et al. 2007 for Salish).

b. Huoche yiding<sup>E</sup> (shi) yao<sup>E</sup> kai le, train surely be YAO start Inc cai hui yizhi ming qidi. (*epist*) just will continuously blow steam.whistle 'The train must<sup>E</sup> be leaving, so it kept blowing the steam whistle.'

However, it has been observed that the different readings correlate with different syntactic constraints. Picallo (1990) argues that Catalan modals, which are ambiguous between the two readings (11), occupy two structurally distinct positions, which can be identified thanks to their interaction with negation (12):<sup>4</sup>

(11) Catalan (Picallo 1990)
El lladre pogué entrar per la finestra
The thief could come-in by the window
(i) 'It is possible that the thief came in by the window.'
(ii) 'The thief was able to come in by the window.'

- (12) a. En Jordi pot no haver sortit. the Jordi could not have left 'It is possible that Jordi hasn't left.'
  - b. En Jordi no ha pogut sortir.the Jordi not has could leave'Jordi hasn't been able to leave.'

On the basis of syntactic evidence, such as the binding of anaphoric clitics, the construal with auxiliaries and the distribution of multiple modals, among others, Picallo argues that epistemic *pot* occurs in I(NFL). This can be translated in recent approaches as T or Agr, the position of inflected elements, and root (ability) *pogut* occurs as a modal in a VP adjoined position.

Modals have thus syntactic positions associated with their different interpretations, and enter into different scope interactions with e.g. negation.

Cinque (1999), on the basis of a cross-linguistic study of the distribution of various adverbials, comes to the conclusion that languages are remarkably similar in the distribution of their various syntactic markers, including modal expressions. In such a structural approach, different modals occur in dedicated, hierarchically organized functional projections, which correspond to their featural content.

These different functional projections are distributed over the spine of the clause ranging from left-peripheral positions for Speech Act to positions between TP and VP for "lower" modals. Given that some languages may have ambiguous modal markers, it is reasonable to assume that each version actually corresponds to a different bundle of modal properties. In other words, English *may* realizes [EPIST(emic); POSS], but also [DEON(tic); POSS]. Ambiguity, in this view, is not a matter of individual lexical items, but of feature bundling. The features will build up the structure and determine structural positions. The structural organization

<sup>&</sup>lt;sup>4</sup> Many thanks to a reviewer for pointing this out.

of the clause, in turn, conditions the scopal properties of its elements; thus, scope relations are a by-product of other, syntactically driven, phenomena. As already mentioned above, this approach, proposed in Beghelli (1995) and Szabolcsi (1997), puts the burden of scope mainly on syntax, in that syntactic scope will condition semantic scope.

#### 2.3 Negation

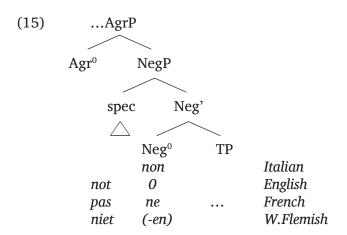
The section presents a brief introduction to the syntax of negation within generative grammar, as well as a discussion of the various interpretations of negation, at the sentence level and beyond.

#### 2.3.1 The syntax of negation: negation as a NegP

The study of the syntactic properties of negation also blossomed in the wake of Pollock's (1989) work on the "split IP", which first introduced the idea that negation heads its own projection, NegP. Pollock's original argument was that TP dominates AgrP and that negation has to appear between the two functional projections, so that TP dominates NegP which dominates AgrP. However, early proposals (see Belletti 1990; Haegeman and Zanuttini 1991) quickly adopted a structure (based on morphological arguments) in which AgrP dominates TP, and NegP sits between the two parts of the split IP:

(14) AgrP > NegP > TP...VP

Haegeman (1995) thus proposes that negative markers which behave like heads (such as Italian *non*, West Flemish *-en* or French *ne*) realize the head of NegP, and may move along as clitics with verbal/auxiliary material. Negative markers which behave like adverbials (typically English *not*, but also French *pas* or West Flemish *niet*), occur as the specifier of NegP. Parametric variation allows languages to lexicalize one, the other or both of the positions:



Recent approaches, which dispense with AgrP or not, reshape the proposal in various ways. Because the focus of this paper is not on the syntax of negation *per se*, but on how negation interacts with modality, I will restrict the discussion of the former to the main claims and to what I will assume w.r.t to negation in the context of my research. Readers are referred to the rich literature for more detailed accounts.

What emerges in recent literature is that the actual variation in the realization of negation across languages requires more fine-grained and articulated clausal structures, in which the various expressions of (sentential) negation can be accommodated. Ouhalla (1990), compares the realization of sentential negation in Turkish and Berber. Whereas in the first language, it occurs inside Tense/Agreement, in the second one, the negative marker appears outside. Ouhalla therefore proposes different positions for the NegP, below TP and AgrP in Turkish, but above them in Berber. He proposes that the variation is regulated by the Neg Parameter, which allows a NegP to occur above or below other inflectional projections. In the same line, research on dialects of Italian (see e.g. Zanuttini 1997; Acquaviva 1999) points towards the idea that the clause may contain several NegPs. Indeed, the various negative markers present in different Northern Italian varieties are hardly reducible to a single NegP in the sentence, whatever its position along the clausal spine. Some (adverbial-like) negative markers occupy low positions, others occupy high, or sometimes intermediate positions in the functional domain of the clause.<sup>5</sup> The possible occurrence of several NegPs is also adopted in Cinque (1999). In these approaches, surface realizations of negative markers reflect transparently clausal structures.

Tenants of a unique NegP also propose various structural articulations. Laka's (1990) original proposal that negation is encoded in a  $\Sigma P$  which occurs at the edge of the inflectional domain is adopted, with slight variants, by e.g. Surányi (1993; 1996) on the basis of Hungarian, where negation occurs systematically above the tensed verb and the subject. On the other hand, Zeijlstra (2004), following early work by Haegeman, adopts the view that NegP occurs lower, between AgrP and TP. In his approach, variation across languages is accounted for by the differences in the featural properties of negation. He argues that (all) preverbal negative markers, be they strong, weak or affixal elements, are heads; on the other hand, so-called post-verbal negative elements are maximal projections. The origin of the negative head marker may differ. Strong negative markers are generated directly in Neg<sup>0</sup>. Weak negative markers are base-generated on Vfin[ite]. A Vfin negative marker carries an uninterpretable [UNEG] feature. In order to be checked, it has to move out of the VP, an therefore it projects a NegP, of which it is the head carrying a [uNEG] feature. There, it merges with an abstract negative operator negOp which carries an interpretable feature [iNEG], and the feature is checked off. Adverbial negative markers are argued to be merged as vP adjuncts, and they may (but do not necessarily) move to spec NegP. This dual system allows Zeijlstra to account for negation cross-linguistically:

"NegP is only available in languages with a [uNEG] feature, i.e. with a syntactic category *negation*. I showed that NegP is available in all languages with a preverbal negative marker (Jespersen Phase I–IV, VI). In Phase V languages the availability of a NegP depends on the occurrence of [uNEG] features. Hence negation as a syntactic category is subject to cross-linguistic variation." (2004: 175)<sup>6</sup>

In Zeijlstra's approach, French, in which *pas* carries [iNEG], and moves to spec NegP to check the [uNEG] feature of *ne* has a NegP. English does not have one in its *not* negator version, but has one in the contracted n't version.

Poletto (2008) combines the two points of view. Starting from Zanuttini's identification of four different negative markers, she classifies them into four types of negative markers

<sup>&</sup>lt;sup>5</sup> Zanuttini (1997) proposes the following structure:

<sup>(</sup>i)  $\operatorname{NegP1}_{\operatorname{NegP1}} \operatorname{non} \left[ \operatorname{V} + \operatorname{Agr}_{\operatorname{NegP2}} \operatorname{mica} \left[ \operatorname{AdvP}_{\operatorname{TP2}} \left[ \operatorname{AdvP}_{\operatorname{already}} \right] \right]_{\operatorname{NegP3}} \operatorname{niente} \left[ \operatorname{Asp}_{\operatorname{perf.}} \operatorname{Vpast}_{\operatorname{part}} \left[ \operatorname{AdvP}_{\operatorname{already}} \right] \right]_{\operatorname{NegP4}} \operatorname{NO} \left[ \operatorname{NegP3}_{\operatorname{NegP4}} \operatorname{NO} \right]_{\operatorname{NegP4}} \operatorname{NO} \left[ \operatorname{NegP4}_{\operatorname{Asp}} \operatorname{Part}_{\operatorname{Asp}} \operatorname{Part}_{\operatorname{Asp}} \left[ \operatorname{NegP4}_{\operatorname{Asp}} \operatorname{Part}_{\operatorname{Asp}} \left[ \operatorname{NegP4}_{\operatorname{Asp}} \operatorname{Part}_{\operatorname{Asp}} \operatorname{Part}_{\operatorname{Asp}} \left[ \operatorname{NegP4}_{\operatorname{Asp}} \operatorname{Part}_{\operatorname{Asp}} \left[ \operatorname{NegP4}_{\operatorname{Asp}} \operatorname{Part}_{\operatorname{Asp}} \operatorname{Part}_{\operatorname{Asp}} \left[ \operatorname{NegP4}_{\operatorname{Asp}} \operatorname{Part}_{\operatorname{Asp}} \operatorname{Par}_{\operatorname{Asp}} \operatorname{Pa$ 

The hierarchy is determined on the basis of the relative position of negative markers, verb and adverbs assumed to occur in TP and AspPs.

 $<sup>^{6}</sup>$  Zeijlstra's taxonomy of languages, classified according to which phase they have reached, in as follows: Phase I = Slavic, Greek, Romanian, Hebrew, Hungarian, Italian, Spanish, Portuguese; Phase II = Berber, Catalan; Phase III = St French, Arabic (Baghdad), variaties of Italian; Phase IV = Dutch, Flemish, coll. French; Phase V = German, Swedish, Norwegian, Quebecois, Bavarian, Yiddish; Phase VI = English.

according to their semantics and etymology: scalar, minimizer, quantificational and focus. She proposes that NegP has a complex structure, with several FPs, each of which hosts one kind of negative marker. Each of the negative elements moves out to a different position located somewhere along the spine of the clause. In languages with two negative markers (like French *ne...*pas), the minimizer (*pas*) gets extracted from NegP and moves to a functional position below TP but above some adverbials.<sup>7</sup> The remnant, containing the scalar negation (*ne*), moves to another functional position above TP. The idea is that the internal components of NegP move to these higher positions in order to check a feature in a functional projection with corresponding features. The individual contribution of each type of negation is thus associated with its semantics, and the internal hierarchy of NegP (16a) is mirrored in the hierarchy of the functional projections in the clause that different negative markers target (16b):

(16) a. NEGP: 
$$[_{Focus/Operator}$$
 NO  $[_{ScalarP}$  non  $[_{MinQ}$  mica  $[_{QP}$  no  $[_{ExistentialP}$  thing ]]]]  
b.  $[_{GroundP}$   $[_{CPFocus}$  NO  $[_{FinP}$   $[_{ScalarP}$  non  $[_{TP}$ ...  $[_{MinP}$  mica  $]$ ... $[_{TanteriorP}$ ... $[_{AspP?}$  thing ... $[_{NEGP}$  ... $[_{VP}$ ...]]]]]]]]

French has both the Italian head-like (scalar negation) and the English adverbial-like negation (minimizer). While, as also observed in Rooryck (2008) the adverbial *pas* is mandatory in modern colloquial French, the head-like negative marker *ne* is, at best, optional. Rooryck also identifies the scalar nature of *ne*, and proposes that it is in fact a *minifier*, in that it signals the smallest amount available in the context. By default, the smallest amount being null, it yields a negative interpretation. Importantly, the role of *ne* is thus not to provide negative meaning, but to define the range within which the proposition is true. Under the assumption that *ne* may raise along with the verb, and take in its scope whatever portion of the clause it dominates, we expect it to occur wherever the tensed verb occurs and have corresponding scope. Peters (2001) argues that in French, *ne* has lost its semantics as contributing to negation, and its role is uniquely to mark scope. He further claims that when *ne* is not pronounced, as in many vernacular varieties of French, a silent operator still raises for scope reasons.

While many languages, including French, exhibit movement to a structural position dominating at least TP, other languages, like English or German, only realize negators which occur in an area between TP and VP. Moscati (2006) argues, on the basis of scope effects, that although an adverbial-type negation such as English not occurs low in the structure, its sentential scope suggests that it raises covertly to a high position. The structure of languages with an adverbial-like negative marker includes a functional projection NegP right above the vP. However, an operation of covert neg-raising may raise the negative marker (or its featural content) to a higher position, enabling it to scope over higher portions of the clause, including some modals. Although the higher position(s) may correspond to the ones proposed in Poletto (2008), it turns out that they are not sufficient to account for all the scope properties, and Moscati adds another structural position hosting negative elements. He claims that the C head, which encodes clause type, can also contain a neg-related feature, which attracts a negative marker overtly or covertly. The exact relation between this position and the positions identified by Poletto remains to be determined, and will be discussed in section 2.3 below.8

<sup>&</sup>lt;sup>7</sup> NegP has to be very low in the structure, maybe right above the vP.

<sup>&</sup>lt;sup>8</sup> On alternative proposals, which analyze modals themselves as polarity items, see e.g. Iatridou and Zeijlstra (2013), Homer (2010; 2015).

#### 2.3.2 The interpretation of negation: Descriptive vs metalinguistic negation

There is a very rich literature on the ambiguous nature of negation and the necessary distinction between "external" and "internal" negation (see Horn 1989 for an extensive exposition and discussion of the variants of this terminology). Horn argues that external negation can be brought out in (17a) below by a continuation as in (17b) (Horn 1989: 362):

- (17) a. The king of France is not bald.
  - b. the king of France is not bald (because) there is no king of France

He observes that under this reading (17a) is true "if France is a republic; the internal reading, by contrast, is either false or truth-valueless in the same circumstances" (1989: 362). He claims that there are indeed two versions of sentential negation. But while the descriptive variety corresponds to a truth-functional operator, the other one, the "non-descriptive variety is not a truth-functional or semantic operator on propositions, but rather an instance of the phenomenon of METALINGUISTIC NEGATION" (1989: 363).

Metalinguistic negation, according to Horn, is negation of the non-truth conditional part of a sentence. He proposes that it functions as "a device for objecting to a previous utterance on any grounds whatever, including the conventional or conversational implicata it potentially induces, its morphology, its style or register, or its phonetic realization" (Horn 1989: 363). Metalinguistic negation is argued to have scope not only over the content of the sentence, but over the assertion of the proposition described by the sentence:

(18) Wilson (1975; cited in Horn 1989)I'm not happy – I'm ecstatic.

Crucially, the scope of the sentence is determined not syntactically, but on pragmatic grounds. In slightly different terms, the distinction between the two types of negation may be characterized as follows:

"It [the distinction] lies rather with the two ways in which material falling within the scope of 'not' can be used: either to represent a state of affairs in the world (i.e. truth-based representation) or to represent another representation (i.e. resemblance-based representation, which includes echoic use)." (Carston & Noh 1996: 8)

Moeschler (2010) notes that while negation is by default narrow scope (i.e. it attaches to predicates), a classical approach to metalinguistic negation associates the latter with wide scope, "as soon as a contradiction occurs inside the utterance" (Moeschler 2010: 38).<sup>9</sup> Moeschler also claims that a corrective string must be overtly realized to trigger the metalinguistic reading:

(19) French (Moeschler 2010; glosses mine) Jean ne vient pas, il court. Jean NEG comes not he runs
'Jean does not come, he runs'.

While the descriptive (i.e. standard polarity reversing) negation scopes over the content of the clause (20a), the metalinguistic reading, which is triggered by the corrective string between brackets, scopes over the speech act (20b):<sup>10</sup>

<sup>&</sup>lt;sup>9</sup> I do not discuss here *contrastive negation*, as proposed e.g. in McCawley (1991), which differs from metalinguistic negation w.r.t scope effects.

<sup>&</sup>lt;sup>10</sup> Note that Moeschler's approach to metalinguistic negation is an inferential one. While he discusses existing approaches such as Specch act (Horn) or metarepresentational (Relevance), he proposes an alternative inferential theory based on implication, scope and discourse relations a.o.

- (20) Moeschler (2010: 29–30)
  - a. pas [Jean vient]
  - b. pas [THE SPEAKER ASSERTS [Jean vient]]

Note, however, that Larrivée (2011) argues that the corrective material does not need to be explicitly realized, as shown by (21):

- (21) Larrivée (2011; translation mine)
  - Est ce que tu penses à ta femme des fois ?
  - Pas des fois. (Film La Turbulence des fluides)
  - '-do you think about your wife sometimes?
  - not sometimes.'

While it is possible to argue, as shown in Section 2.1.1 above, that the scope of descriptive negation is constrained by syntactic factors, researchers claim that metalinguistic negation, as non truth-conditional negation, lives independently of structural constraints.<sup>11</sup>

#### 2.4 Interactions between modal markers and negation

With the above assumptions about syntactic structures, we now come back to the interaction between modals and negation.

Modality markers do not all interact identically with negation. Let us start with root interpretations. Deontic *must* can either take negation in its scope, as in (22a), or scope under negation, as in (22b).

- (22) a. Eija must not miss the train.
  - [DEONT > NEG]
  - b. Innovation must not be necessarily troublesome.<sup>12</sup> [NEG > DEONT]

English *can* also has a root (deontic or ability) reading. In all its interpretations, *can* scopes under negation:<sup>13</sup>

- (23) a. Ferdaous cannot retake the exam
  - [NEG > DEONT] b. She cannot open the file [NEG > ABIL]

Similar scope patterns emerge in French, where *devoir, pouvoir* (although they behave like verbs and not "auxiliaries") exhibit the properties of their English counterparts:<sup>14</sup>

<sup>&</sup>lt;sup>11</sup> Moeschler (2010) claims that "in other words, the scope of negation is not determined by structural properties, but computed against contextual information. For instance, wide scope is a logical property emerging from semantic and pragmatic computations. One argument, given by Horn (1985; 1989), is the absence of a specific marker devoted to external or metalinguistic negation: no language needs for a specific linguistic marker to distinguish between internal and external negation". (Moeschler 2010: 35).

<sup>&</sup>lt;sup>12</sup> https://www.newsghana.com.gh/innovation-must-not-be-necessarily-troublesome/.

<sup>&</sup>lt;sup>13</sup> I am here ignoring the version in (i) below, in which *not* seems to attach locally to the VP, and which requires a special intonational contour.

<sup>(</sup>i) Ferdaus can [not retake the exam].

<sup>&</sup>lt;sup>14</sup> Again, movement may involve only the relevant features, without pied-piping of the phonological content. Alternatively, the theory may resort to a long-distance mechanism of feature-checking, *Agree* (see Chomsky 2000).

- (24)Eija ne doit pas rater son train. a. Eija NEG must not miss.INF her train 'Eija must not miss her train.' [DEONT > NEG]
  - On ne doit pas nécessairement passer devant, se Ь. rapprocher c'est IMPS NEG must not necessarily move front, REFL get-closer it-is déjà bien.15 already good 'You don't necessarily have to be first, getting close is already good.' [NEG > DEONT]
- (25)Ferdaous ne peut pas partir. a. Ferdaous NEG can not go.INF 'Ferdaous cannot go.' [NEG > DEONT]
  - Elle ne peut pas ouvrir le dossier. b. she NEG can not open.INF the file 'She cannot pen the file.' [NEG > ABILITY]

French devoir ('must') can both be interpreted above negation (24a) and below it (24b). As illustrated in (25), *pouvoir* ('can') systematically scopes under negation.

One possible line of analysis, as proposed e.g. in Homer (2010; 2015) accounts for the scope variations as a result of covert movement of the modal itself. Indeed, the author argues that deontic *must and should* are PPIs which may move out of the domain of negation in an anti-licensing environment. As can is not a PPI, it cannot escape negation.

However, epistemic interpretations of the same modals reveal a different pattern. Epistemic *must* seems to occur exclusively outside the scope of negation, while epistemic can occurs (preferably?) in its scope:

- (26)If you felt like that with Obama, then you must not have been damaged a. as other millions of people were by his and his wife's policies.<sup>16</sup> [EPIST > NEG]
  - New York Mets cannot possibly trade Wilmer Flores, can they?<sup>17</sup> b. [NEG > EPIST]

The same observation holds for French epistemic *devoir* and *pouvoir*:

(27)Vivre avec Liliane, ça ne doit pas être possible.<sup>18</sup> a. live.INF with Liliane, it NEG must not be possible 'To live with Liliane must not be possible.' [EPIST > NEG]

<sup>&</sup>lt;sup>15</sup> https://www.rtbf.be/sport/moteurs/rallye/wrc/detail\_neuville-on-ne-doit-pas-necessairement-passerdevant-se-rapprocher-c-est-deja-bien?id = 9671611. Accessed August 9, 2018. <sup>16</sup> https://twitter.com/joshmill88/status/996893581129416706 Accessed August 9, 2018.

<sup>&</sup>lt;sup>17</sup> https://risingapple.com/2018/07/10/mets-cannot-trade-wilmer-flores/. Accessed August 9, 2018.

<sup>&</sup>lt;sup>18</sup> https://www.programme-tv.net/news/series-tv/200816-frederic-bouraly-scenes-de-menages-vivre-avecliliane-ca-ne-doit-pas-etre-possible/ Accessed August 9, 2018.

b. Gagner 3-0 sur un terrain aussi difficile, ça ne peut pas être banal.<sup>19</sup>
 win-.NF 3-0 on a ground so difficult, that NEG can not be unimpressive
 'To win 3-0 on such a difficult field cannot be unimpressive.'
 [NEG > EPIST]

In the hierarchy proposed in Cinque 1999, which is constructed on the basis of crosslinguistic evidence, epistemic modality is encoded higher in the functional sequence than deontic/ability modality markers, potentially above NegP where negation would be interpreted. Under an approach which requires matching feature bearing elements to raise (overtly or covertly) to the position where feature checking may apply, modals endowed with an [EPIST] feature will move to (or *Agree* with) the functional head encoding epistemic modality. One expects thus epistemic modals to be systematically interpreted outside the scope of negation. While this seems to be the case with *must/devoir, can/pouvoir* pose a potential problem. Moscati (2006) observes that given the right contextualization, negation can indeed scope over epistemic modality. He gives the following Italian example, which actually correspond to the attested examples given in (26b, 27b):<sup>20</sup>

(28) Moscati (2006: 34; glosses mine)

Il sugo non può essere pronto : nonne sento l'odore. the sauce NEG can be ready : NEG it smell.PRES.1SG the odour 'The sauce can't be ready: I can't smell its odour.'

- a. It is not possible that the sauce is ready [NEG > EPIST]
- b. It is possible that the sauce is not ready #[EPIST > NEG]

As discussed above, Moscati argues that in English, covert *neg-raising* raises negation to the CP(-domain), allowing it to scope over high modal markers. He assumes that negation is inserted in NegP, a projection which immediately dominates the VP. But the expression of negation may covertly raise to the highest clausal position available. This position is spec ForceP, which is involved in clause typing. Moscati proposes that given the relevant conditions, the Force (C) head can encode a NEG typing feature. Neg-raising will (covertly)

- (i) non può essere pronto (Neg>Mod), NEG can be ready
- (ii) può non essere pronto (Mod>Neg). can NEG be ready

This contrasts with the Italian necessity modal *dovere*, where "the epistemic reading tends to scope above negation with (iii) and (iv):

- (iii) non deve essere pronto (Mod>Neg) NEG must be ready
- (iv) deve non essere pronto (Mod>Neg) must NEG be ready

S/he further notes that "The Neg > Mod reading of *non deve* is possible but quite marked". It becomes accessible with co-occurring modal adverbials such as *per forza* (forcedly) or *necessariamente* (necessarily), as in

 (v) Non deve essere per forza pronto se sentiamo il profumo della salsa 'It does not necessarily mean that it's ready if we can smell the sauce'

This seems to correspond to the French data discussed in (24, 25) above.

<sup>&</sup>lt;sup>19</sup> https://www.sofoot.com/zidane-gagner-3-0-ici-ca-ne-peut-pas-etre-banal-454173.html. Accessed August 9, 2018.

<sup>&</sup>lt;sup>20</sup> A reviewer notes that "in Italian, also with epistemic *potere* order always reflects scope":

target spec ForceP. Negation is thus able to scope over all the clausal material, including high modals. He proposes that negation may occur in the following configurations:

Moscati (2006: 34, example (50))
 Neg > Epistemic Mod > Neg > Alethic Mod > Neg > Root/Deontic Mod

Thus, while both a PPI and a standard covert movement analysis may account for the scope alternations of deontic *must/devoir* (note that they are not incompatible approaches), a covert neg-raising analysis enables us to explain the wide scope interpretations of negation w.r.t epistemic modality markers.

Focussing on the English-type negator, Moscati claims that English *not* raises covertly to spec ForceP. We need to further assume that the [neg] clause-typing feature itself occurs on the head itself, and licenses possible negative material in its specifier. I will propose below that the negative feature in the C (Force) head may also be checked when a relevant head moves to C. This is the case with negative interrogatives, among others:

- (30) a. Won't you sit down?
  - b. Will you not sit down?

While (30a) exhibits overt movement of a head-like negator (see e.g. Zeijlstra's proposal) to C, (30b), which may have an identical interpretation, will resort to covert movement of the negator as discussed above. Both, I assume, are triggered by the need to check a clause-typing [NEG] feature as proposed by Moscati.

### 2.5 Hypotheses

Given the properties of negation and modality observed here, namely that:

- (i) modal markers bear syntactic features that participate in feature-checking
- (ii) negation may raise overtly (or covertly) to high, left-peripheral positions,
- (iii) scope relations are to be read off (interpretable) syntactic structures,

the following hypotheses are formulated:

(H1) The peculiar behavior of optatives and hortatives (which include modal properties of the bouletic kind) w.r.t negation is accounted for by the interaction between the two types of elements. In a framework which assumes a direct mapping of syntax onto interpretation, this suggests that the syntactic encoding of bouletic modality involves mechanisms/positions, which interfere with negation. (H2) Metalinguistic negation readings are also constrained, at least in some cases, by syntactic structures.

The remaining of the paper will propose an analysis of hortative and optative markers, as expressions of bouletic modality, which is compatible with these hypotheses.

# 3 The syntax of optatives and hortatives

As put forth in the introduction, I would like to propose that optative and hortative markers encode two instances of a different, yet understudied kind of modality. It is generally accepted that bouletic modality "concerns what is possible or necessary, given a person's desires" (von Fintel 2006: 2). In a possible world semantics approach, it is viewed as quantifying over worlds which are consistent with what a person wishes. Aside from a few extremely insightful studies (see e.g. Condoravdi and Lauer 2012 on the bouletic content

of imperatives), very little is said about its properties and potentials as a modal marking of worlds which fit with the desires and wishes of a speaker/subject. However, bouletic modality corresponds to an identifiable modal concept, which finds a rather wide range of realizations across languages. Recently, Blochowiak (2014) has argued that bouletic modality is involved in the polarity of emotional states (she considers that emotional states are positive or negative).<sup>21</sup> One clear instance of bouletic modality can be identified in clauses embedded under the matrix predicate *wish*.<sup>22</sup> In English, the relevant modal feature is encoded on the modal *would*:

(31) Heljä wished that Hema *would* write.

I would like to defend the idea that a matrix/root expression of bouletic modality appears in hortatives, optatives and expressions of wish such as 'if only', as in (32):

- (32) a. Let's go to the movies!
  - b. May Irina win a gold medal!
  - c. Had Irina won a medal !
  - d. If only Irina won a medal!

These expressions of bouletic modality do not contain a modal "auxiliary" in English. Rather, their realization depends on other syntactic mechanisms. As illustrated in (32a, b, c), the inflected verb occurs in the first position, as the result of a so-called Subj-Aux inversion. (32d) comes with a lexicalized form, *if only*. Note that other languages use similar or parallel strategies. While Hungarian hortatives require the subjunctive with verb initial structures (as in (33a)), optatives have a lexicalized marker *bár(csak)* (see É-Kiss 2011):

- (33) a. Menjünk moziba! go.SUBJ.1PL movies.INESS 'let's go to the movies!'
  - b. Bár(csak) aranyérmet nyerne Ilonka! if only gold-medal.ACC win.COND Ilonka.NOM 'If only Ilonka would win a gold medal!'

Compare also with the French equivalents. Hortatives also exhibit a V1 pattern as in (34a) (but see below), while optatives may be realized with inversion of the modal (34b), as well as with two lexical markers *pourvu que* ('let's hope that' lit: 'provided that') (34c) and *si seulement* ('if only') (34d).

- (34) a. Allons au cinema! go.1PL to movie 'Let's go to the movies!'
  - b. Puisse-t-elle gagner une médaille! can.SUBJ she win a medal 'May she win a medal!'

<sup>&</sup>lt;sup>21</sup> Specifically, Bolochowiak claims that "Any emotional state has its polarity (negative or positive). This polarity tells us something about the experiencer's wishes, i.e. her buletic attitude, which inherits the polarity of emotional states (w.r.t. eventuality described by the embedded proposition)." (2014: 173).

<sup>&</sup>lt;sup>22</sup> Baunaz & Puskás (2016) argue that clauses embedded under various categories of subjunctive-selecting verbs are actually bouletic modality bearing, and that subjunctive licensing complementizers are (one of) the realization(s) of this bouletic modality.

- c. Pourvu que Irina gagne une médaille! provided that Irina win.SUBJ.3S a medal 'Let's hope Irina wins a medal'.
- d. Si seulement Irina gagnait une médaille! if only Irina win.IMP.3S a medal 'If only Irina would win a medal!'

A note of caveat is in order here. The present paper is not concerned with bouletic modality per se. It is beyond doubt that not all markers of bouletic modality behave alike, and, cross-linguistically, they occur in various guises. In this perspective, an indepth investigation of the various instances and properties of bouletic modality is still on the agenda, both from a semantic and a syntactic perspective. However, I would like to defend the idea that optatives and hortatives are expressions of bouletic modality, in that they crucially encode the speaker's wish. They cannot be pure deontics (as the speaker does not refer to a set of possible worlds ordered according to rules of some kind) nor can they be epistemic (as they do not refer to a set of worlds ordered according to the speaker's knowledge/opinion). They indeed operate on possible worlds ordered according to the speaker's desires. While optatives very clearly express the speaker's wish, I contend that hortatives, which resemble imperatives, also include a bouletic modal feature. The relation between imperatives and bouletic modality has been independently studied (see Condoravdi & Lauer 2012 for a proposal which defends the idea that bouletic modality is conventionally encoded in imperatives). While it can be argued that imperatives and hortatives have mood properties in common, as well as Speech Act properties, that does not exclude bouletic modality.<sup>23</sup> Each of these manifestations of this type of modality are explored in detail below.

#### 3.1 Optatives

Optatives express a wish or a desire of the speaker that some situation be brought about. As also noted in Condoravdi & Lauer (2012), speaker's wishes do not need to have any addressee. Optatives are typically cases in which there is no addressee on which the fulfilment or satisfaction of the wish may depend. That optatives are expressions of bouletic modality seems to be supported by the fact that negating an (overtly expressed) wish of the speaker's is infelicitous:

(35) #May Irina win a gold medal, although I wish she would not.

Compare with e.g. expressions of deontic modality, where negating the speaker's wish is unproblematic:

(36) Irina must enroll in three classes this year, although I wish she would not.

#### 3.1.1 The syntax of optatives

As already mentioned above, optatives may involve subject-auxiliary/verb inversion (SAI) or various modality markers. In this sense, they contrast sharply with epistemic (and deontic) modality expressions:

<sup>&</sup>lt;sup>23</sup> Usually, the literature tends to make a distinction between *modality* and *mood*. However, the very fact that embedding under verbs of wish may both occur with a modal (English *would*) and subjunctive "mood" markers (e.g. French) seems to show that there is no clear line of divide. Therefore, I use the term *modality marking* as a cover term, reserving the term *modal* only for the attested *modal verbs* or auxiliaries.

- (37) a. Junko may win her first gold medal tomorrow.
  - b. May Junko win her first gold medal tomorrow!

The English modal *may* encodes both epistemic (37a) and bouletic (37b) modality. The syntactic difference between the two modalities is the occurrence of SAI in the optative case, suggesting that the modal is raised to a high, left-peripheral position. That this position is indeed very high in the left periphery is confirmed by the fact that adverbials that occur in sentence initial positions are incompatible with bouletic modality as expressed in optatives, in English (38), but also in French (39) and Hungarian (40):

- (38) a. \*Next week, may she win a medal!b. \*In Sarajevo, if only she won a medal!
- (39) French
  - a. \*La semaine prochaine, puisse-t-elle obtenir une médaille! the week next may.SUBJ she get.INF a medal
  - b. \*A Sarajevo, pourvu qu'elle obtienne une médaille! at Sarajevo provided that she get.SUBJ a medal

#### (40) Hungarian

a. \*Jövő héten, bárcsak érmet nyerne! next week, if-only medal.ACC win.SUBJ.3SG

Compare with epistemic modality markers, which can co-occur with the same adverbial in English (41a), French (41b) or Hungarian (41c):

- (41) a. Next week, she may win a medal.
  - b. French

La semaine prochaine, elle peut/pourrait gagner une médaille. the next week she can.PRES/can.COND win a medal 'Next week, she can/could win a medal.'

c. *Hungarian* Jövő héten, érmet nyerhet. next week.SUP medal.ACC win.POSS.3S 'Next week she can win a medal'.

Adverbials like *next week, in Sarajevo,* belong to the class of "scene-setting adverbials". They have been argued to occur at the edge of the clause (see Beninca & Poletto 2004; Haegeman 2004). They sit in the specifier of the highest clausal projection, namely CP. As shown in the examples above, they cannot co-occur with optative markers. Given the inversion phenomena illustrated in (34b) and (37b), it seems reasonable to conclude that some markers at least occupy a head position. Therefore, (38–40) cannot be excluded on the ground that the adverbials and the modality markers compete for the same position. I will rather explore the idea that this incompatibility results from the fact that bouletic modality markers occur higher than these adverbials. First, following the discussion in section 2 above, I propose that the bouletic meaning is encoded on a functional head endowed with a feature interpretable as bouletic modality (that is, the expression of the speaker's desires). The question is then: which of the heads in the CP field satisfies this condition? Standard views about the role of left peripheral functional projections distribute properties among the identified heads within the range of clause-internal properties.

In other words, if the C (highest) head encodes clause typing, it belongs to the domain of the sentence itself. As such, it does not include actual speaker properties.

Several authors have investigated the contribution of Speaker and Addressee in the syntactic mechanisms of clause structure. Speas and Tenny (2003)) claim that speaker and addressee (hearer) are encoded in the syntax of the left periphery. They propose that the structure includes a Speech act phrase, projected from a Speech act mood head, which is located in the left periphery. Speaker is licensed in the spec of this projection, while Hearer is the complement. Bianchi (2003; 2006) argues that speaker and hearer can be interpreted with respect to a context which is syntactically built in the structure of the clause. She proposes that context is the logophoric center, which corresponds to a mental event including, among others, a speaker or source, a temporal anchoring and optionally an addressee and spatial anchoring. She claims that in finite clauses, the logophoric center is encoded in Fin, the head of the lower projection of the left periphery. In a similar vein, Sigurðsson (2004; 2010) introduces the idea that the structure contains syntactic positions within the left-peripheral domain, between the C and Fin heads, which host the Logophoric Agent (or speaker), as well as the Logophoric patient. In these approaches, the syntactic encoding of *speaker* is integrated in the syntactic clause, i.e. associated with functional projections below the highest head of a split CP. Wiltschko (2014), on the other hand, argues that the clause is actually extended to contain a domain which contains, among others, Speaker related projections. She considers the (classical) CP to be the locus of typing information, such as *declarative*. Typing relates to the eventive content of the utterance. But the clause also contains a domain devoted to what she calls perspectivization, which is associated with the Speaker's point of view, and a domain which takes into account the Addressee, and serves as anchoring. Crucially, these domains are syntactic domains. They are structurally organized as follows:<sup>24</sup>

# (42) (RespP [CoA responding] > GroundP [set of A-beliefs] >) GroundP [set of S-beliefs] > CP [declarative]

Wiltschko argues that (the bare) CP contains presentation and exclamation, and GroundSP contains non-informative assertions. I will ignore the highest projections here. Under standard assumptions that the (highest) C head encodes clause typing (signaled as declarative in (42) above), this layer corresponds to Rizzi's ForceP. Hence, while previous authors propose to accommodate speaker's point of view within the classical left periphery, Wiltschko's approach extends syntactically the structure beyond clause-typing, to a domain of structural positions encoding speaker's and addressee's beliefs. Given that our optatives, as expressions of the speaker's wish, build on her views about the situation, it seems reasonable to associate them with the level where the set of the speaker's beliefs is encoded. I will therefore adopt such an enriched structure for the left periphery, and assume that CP is actually syntactically dominated by (at least) one projection, which I label SpeakerP. I will propose that this is the projection where expression of the speaker's desire is encoded. I tentatively label the feature associated with the speaker's wish [bouletic]. A detailed study of the properties of bouletic modality in general is however still to be conducted.<sup>25</sup> The extended left periphery may thus look as follows:

<sup>&</sup>lt;sup>24</sup> CoA corresponds to Call on Addressee.

<sup>&</sup>lt;sup>25</sup> A reviewer notes that other instances of bouletic modality may be agent oriented and root. This is indeed why an in-depth study of bouletic modality in its many forms needs to be undertaken. One should also consider the fact that, very much like epistemic or deontic modality, bouletic modality may come with varying forces (necessity, possibility, etc).

(43)  $[ \sum_{\text{SpeakerP}} [ \sum_{\text{Sp[boul]}} \frac{may}{puisse} pourvu que [ \sum_{\text{CPtype}} \dots [ \sum_{\text{TopP}} \dots < \frac{may}{puisse} > \frac{may}{puisse} ] ] ] ]$ 

While in optatives which exhibit SAI, the inflected verb form raises to Speaker<sup>0</sup>, specific markers may merge directly in this position, accounting for the ungrammaticality of (38–40). Such a move obviously makes some predictions about negation, and in the next section, we will see that the interaction between optatives and descriptive negation corroborates the above claim.

#### 3.1.2 Interaction with descriptive negation

In this paper, I assume the following. In a structured NegP à la Poletto, French *ne* (which corresponds to some version of scalar negation, be it weakened à la Rooryck) heads the highest of its functional projections. It is a clitic which, once it has raised to ScalarP, attaches onto the inflected verb. *Pas*, in modern vernacular French, looks like a minimizer (see also Rowlett 1998 a.o.). It occurs lower, in a position between T and VP, which may correspond to Poletto's minP. Given that modern French in its vernacular form tends to delete the *ne*, I also assume that *pas* is the contentful expression of negation. English does not have the scalar negative marker. Following Poletto and Moscati in the essence if not the letter, I also assume that negative elements may raise to high structural positions in the clause. Movement to these heads can be covert, as argued for English by Moscati. It can also be overt, as attested by the French examples below, where the inflected verb in (44b) inverts with the pronominal subject in negative interrogatives:<sup>26</sup>

- (44) a. Elle ne mange pas de bonbons. she NE eats NEG of sweets 'She does not eat sweets'.
  - b. Ne mange-t-elle pas de bonbons? NE eat-she NEG of sweets 'Doesn't she eat sweets?'

The structure adopted above, as well as Moscati's analysis, give strong predictions as to the relation between descriptive negation and bouletic modality as encoded in optatives: given the relative position of the two markers, negation should not be able to scope over the optative marker. This is indeed the case. Consider the following:

(45) May she not get hurt! [BOUL > NEG; \*NEG > BOUL]

Example (45) straightforwardly expresses the fact that the speaker wishes that not p. The bouletic feature, which triggers raising of the modal *may*, yields the observed scope relations. While the expression of modality scopes above negation, the reverse scope is not accessible: the sentence cannot mean that the speaker not wishes that p.<sup>27</sup>

<sup>&</sup>lt;sup>26</sup> On French negation, see Déprez (1997; 2003) and the papers in Corblin and de Swart (2004). See also Zeijlstra (2009) who argues that *ne* is an NPI, and Rooryck (2008) who defends the appealing idea that *ne* is a *minifier*.

<sup>&</sup>lt;sup>27</sup> Note that it possible to negate a wish, and obtain the pattern in which negation scopes over bouletic modality, but this has to be syntactically encoded in a bi-clausal negative sentence with the overt predicate *wish*, and turns into an "assertion:"

<sup>(</sup>i) I do not wish that *p* 

French has an interesting syntactic constraint on negation in optatives. Recall that while the contentful negative marker is an adverbial-like *pas*, which may be analyzed along the lines of English *not*, standard French also has a negative clitic-like element, which raises with the inflected verb (see 2.1.1). Consider the following pair:

- (46) a. Puissiez-vous avoir raison! can.SUBJ.2PL you have right 'May you be right!'
  - b. \*Ne puissiez-vous pas avoir raison! NEG can.SUBJ.2PL you not have right

Although an interpretation where descriptive negation is involved is perfectly plausible, the negative marker cannot raise with the verb.<sup>28</sup> The data here suggests that in modern vernacular French, there is no syntactic movement of a negative marker whatsoever to the position in which the optative element occurs. Note that neg-raising to a C-related head is not excluded, as attested by the following negative wh-question:

(47) Ne pouvez-vous pas venir? NEG can you not come 'Can't you come?'

The negative marker, under Moscati's analysis, is at most licensed in a type-related head, say C. Optatives were argued to target a higher head (Speaker). Since this head dominates the clause-typing head, there is no neg-licensing at this level, and a negatively marked head is banned from that position. Although head-movement per se does not affect scope relations, crucially, the movement of the modal verb here targets the head where the bouletic feature is encoded. As such, it overtly creates the configuration in which negation scopes lower than the modal: Speaker<sup>0</sup> sits higher than any position in which negation could be licensed. While C<sup>0</sup> (or Force) may license negation, such neg-raising à la Moscati does not affect Speaker<sup>0</sup>.

#### 3.2 Hortatives

Although hortatives are also expressions of bouletic modality, they differ in several respects from optatives. A striking feature of hortatives is that they share properties with imperatives. Their interpretation is that of a directive speech act in which, among others, "the agent(s) of the action may not be the addressee(s) of the utterance, but someone else: the speaker or a third party" or "the speaker herself may be included among the agents" (Jarry & Kissine 2014: 26). They encode bouletic modality, just as imperatives do in that they express the speaker's desire that p obtain. Condoravdi & Lauer (2012) argue that imperatives "commit the speaker to a particular kind of preference and to be bounded by a condition that limits his active involvement in making the content true" (2012: 45). Morphologically, hortatives may also look like imperatives and may share the same inflectional paradigm. This is however not systematically the case, suggesting that while they

<sup>&</sup>lt;sup>28</sup> A reviewer notes that examples like (46b) are attested in a literary register: "Idoméneus, ne puisse-t-il jamais revenir de la terre Troienne" [L'Iliade, chant XIII, trad. Leconte de Lisle] or "Jamais ne puisse-t-il arriver de mal à l'homme de bien!" [*Voyages de monsieur le chevalier Chardin en Perse et autres lieux de l'Orient*]. However, as s/he notes, negation still scopes below the bouletic modality. S/he also suggests that "It is quite possible that the negation scopes below the mood marker and above the verb pouvoir", an interesting path to explore. While similar examples are only to be found with 3<sup>rd</sup> person pronouns, modern vernacular French seems to have lost this option altogether, maybe due to a reanalysis of *pouvoir* as a "pure" bouletic modality marker. The detailed featural makeup of various modality markers are part of an ongoing research project of the author.

belong to the family of directives, they still are distinct from imperatives proper. Typically, imperatives may encode a variety of uses, such as directives (command, request), but also wishes, permissions, invitations or advice (see Condoravdi & Lauer 2012). Hortatives, on the other hand, are restricted to wishes and suggestions (48) while doing part of the same job as imperatives, that is, committing the Speaker to a preference (49):

- (48) Let's take the bus
  - (i) I suggest that we take the bus
  - (ii) #I order you/us to take the bus
  - (iii) #I allow you/us to take the bus
- (49) #I don't want to, but let's go to the movies!

#### 3.2.1 The syntax of hortatives

Syntactically, hortatives exhibit a behavior which distinguishes them from epistemic/deontic modality markers. As opposed to the latter, they can precede the subject pronoun:

(50) a. We (all) must be at home.b. Let's (all) go to the movies!

In (50a), the subject pronoun precedes the modal, which occurs in an inflection-related position, T under standard accounts. In (50b), the hortative marker *let* which, I claim, encodes modality, precedes the subject pronoun. It must therefore merge in a higher position. Similarly, French exhibits subject-inflection inversion in hortatives, but not in sentences carrying epistemic modality:

- (51) a. Ils doivent être malades. they must.3PL be sick 'They must be sick.'
  - b. Mettons-nous au travail! Put.1PL us to work 'Let's get to work!'

In this respect, hortatives look like the optatives discussed above: languages may vary as to the lexicalization of the marker. While English uses a specific marker *let*, French has SAI.

However, the data below reveals an important syntactic difference: hortatives are compatibles with sentence-initial scene-setting adverbials:

(52) a. (?) Next week, let's go to the movies!

b. French

La semaine prochaine, soyons à l'heure!
the next week be.SUBJ.1PL on time
'Next week, let's be on time!'

Given the discussion in Section 3.1, the conclusion we are led to is that hortative markers do not target the position occupied by optatives. Where do they surface?

I will build on the resemblance between hortatives and imperatives, and propose that the merging/landing site for the modality marker (*let* in English (52a), inflected verb in French (52b)) is the projection which is also associated with imperative clause type, namely CP. Indeed, unlike in epistemic modality constructions (53), but like in imperatives (54), topics are banned from hortatives, suggesting that they occur higher than TopP (55):

- (53) a. The red box Kaniehtiio can have taken on purpose.
  - b. French
    La boîte rouge, Kaniehtiio a dû la prendre exprès.
    the box red, Kaniehtiio has must it take.INF on-purpose
    'The red box Kaniehtiio can have taken on purpose.'
- (54) a. \*The red box, take (it)!
  - b. French
    \*La boîte rouge, prends(-la)!
    the box red take.IMP (it)
- (55) a. \*The red box let's take it!
  - b. French
     \*La boîte rouge, prenons(-la)!<sup>29</sup>
     the box red take.IMP.1PL (it)

As already mentioned above, I assume that within a (split) CP structure, the head C encodes clause-typing. If imperatives are indeed clause-typing (see Portner 2004; 2007; Condoravdi & Lauer 2012), and if hortatives belong to the imperative family, they also encode the directive clause type feature. In hortative clauses of the French type, which exhibit SAI, the tensed verb/auxiliary occurs in a high left-peripheral projection. I propose that it raises to check its directive feature in the functional projection associated with the relevant imperative feature, namely CP.

However, as argued above, hortatives are also associated with bouletic modality, and this latter property also needs to be licensed. The functional head encoding the relevant bouletic modality feature, Speaker<sup>0</sup>, c-commands the position in which the hortative marker occurs. I propose that it legitimates the modal content of the hortative auxiliary/verb via *Agree*. The lack of further overt movement to SpeakerP still needs to be explored. For the time being, I do not have a full explanation of this, but a trail that could be followed is that hortatives cannot move higher than CP because they are "frozen" in this position, where the imperative type-feature is encoded. The notion of "freezing" builds on Rizzi's notion of "criterial freezing" (Rizzi 2006). The essence of the proposal is that an element *A* endowed with a feature  $\alpha$  may move to a position where the feature is checked, but once it is checked, no further movement operations. Crucially, the phrase must be involved in what Rizzi calls a "criterial configuration", that is a configuration which participates in the expression of scope and/or discourse properties.<sup>30</sup>

A partial structure of the left-periphery of hortative sentences is given below.<sup>31</sup> Again, while some markers reach the relevant position via movement, it may be the case that others undergo external merge to the position.

(i) Cinque's modal hierarchy (Cinque 1999) Mood<sub>speech act [Hortative]</sub> > Mood<sub>evaluative</sub> > Mood<sub>evidential</sub> > Mood<sub>epistemic</sub> ....

<sup>&</sup>lt;sup>29</sup> Note that (52a, b) is fine with a comma intonation, which corresponds to so called "hanging topics".

<sup>&</sup>lt;sup>30</sup> Clearly, the question that would need to be explored is what feature(s) may participate in criterial freezing, and whether further *Agree* relations may still hold. Partial overt/covert movement and feature-checking has been explored in Baunaz and Puskás (2008), who argue that an element bearing a complex set of features may strip of some feature overtly and be blocked in apparent "freezing" while covert feature-movement may still be available.

<sup>&</sup>lt;sup>31</sup> The above observations are compatible with Cinque's hierarchy, where hortatives are classified under *Speech act mood*, which hierarchically dominates epistemic mood:

(56)  $[_{\text{SpeakerP}} [_{\text{Sp}} OP_{\text{BOUL}} [_{CP} XP_{\text{scene-setting}} [_{CIMP,} let/soyons_{boul} \dots [_{MoodEPIST} \dots [_{TP} \dots < soyons > Agree-$ 

#### 3.2.2 Interaction with descriptive negation

The interaction between hortatives and negation supports the analysis proposed above. Hortative markers can co-occur with negation:

(57) Let's not go to the movies! [HORT>NEG; \*NEG >HORT]

The interpretation in which the content embedded under the modality marker can be negated is the default one. In other words, (57) means that the speaker wishes that the addressees, including herself, do not go to the movies. On the other hand, the interpretation in which negation scopes above the modal is not available with descriptive negation: there is no way in which (57) can mean that the speaker does not wish that she and other addressee(s) go to the movies.

A parallel example in French reveals an interesting property of hortatives:

- (58) a. Allons voir un film ce soir! go.IMP.1PL see.INF a film this night 'Let's go and see a film tonight!'
  - b. N'allons pas voir de film ce soir. NEG gO.IMP.1PL not see.INF *de* film this night 'Let's not go and see a film tonight.'

(58a) is a case of (positive) hortative, with the verb *allons* ('let's go') argued to occur in C (see Section 3.2.1 above). (58b) is an instance of descriptive negation, an interpretation which is confirmed by the presence of the indefinite *de* (on the *un/de* distinction, see Gross 1977; Horn 1989).<sup>32</sup> Crucially, the interpretation is that of MOD > NEG ('wish NEG see a film'). I assume (see Section 2.2) that *ne* is a clitic, which moves along with the inflected verb. The dual nature of the hortative element clearly appears in its interaction with negation. Recall that the optative head cannot appear with the clitic *ne*, and I have argued that this results from a failure of the Speaker head to license negation. As discussed above, hortatives have an "imperative" component. A comparison with imperatives reveals indeed a similar syntactic behaviour:

(59) N'allez pas voir ce film! NEG gO.IMP.2PL not see.INF this movie 'Don't go and see this movie!'

The head hosting the imperative verb/auxiliary is standardly assumed to be C, as a clause-typing head. If Moscati's analysis is correct, this head may bear a negative clause-typing feature, licensing the presence of the negative scope marker.<sup>33</sup>

- (i) Paul a un frère Paul has a brother
- (ii) Paul n'a pas de frère Paul *ne* has not *de* brother

 $<sup>^{\</sup>rm 32}$  Essentially, descriptive sentential negation requires the indefinite de in French:

The indefinite *de* behaves like a polarity item, which is licensed in the scope of descriptive sentential negation. <sup>33</sup> But it does not take the imperative operator in its scope (in other words, (56) cannot mean that the speaker does not command that the addressee go and see the film).

However, as argued above, the bouletic feature of the hortative marker/inflected verb needs to be checked in a higher projection. Since there is no overt movement, the chain is created via Agree. The head of the chain c-commands, and hence scopes over, negation. Therefore, even if negation is licensed in CP, bouletic modality will never be in its scope, since it occurs in a projection dominating CP. The interpretation of sentential descriptive negation is systematically that of narrow scope with respect to the modal component, due to the syntactic constraints of negation and modality.

#### 3.3 Interim conclusion

The discussion of the syntactic properties of two expressions of bouletic modality has led us to the conclusion that bouletic modality is encoded in a functional projection which dominates the functional head encoding clause-typing (C<sup>0</sup>). While optatives were shown to occur overly in the bouletic head, hortatives were argued to appear lower, possibly in C, due to their imperative component. It was tentatively proposed that they are "frozen" in this position. However, their bouletic feature is checked with the bouletic head, thus creating a chain which scopes over the rest of the clause. Interaction with negation has shown both overt constraints (in French) and covert constraints, in the form of scope relations, which confirm both the difference in overt syntax and the similarity in covert syntax between the two types of bouletic modality expressions. The syntactic properties of bouletic modal markers as expressions of the highest left-peripheral modality are in line with their interaction with descriptive negation. The distinction between these two expressions of bouletic modality, which was identified both in their syntactic distribution and their interaction with descriptive negation, is structurally encoded. I therefore propose a higher granularity of the left periphery, where, in addition to positions dedicated to epistemic modality and speech act mood as proposed in Cinque (1999), a speaker-related position associated with bouletic modality is included:

(60) Fine-grained hierarchy of heads encoding expressions of modality: a. (..) Mood <sub>bouletic [optative]</sub> > Mood <sub>[imperative]</sub> > Mood<sub>eistemic</sub> ...[NegP ]...

Expressions of bouletic modality as associated with optative and hortative markers will occur in the left periphery, licensed by the corresponding features:

- (61) Structural positions of expressions of bouletic modality:
  - a.
  - $\begin{bmatrix} & & \\ &$ b.

The analysis proposed here converges with Hypothesis I: descriptive negation is blocked from scoping above expressions of bouletic modality due to syntactic constraints.

# 4 Metalinguistic effects

Recall that metalinguistic negation is claimed to yield wide scope interpretations because it does not function as negation of the propositional content of a sentence. Therefore, the prediction is that metalinguistic negation ignores the structural scope relations imposed by syntactic constraint, and, as opposed to descriptive negation discussed in section 3 above, should scope over the instances of bouletic modality studied here under the relevant contextual conditions. However, the data suggests otherwise. Given the distinction between the two sub-types of bouletic modality expressions uncovered previously, I will discuss them separately.

#### 4.1 Hortatives

Consider the following examples of hortative contexts:

(62) Context: Lena and Mei are discussing what they will do next Saturday. Lena suggests that they go and see a film, but Mei is rather against the idea. After having listened to Lena's arguments, she says:

Let's not go to the movies! intended: NEG [WISH [go to the movies]]

As discussed in the literature (see references in 2.1.2 above), metalinguistic negation may scope over different sizes of constituents. (62) may involve different levels of metalinguistic negation, as attested by different continuations:<sup>34</sup>

- (63) a. let us go not to the 'movies let's go the to the *pictures* [word level: *movies*]
  - b. let us not 'go to the movies let's *run* to the movies [VP level: *go to the movies*]
  - c. let's 'not go to the movies let's paint the town red! [Sentence level: [wish that] we go to the movies]

(63a, b) are cases of metalinguistic interpretations at different sub-sentential levels. In (63c), which bears a stress on the negative marker, negation targets the propositional level. That we are dealing with metalinguistic negation is attested by the fact that under this interpretation, NPIs are not licensed:<sup>35</sup>

(64) Let's 'not go to some/\*any movie NEG + WISH [go to some movie]

Similarly, metalinguistic interpretations of negation with hortatives are also accessible in French. Recall that descriptive sentential negation licenses the indefinite *de* (example (58b) repeated here as (65a)). This contrasts with (65b):

- (65) a. N'allons pas voir de film ce soir. NEG gO.IMP.1PL not see.INF *de* film this night 'Let's not go and see a film tonight'
  - b. N'allons 'pas voir un film ce soir! NEG gO.IMP.1PL not see.INF a film this night 'Let's 'not go and see a film tonight.'

The presence of the indefinite de in (65a) versus un ('a') in (65b) clear indicates that metalinguistic negation is at play.

However, the metalinguistic negation interpretation does not include the bouletic operator. In other words, there is no situation in which the speaker's wish (that p) is negated, even as metalinguistic interpretation. This appears to challenge the claim, at least in its strongest form, that metalinguistic negation scopes over the speech act. Before attempting to account for this, we compare the data with those of optative clauses.

<sup>&</sup>lt;sup>34</sup> I am adopting here a variant of Horn's notation: rather than indicating stress on a segment by putting the diacritic ´ on the relevant/first syllable, I will insert it at the beginning of the target string.

<sup>&</sup>lt;sup>35</sup> Although there is debate (see Larrivée 2011) about the fact that metalinguistic negation indeed rules out NPI licensing, it seems clear that, as opposed to descriptive sentential negation, these special cases of negation are incompatible with "negative-dependent" elements in many languages.

# 4.2 Optatives

Recall that optatives differ from hortatives in their syntactic realization, as attested by the ban on high adverbials. On the other hand, very much like hortatives, optatives scope over descriptive negation. Given the properties of metalinguistic negation, we again expect that the latter should scope over the modal in similar contexts. Consider now the following:

(66) Context: Nizhoni and Otilia are arguing about Polona's tendency to run late, and Nizhoni claims that she never witnessed this, and that at least it never affected her own plans. At that point, Otilia says:

May Polona 'not be late ! [but outrageously late] (i) WISH [ NEG [Polona be late]] (ii) \*NEG [WISH [Polona be late]]

Metalinguistic negation can target the complement of the modal (i.e. it can be understood as expressing that Otilia wishes Polona were NOT late, but e.g. very late), but it cannot cancel the bouletic modality on any ground. In other words, metalinguistic negation may affect the embedded units, but never the modal itself. This could be a purely semantic constraint, but it is difficult to argue that there is no way one could object to a wish.<sup>36</sup>

Similarly, (67) cannot be interpreted as metalinguistic negation scoping over the modal. In other words, there is no interpretation which cancels the wishing (while the wish can be objected to very easily):

(67) Had Rohimata 'not called the dean! \*NEG [WISH [Rohimata called the dean]

That (66) and (67) do involve metalinguistic negation can also be shown by the NPI test (68). Here again, the scope of metalinguistic negation does not include the bouletic operator:

- (68) Had Rohimata 'not called some/\*any professor(i) WISH [ NEG [call some professor]
  - (ii) \*NEG [WISH [call some professor]

Why would a metalinguistic negation interpretation be blocked in these contexts, while it may be accessible with other types of modals? A piece of the puzzle is contributed by data from French. Recall that descriptive negation was shown to be restricted to the complement of the bouletic modal maker, and the explanation proposed was the fact that negation cannot raise to the position which the inflected modal targets above CP.

Note that metalinguistic negation can still target the complement of the modal operator:

- (69) a. Puissiez-vous ne 'pas avoir raison (mais entièrement raison!) Can.SUBJ.2PL you NEG not have right but entirely right 'May you nót be right (but entirely right)!'
  - b. Puissiez-vous ne ´pas entendre une bêtise ! can.SUBJ.2PL you NEG not hear a stupidity 'May you nót hear something stupid'!

<sup>&</sup>lt;sup>36</sup> Actually, embedded contexts allow precisely this:

<sup>(</sup>i) I don't wish Polona were late (I am desperate about it)

I would like to explore the idea that the syntactic behaviour of negation and modality uncovers some important property of metalinguistic negation. Crucially, the key to the problem seems to be the fact that the ban on the overt raising of *ne* to a high position, a syntactic constraint, correlates with the impossibility of having metalinguistic negation interpretations which would outscope the modal marker.

#### 4.3 The syntax of metalinguistic negation

The analysis builds on previous work showing that Metalinguistic negation (MlN), while relying on inferential processes to retrieve the metalinguistic interpretation, is triggered in contexts which require access to a contrast/set. It runs as follows:

(i) As discussed above, it is argued in the literature (see Horn 1989; Carston 1996; Larrivée 2011, etc) that metalinguistic interpretations are inferences that are drawn with respect to some contextual background. In this sense, MLN is standardly considered as a (purely) pragmatic phenomenon.

(ii) it has also been observed (see a.o. Moeschler 2010; Larrivée 2011; 2016) that MlN readings require overt or covert corrective material. As proposed in Larrivée (2011):

"M[eta]Linguisitc] N[egation] upsets the expected old/new information dynamics: it ranges over discourse-old material, and transforms a discourse-old information into a discourse-new focus. Modifying the expected flow of IS is why MLN gives rise to garden-path effects, and why more generally it is marked" (2011: 3).

In all of the cases discussed here, it is indeed possible to have a continuation which overtly states some corrective material:

(70) Let's not go to the 'movies – let's go to the pictures.

(iii) as was also mentioned in Section 3 above, it has further been observed that MLN interpretations are triggered by some "signal", often encoded as a phonological marking. Indeed, Horn (1989) notes the association of the metalinguistic negation interpretation with a specific intonation, in the form of *a particular stress pattern*. In the examples discussed in this paper, a wide scope metalinguistic negation interpretation is actually accessible in the presence of a heavy pitch accent on the negative marker (*not, pas*).

(iv) a strong accentuation in the form of stress is, among others but as a priority, associated with contrast. Selkirk (2012) claims that a  $L+H^*$  pitch accent is most readily associated with Focus, and focus marking of a unit introduces a contrast. Typically, languages such as English, which have no syntactic marking of Focus, signal the contrast by a heavy stress:

#### (71) Sue invited THALIA (not Tina)

(v) by (i) to (iv), and following Larrivée (2016) and Puskás (2012) who also give arguments to the fact that contrast marking is the MLN inference trigger, I will conclude that what enables to have access to MLN readings is the contrast (stress) marking on some element of the sentence.

(vi) I will adopt here a rather consensual view of the notion of contrast which claims that the role of a contrast is to introduce alternatives. Such a view has, for example, been proposed in order to account for the semantics of Focus (see e.g. Rooth 1992), but it extends to other types of contrast (as discussed in e.g. Jacobs 2001; Büring 2003; Frey 2006; Molnár 2006).

(vii) The stress associated with Focus thus signals the fact that alternatives will be triggered.

(viii) Other intonational patterns may also be associated with contrast, such as the "hat contour" discussed in Jackendoff (1972) and Büring (2003). While focus accent is associated with the selection of one alternative, to the exclusion of others, the "hat contour" argued by Büring to be the characteristic pattern of Contrastive Topic, evokes several, non-mutually exclusive alternatives (see also Molnár 1998 on the idea that contrastive topics introduce weak alternatives).

(ix) under the view that contrast has the property of giving access to alternatives, we can also conclude that MLN is conditioned by the availability of (contrasting) alternatives. In this sense, all MLN readings involve a contrast. Since metalinguistic negation appears in corrective contexts, its function of is to *give access to alternatives*.

(x) in the syntax, contrast (topic, focus) is encoded in some let-peripheral position. There is indeed a large bulk of work which has established cross-linguistically that the overt syntactic positions associated with contrast are located above the inflectional head(s). Ranging from Italian (Rizzi 1997) to Hungarian (Horváth 1986; E.Kiss 1987; Puskás 2000; Lipták 2001; 2011 a.o.) and Gungbe (Aboh 1998) among others, researchers have shown that the syntactic realization of focused constituents which encode (exhaustive) contrast, but also contrastive topics associated with non-exhaustive contrast involve overt or covert movement to dedicated left-peripheral functional positions. As discussed in Section 2.2.1, focused constituents move to a dedicated left-peripheral position located in the CP-domain, overtly in languages like Hungarian (72a) or Italian (72b):

- (72) a. *Hungarian* Ursát VALINAK muttatuk be. Ursa-acc Vali-dat introduce-pas-1pl part 'We introduced Ursa to VALI.'
  - b. *Italian* Il libro A VALERIO l'ha comprato Valentina. the book, to Valerio it-has bought Valentina 'the book, Valentina bought it for VALERIO.'

Contrastive topics, which also bear a contrast feature (signaled by the diacritic  $\sqrt{}$ ), can also appear in the left –periphery:

- (73) a. Hungarian (Molnár 1998)
   √Péter Lundba jár egyetemre.
   Peter.NOM Lund.ILLAT go.3S university.SUBL
   '(As for) Peter, he goes to university in Lund.'
  - b. *Italian*√il libro, l'ho letto ieri
    the book, it has read yesterday
    'the book, I read (it) yesterday'

Languages like English do not (necessarily) have overt movement to these left-peripheral positions. Both focus and contrastive topics are prosodically marked, but do not undergo overt movement:

- (74) a. Ursula saw VALERIA.
  - b. Büring (2003)
     √The female pop-stars wore kaftans.

It has been proposed (see Drubig 1994; Wagner 2006) that in languages like English which do not display word-order variations, focused constituents undergo covert movement to the Focus position. I assume that similar covert movement raises contrastively topicalized material to a left-peripheral position (see Lipták 2011). This means that in situations in which contrast is signaled by stress but there is no overt movement to a left-peripheral position, as is the case for French *pas* and English *not*, there is covert movement to a contrast position.

(xi) since contrast occurs when some element is moved overtly or covertly to a leftperipheral position, and since MLN readings arise when there is contrast, (from ii and ix), I will propose that MLN is triggered if there is some element which raises overtly or covertly to a left-peripheral contrast position. Note, however, that assuming that all MLN readings are triggered by movement to the left –periphery is probably too strong. There are cases of MLN readings which involve low (local) negation, such as (75) below:

(75) Weiwei is not just a 'girl – Weiwei is my sister.

The argument of movement to a high contrast position is here more difficult to defend. The cases I am focusing on involve sentential negation, that is, negation at the clausal level. Therefore, I am not concerned with every kind of MLN, but only with those which are triggered by the presence of a stress on the (sentential) negator.

(xii) I claim that the syntactic implementation of negative configurations is a crucial part of metalinguistic processes. It goes as follows. As was discussed above, I assume, following Moscati that there is a high NEG position in the left periphery. In negative clauses, the C head is endowed with a negative clause-typing feature (Moscati 2006). In languages like French, the negative *scope* marker may either raise overtly if the verb it is attached to raises to C, or may undergo covert movement. In languages like English, the negative marker *not* raises covertly to the left-peripheral position. This brings negation to a sentential scope domain.

As such, negation will scope over the Focus or Contrastive Topic projection, where focused, resp. contrastively topicalized, material is licensed.

(xiii) alternatives are assumed to be of the same kind as the contrast-marked unit (see e.g. Büring 2003). I will propose further that syntactically as well, there has to be isomorphism. Consider the following cases of overt contrasts:

(76) French

- a. C'est à Xochitl que j'ai parlé, pas à Yvette It is to Xochitl that I spoke, not to Yvette
- b. \*C'est à Xochitl que j'ai parlé, pas chanté. It is to Xochitl that I spoke, not sang
- (77) Hungarian
  - a. ZORÁVAL beszéltem, nem Adával.
     Zora.INSTR speak.PAS.1S NEG Ada.INSTR
     'I spoke with ZORA, not with Ada.
  - b. \*ZORÁVAL beszéltem, nem telefonáltam. Zora.INSTRspeak.PAS.1S NEG phone.PAS.1S

Both French (76) and Hungarian (77) show that what contrasts with the focused unit has to be of the same syntactic form (PPs in this case).

(xiv) Therefore, whatever NEG scopes over will be contrasted with identical segments.

(xv) However, syntactic movement of negation is blocked at the C(P) level; no negative marker is licensed above the clause-typing head. I have argued that this is what blocks descriptive negation from scoping above the bouletic modality markers discussed here.

(xvi) if the negative marker reaches a high left-peripheral position, alternatives will be of the same kind as what it takes in its scope. Since negation can target a focus position in the left periphery, alternatives are available. They will correspond maximally to the portion of the clause which is in the focus domain. Recall, however, that the bouletic modality markers of this study were argued to occur in SpeakerP, a high functional projection of the clause above C, the clause typing head.

(xvii) therefore, alternatives cannot include the bouletic modal marker.

(xviii) from (xi), (xiv) and (xvi), we can conclude that contrastive interpretations which scope over bouletic modality will not be available.

(xix) Since (proposition level) MLN readings build on the accessibility to alternatives, there will be nor reading in which bouletic modality is in the scope of negation, even in its MLN reading.

Therefore, metalinguistic negation readings at the sentence level are also syntactically constrained. The above analysis supports hypothesis II.

#### **5** Conclusion

The main question of the paper was to find out why expressions of bouletic modality as instantiated in hortatives and optatives escape the scope of metalinguistic negation.

The study of the syntactic properties of these instances of bouletic modality and a close scrutiny of how negation interferes with it has enabled us to come to the conclusion that bouletic modality differs from other kinds of modalities with respect to negation because its syntactic encoding does not offer the same accessibility to neg raising.

A confirmation to the first hypothesis, namely that the syntactic encoding of the relevant expressions of bouletic modality involves mechanisms/positions which block negation from scoping high, was offered through the analysis of the syntactic properties of bouletic modality markers in different languages. The interaction with high adverbials, as well as with negative markers like French *ne* has led us to conclude that optative and hortative markers are licensed in a left-peripheral position which hierarchically dominates the C head where clause typing is encoded, and to which negation may maximally raise. This prevents descriptive negation from scoping above the bouletic content of these markers.

An approach which integrates the idea that metalinguistic negation depends on the availability of alternatives has led us to validate hypothesis II. Indeed, it appears that only when negation can scope over some focused material is a metalinguistic negation reading accessible. We have thus offered a correlation between the fact that bouletic modality never scopes below negation, and hence alternatives are not available at that level, and the fact that no metalinguistic reading is available. Confirming what was discussed in Puskás (2012) and Larrivée (2016), we have evidence for the fact that metalinguistic negation is dependent on the availability of contrasting material. Since contrasting material is syntactically encoded in focus, the availability of metalinguistic negation interpretations is conditioned by a syntactic constraint. The conclusion one is led to draw from these observations is that metalinguistic negation is not (always) a purely pragmatic phenomenon. Metalinguistic negation readings are triggered by contextual input, and rely on inferential processes, but MLN is not blind to syntax. Pragmatics can do its job once syntax has cleared the path.

Clearly, in order to grasp the full reach of the proposal, which is here restricted to cases of MlN readings for optatives and hortatives as expressions of bouletic modality, further investigation on the relation between syntactic encoding and pragmatic inferencing in other domains will need to be pursued. Other types of modality markers also interact in unexpected ways with negation, both in its descriptive and its metalinguistic interpretation. I hope this paper offers a first step towards this goal.

# Abbreviations

NOM = nominative, ACC = accusative, DAT = dative, ILL = illative, SUBL = sublative, SUP = supersessive, NEG = negative, BOUL = bouletic, EPIST = espistemic, DEONT = deontic, ABIL = ability, POSS = possibility, NECC = necessity, PERF = perfective, PAS = past, PRES = present, INF = infinitive, IMP = imperative, SUBJ = subjunctive, COND = conditional, PL = plural, SG = singular, TOP = topic, FOC = focus

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# **Competing Interests**

The author has no competing interests to declare.

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