

A SYNTACTIC APPROACH TO LOGICAL MODALITY

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This paper argues for a structural analysis of the sentence which differs from most of the current generativist proposals on the subject in that it projects two core features in the illocutionary shell: [\pm assertive] and [\pm indicative], to be found in the categories Force Phrase and Mood Phrase, respectively. We explore the relationship between these features and the rest of the functional categories in the representation, focusing on the particular behaviour of Tense Phrase in each of the cases. We also examine the syntactic implications of these features, to eventually provide an approach to logical modality which integrates sentences with modal verbs, *that*-subjunctive clauses and *to*-infinitives.

KEY WORDS: syntax, modality, mood, subjunctive, modals, *to*-infinitives

1. The Functional Structure of the Sentence

Formal characterizations of the sentence customarily distinguish among three layers: a predicative layer, where thematic role assignment takes place, an inflectional layer, with the grammatical categories corresponding to concrete or abstract morphological specifications on the verb, and an illocutionary layer, which connects the proposition with the actual discourse.

Practically all generativist analyses of the sentence from the early eighties on have expressed the differences between the predicative layer and the inflectional/illocutionary ones in terms of the differences between lexical and functional structure, respectively. In the first case, the head of the syntactic projection is a lexical category, which is denotative and capable of assigning thematic roles, and which can be modified quite freely; in the other two, the head need not be lexical, only adds some grammatical information and gets modified in much more restricted terms. The analysis of the sentence defended in Chomsky (1981) clearly, but rather schematically, reflected these basic assumptions:

1. [CP [IP [VP

The Complementizer Phrase (CP) was the functional category which represented the illocutionary layer, and therefore served as an interface between a propositional content and (a) the articulation of the discourse and (b) a higher clause, if any. Inflectional Phrase (IP) projected the grammatical features for tense, lack of tense, morphological agreement between the verb and the subject and, arguably, grammatical

aspect and modality.¹ And in the verbal phrase (VP) one would find the representation of the hierarchic relations between the verb and its arguments.²

Once it had been established that grammatical categories had an important role to play in the characterization of the semantic and distributional properties of the sentence, a very fruitful debate started about how many of them are required in the representation, in which hierarchical order they should be projected and what particular features they head. The CP is in this respect currently assumed to comprise at least two projections (Rizzi 1997): a Force Phrase, where the illocutionary force of the sentence is encoded (i.e. if it is a question, a declarative, an exclamative, a relative, a comparative clause etc.) and where the complementizers (or subordinators) are projected; and a Finite Phrase, which signals the (non)-finiteness of the clause;³ since these are the leftmost peripheral categories in the representation, their values will be selected from outside, thus reflecting the well-known contrasts between predicates which require declarative or interrogative clauses as their complements (2), or those which select a finite or a non-finite value in those clauses (3):

2. They *said* that/*whether she has recently been to Paris
They *wonder* *that/whether she has recently been to Paris
3. They *said* that he has won the race/*him to have won the race
They *want* him to win the race/*that he wins the race

As regards IP, after the seminal work by Pollock (1989), the node has been “split open” and each of the features contained in it have been argued to project independently (see Haegeman 1997 and references therein). Of all these, Tense Phrase has always been assumed to be one of the core functional categories in the representation (see Chomsky 1995 and subsequent work). And, in recent analyses, it has even played a dual role in the syntax: as a functional category (which checks Nominative Case, categorial features and grammatical features like person and number) and as a lexical category with an argument structure of its own. In particular, Zagana (1990) proposes that tense is a two-place predicate whose external argument is a Reference-Time, which corresponds to the time of speech in matrix clauses, and whose internal argument is the Event-Time, that is, the specification of the inherent internal temporality of the verbal predicate (i.e. its lexical aspect). Tense then orders the Event-Time *within*, *after* or *before* the Reference-Time.

Finally, since it has also been convincingly argued (Smith 1991; Klein 1992; Klein 1994; Klein 1995) that what is ordered with respect to the Reference-Time is not the whole Event-Time but only the part of it for which an assertion is made, Demirdache and Uribe-Etxebarria (2000 and 2004), among others, have justified the inclusion of a category AspP for grammatical aspect (expressing the part of the event to be focused) which mediates the

1. In fact, neither grammatical aspect nor modality were standardly projected in the sentence at this time, but the category IP would be the only place for them under basic assumptions.

2. From the work of Sportiche (1988) on, it has been customarily assumed that the subject function, canonically associated with the external argument of the verb, projects in the VP in the underlying structure (*VP-internal subject hypothesis*). The VP-shell will therefore be the syntactic locus for the propositional content.

3. Two other categories may also be optionally projected in between these two: Focus Phrase, for focalized constituents, and Topic Phrase, for topicalized ones.

placement of the event in the external time. The functional skeleton of a sentence will therefore be as in (4):

4. [ForceP[FiniteP[TP[AspP[VP

The inflectional layer of the sentence then provides for projections where the temporal features of the proposition are specified, and these features must be checked off by the verb of the sentence, which is morphologically marked for them. The question now arises of where and how to account for the syntactic expression of modality, which is also an essential part of the transmission of any state of affairs. In principle, modality could be considered a category in the illocutionary layer, since it conveys different types of relationship between the speaker and what is expressed in the proposition, although in one of its grammatical manifestations, that of mood, it shows in the inflectional part, as one of the potential suffixes on the verb stem.

Our goal here will be to provide a syntactic account of logical modality which seeks to express its relationship with the rest of the categories in the representation. This, in turn, will lead us to revise the core categories in the illocutionary shell, which will be modified to accommodate two features which we consider relevant for this syntactic characterization: [\pm assertion] and [\pm indicative].⁴ And, in the last section, we will offer a tentative approach to infinitive sentences which formally connects them to subjunctive *that*-clauses and to modal verbs. Though the Chomskyan Minimalist Program underlies our conceptual and empirical view, we will for the most part ignore technical questions which may hinder our descriptive aim to those readers not well acquainted with the model, and, therefore, we will make standard assumptions wherever possible.

2. The Expression of Modality

A number of criteria have been proposed, implicitly or explicitly, for the definition of modality (see Lyons 1977 and Palmer 1986 for an overview of the different proposals). In general, most linguists agree that there are two basic distinctions to be made in this respect: (a) *epistemic modality*, which relates to the commitment of the speaker to the truth value of the proposition and comprises the notions of possibility and necessity (as in the examples in [5]), and (b) *deontic modality*, which codifies the speaker's attitude to the actualisation of the situation, and expresses such notions as command, prediction, futurity, request, permission or wish (as in [6]). To these central values one may add what has been termed *dynamic modality* (Huddleston and Pullum 2002), which expresses ability or disposition on the part of the external argument of the predicate (see [7]):

4. As one anonymous reviewer notes, the problem with this type of research lies on justifying the proliferation of features within the Minimalist Program. Since we strongly believe that a model which makes a programmatic use of grammatical categories cannot ignore the relevance of modality for the structure/functioning of the sentence, we have tried to avoid unnecessary proliferation of categories by adapting for the purpose two which are customarily assumed to be obligatorily required in the illocutionary layer: ForceP and FiniteP.

5. a. He may be here at ten
b. He is likely to be here at ten
6. a. He must be here at ten
b. I insist that he be here at ten
7. He cannot lift that weight

As these examples show, modality can be expressed grammatically either in the verbal morphology, i.e., grammatical mood, or through modal verbs.⁵ As is well known, present day English makes a productive use of modal verbs whilst the expression of moods different from the indicative is quite restricted. But, in any case, the semantic function of modality affects the contents of the whole proposition, and therefore we will have to assume that the modal value of the sentence shows syntactically in a category whose scope is wider than the rest; this can be the modal verb, which structurally dominates the proposition, or some category in the illocutionary layer, the hierarchically higher shell in the representation. Let us describe each of these possibilities in turn.

2.1. Modality, Modal Verbs, and Tense

It is standardly assumed that there are two main components to be distinguished in sentences with modal verbs: the modal itself, which may have an epistemic or a deontic reading, and the proposition it introduces, syntactically a VP:

8. [_{TP} [V_{epistemic} can] [_{VP} it be a heart attack]]
9. [_{TP} [V_{deontic} can] [_{VP} you borrow my computer for that]]

These two components merge with a TP which serves its two basic purposes (see supra): it has a [+DP] feature to be checked by a lexical constituent in the Nominative Case, and it places the verb with respect to the Reference-Time.⁶ In particular, the temporal head here situates the modal verb in the objective time axis, and in independent sentences this normally means simultaneity with it; that is, we convey the speaker's attitude towards the proposition at the moment of speech:

10. Epistemic reading
 - a. Call up the emergency services: it can/could/may/might be a heart attack
 - b. Judging from the noise, the children must be playing upstairs
11. Deontic reading
 - a. You can/could/may/might borrow my computer for that
 - b. You must/should finish your dissertation within this month

As a consequence, the past morphology on modal verbs basically implies a degree of remoteness, and not past tense. Since modal verbs must always take as their complement

5. The examples in (5) and (6) advance the three constructions which we seek to integrate in our analysis of the syntactic realization of modality, i.e. sentences with modals (5a and 6a), sentences with *to*-infinitives (5b), and sentences with the verb in the subjunctive mood (6b).

6. The grammatical feature [+DP] (or [+person]); see Chomsky 1999 for a discussion) is what forces all sentences to have a lexical subject in English.

a bare infinitive, when one needs to refer to the present judgements of the speaker about the truth value of a past situation (epistemic modality), the proposition will be introduced by the bare infinitive of the auxiliary verb *have*,⁷ whose grammatical function is to mark an event as anterior to another reference time:

12. Epistemic reading
 - a. This can/could/may/might have been a heart attack
 - b. Judging from the state of the room, the children must have been playing here

The situation is different, though, in the case of deontic modality: one cannot impose obligation or grant permission now for a past situation, and therefore the values of TP (checked by the modal verb) and of the time of the situation (expressed by the optional auxiliary *have* that introduces the proposition) must match in these sentences, which all have a contrary to fact implication:

13. Deontic reading
 - a. You *can/could/*may/might have borrowed my computer for that
 - b. You *must/*shall/should have finished your dissertation within this month

Therefore, the structure of independent sentences with modal verbs must be as in (14) and (15).⁸ These structural representations show that [-past] is the unmarked value of tense and of the proposition, and that this value does not change for TP even if the proposition projects an auxiliary for past in the epistemic reading, though matching of the two is required in the deontic one:

14. [TP_[-past] [VP V_{epistemic} [VP_[α past] (have [TP_[+past]])]]_{AspP} [VP V_{lexical}
15. [TP_[α past] [VP V_{deontic} [VP_[α past] ((have [TP_[+past]])]]_{AspP} [VP V_{lexical}

Notice that the representations in (14) and (15) also reflect the local relations of selection among the different heads of the sentence. This extends to the case where the sentence with a modal is dependent on another verb (for example, in reported speech); in these cases, the TP of the subordinate sentence is selected under matching conditions by the main verb, thus obtaining real past readings of the modal verbs:

16. He [TP_[+past]] said that [TP_[+past]] it *can/could be a heart attack
17. She [TP_[+past]] told me that [TP_[+past]] I *can/*may/could/might borrow her computer for that

Therefore, in sentences with modal verbs tense retains the values it has in non-modal clauses, but its function as a predicate that situates that verb with respect to a reference

7. See Ojea, 2003 for a justification of the temporal (not aspectual) value of the auxiliary *have* in all contexts.

8. Dynamic modality is different from the other two, and here it is the modal that can be present or past, not the proposition: *He can speak two languages* vs. *When he was a child, he could speak two languages* (cf. **When he was a child, he can/could have spoken two languages*). Note that in this reading the modal is not neutral as to the thematic role of the participants in the proposition either: in particular, it selects an *agent* as the external argument of the predicate.

time is conditioned (a) by the particular reading of the modal verb, i.e. epistemic or deontic, and (b) by the dependent/independent status of the clause.

2.2. Modality, Mood, and Tense

In languages where grammatical mood is consistently signalled on the verbal morphology, the clarification of the semantic and syntactic conditions which may explain the alternation between indicative and subjunctive has never been an easy task for grammarians (see, for example, Bosque, 1990 for an overview of the different grammatical approaches to the topic in Spanish grammar). Since our aim here is just to explore how to project the modality values on the syntactic structure, we will adopt a simplified view of the issue, accepting what may be considered the standard hypotheses. Two assumptions are common ground in relation to this matter: that mood is conditioned from outside (i.e. certain predicates or operators force subjunctive mood, whilst others select indicative), and that it is semantically associated with the assertive value of the selector. The work of Hooper (1974) has been strongly influential in this respect. Hooper (1974) considers two dimensions for classifying English predicates. The first concerns the assertive/non-assertive divide, and the second the factive/non-factive one.⁹ This produces a fourfold classification: [+assertive, +factive] (*find out, discover, know, learn, notice, realise, etc.*), [+assertive, -factive] (weak assertive: *think, believe, suppose, expect, imagine, guess, etc.*, and strong assertive: *admit, argue, claim, explain, maintain, say, write, be clear/obvious/evident, etc.*), [-assertive, +factive] (*regret, resent, forget, be odd/strange/interesting/relevant/sorry, etc.*) and [-assertive, -factive] (*doubt, deny, be (im)possible/(im)probable/(in)conceivable, etc.*).

Although this classification may help to establish certain semantic and syntactic generalizations across predicates, it can hardly be used to account for mood distinctions cross-linguistically, except in that assertive predicates (or even, the assertive reading of some predicates) are strongly associated with complement clauses in the indicative mood. That the feature [\pm factive] of the matrix predicate is not directly implicated in mood selection is shown in the contrast between a verb like *regret* ([-assertive, +factive], which selects subjunctive, and another like *found out* ([+assertive, +factive] which selects indicative, even though they share the same value in the [\pm factive] paradigm.¹⁰

Now, if grammatical mood is (at least) connected with the assertive value of the predicate which introduces and selects the subordinate clause, we expect this [\pm assertive] feature to be relevant in the characterization of sentences as well; accordingly, it will have to be present in some part of their constituent structure, the obvious candidate being the most external category in the illocutionary layer (i.e. the one in a local structural relationship with the selector), that is, ForceP. We also claim that this category will in turn dominate a Mood Phrase with a feature [\pm indicative] to be checked in the narrow syntax

9. Assertive predicates introduce sentences which can be assigned a truth value (i.e. whose state of affairs conforms to reality), and factive predicates are those which presuppose the truth of their complements (see Kiparsky and Kiparsky, 1971).

10. Examples with these verbs in Spanish (where the mood specification is productively found) shows this more clearly: *Lamento que se haya marchado tan pronto/Descubrí que se había marchado demasiado pronto.*

by the verb.¹¹ Finally we propose that, under this view, infinitive clauses may be treated as one of the possible syntactic manifestations of the feature [-indicative], something that, as we will try to show, helps to account for their basic formal and semantic properties in a rather straightforward manner. We therefore suggest that the clausal structure in (4) be modified as in (18):

18. [ForceP_{±assertion} [MoodP_{±indicative} [TP [AspP [VP

Our proposal predicts four possible combinations of the features [±assertive] and [±indicative], all of them actually present in different clause-types: (a) [+assertion, +indicative], to be found in main sentences and most complement clauses after assertive predicates, (b) [-assertion, +indicative], which will characterize interrogative clauses, (c) [-assertion, -indicative], the values in most complements to non assertive predicates, mainly sentences in the subjunctive mood and *to*-infinitives,¹² and (d) [+assertion, -indicative], the features that we will suggest characterize a subgroup of *to*-infinitive clauses (see section 2.3).¹³ We will also assume that when MoodP has the feature [-indicative] the TP it introduces is not a proper temporal predicate, since it loses the capacity to place the event with respect to the Reference-Time by itself.

Back to subjunctive *that*-clauses, their syntactic structure will then be:

19. [ForceP_[-assertion] [MoodP_[-indicative] [TP [AspP [VP

They are dominated by an illocutionary layer with the features [-assertion] in ForceP and [-indicative] in MoodP, and therefore have a defective TP, that is, a temporal projection where the [+DP] feature is checked by a Nominative DP, but which is anaphoric, i.e. it needs a matrix TP to take their temporal reference from it. This is why clauses in the subjunctive mood are always subordinate and do not display real tense distinctions, as the following examples from Querreda (1993: 180) show:

20. I recommend that every student be quiet during the exam
 21. In my old school days the teachers recommended that every student be quiet during the exam

Given the lack of temporal features of its own, if the verb in the subjunctive clause is inflected for past morphology, this will predictably be not a real past, but a case of modal remoteness which, as we have just seen, is the common reading of past inflections when modality is involved:

22. Suppose they left for Paris now/next week

11. If the optional categories for topicalized and focalized constituents were to be projected in the illocutionary layer, they would appear in between the two obligatory ones, with TopP dominating FocusP (see Rizzi, 1997 on the issue): [ForceP_{±assertion} [TopP [FocusP [MoodP_{±indicative} [TP [AspP [VP.

12. This is why these clauses appear not only in contexts which imply an epistemic or a deontic reading, but also in other unassertive ones: hypothetical, conditional, intentional, etc.

13. We will leave aside for further research the feature specification of the bare infinitive, which presents interesting semantic differences with *to*-infinitive clauses (see Duffley, 1992 for an overview).

Finally, another of the peculiarities of subjunctive structures also follows from this defective nature of TP: when negative, the auxiliary *do* will not be required, given that this form is basically associated with the temporal projection in its core function as a temporal place-holder:

23. It is important that you (do) not spend so much time on that task

Grammatical mood, although it is not very productive in present-day English, is then one of the possible syntactic manifestations of modality, and its structural properties follow from the fact that its non-assertive nature precludes a proper temporal reading of the clause, thus depriving tense of some of its formal and semantic features.

At this point, we would like to suggest that there also exist clauses with a MoodP with the feature [-indicative], and with a modal particle that introduces a proposition with a bare infinitive. The TP complement of this [-indicative] Mood Phrase expectedly lacks its lexical value (i.e. it does not relate an Event-Time with a Reference-Time), and has even lost its capacity to license Nominative Case, given that it is not in a local relationship with a verbal category. In other words, it is the most defective of all, only retaining the [+DP] feature which will have to be checked via movement or merge with a DP projection. This proposedly is the syntax of the so-called *to*-infinitives, whose structural characterization will then be as in (24):

24. [ForceP_[±assertion] [MoodP_[-indicative] [TP [Modal particle *to* ... [VP

2.3. Modality, To-Infinitives, and Tense

The idea that underlies our analysis is that *to*-infinitives constitute a potential syntactic realization of [-indicative] mood. As is well known, the particle *to* derives from the homophonous preposition which denotes the goal of a motion, and it has been customarily assumed that the meaning of infinitive-*to* is still connected to that of the preposition (through a sort of metaphorical connection; see Quirk, et al. 1985: 687). Another long standing assumption has been that bare and *to*-infinitives were in competition in Old English, with *to*-infinitives eventually winning over and replacing the bare infinitive in most contexts (Sweet 1903; Jespersen 1927; Visser 1963; Lightfoot 1979). But Los (1999) has recently offered compelling evidence that the *to*-infinitive, although a purposive PP initially, came to be regarded as the non-finite counterpart of subjunctive purpose clauses. She shows that in Old English *to*-infinitives appear with impersonals and in subject and object control constructions, which were invariably about non-actuated acts that were intended, promised, permitted or ordered by the speaker, that is, unassertive contexts where finite subjunctive clauses could also appear. She therefore argues that the ongoing competition in Old English was actually between these two structures, with *to*-infinitives ousting subjunctive *that*-clauses in Middle English.

This leads to the situation we find in present-day English, with subjunctive *that*-clauses practically a relic, their function as markers of modality having been undertaken by sentences where the modal value is expressed analytically (i.e. through modal verbs) or by *to*-infinitive sentences in control structures:

25. a. I recommend that every student be quiet
 b. I recommend that every student should be quiet
 c. I recommend every student to be quiet

Now, if *to*-infinitives are historically and semantically connected to subjunctive clauses, their syntactic structure must somehow reflect it. Our proposal is that this is precisely the case, as the structures in (19) and (24) show. They share the same feature in the MoodP, although *to*-infinitives may display any of the two values [\pm assertive] in ForceP. They also have a defective TP projection, which implies that none of the two will ever be independent sentences, their only difference in this respect being the (im)possibility to check Nominative Case in the subject position.

Together with the close relationship between subjunctive clauses and *to*-infinitives, our analysis also reflects the connection (both formal and semantic) between modal verbs and the particle *to*, a connection which, to my knowledge, has been ignored in most accounts of the issue. Actually, in early generative analyses (see, for example, Chomsky 1957: 100) *to* was basically analysed as “a mere empty grammatical appendix to the infinitive,” as Jespersen (1940: 154) had put it. But, on the one hand, *to* shows the same structural behaviour with respect to its VP complement than modal verbs with respect to theirs:

26. They offered to lend her the money, and now they don't want *to*
 27. They offered to lend her the money, so *lend her the money* they have *to*
 28. *To* constantly *complain about the situation* does not help you at all

As (26) and (27) show, the VP can be elided or displaced independently of *to*, and the two constituents may be separated by adverbials, the negative particle *not* ... in the so-called split infinitives, as in (28). These same possibilities are found in the case of modal verbs:

29. Will they lend her the money? Yes, they *will*
 30. They said that they would lend her the money, and *lend her the money* they *will*
 31. He *will* surely *be here tomorrow*

From a semantic perspective our analysis also predicts certain similarities between the two constructions. Note that *to* is the grammatical particle responsible for the checking (and cancellation) of the [-indicative] and [-assertive] features in MoodP and ForceP; this implies that the subordinate clause it inaugurates will convey different non-assertive readings (i.e. epistemic, futurate and deontic, the latter being more frequent given the origins of the particle as a preposition of purpose), which basically coincide with those denoted by modal verbs:

32. Epistemic reading:
 a. They are sure *to* finish it on time
 b. I hope *to* be there soon
 c. John is likely *to* stay
 33. Futurate reading:
 a. She expected *to* have it ready more easily
 b. They have planned *to* visit Oregon next year
 c. She really means *to* spend the night there

34. Deontic reading:
 a. We insist *to* be kept informed
 b. They have told him *to* stay
 c. He didn't allow me *to* borrow his pen

According to our proposal, the structural analysis of any of the sentences in (32)–(34) will be as in (35):

35. They are sure [ForceP_[-assertion]] [MoodP_[-indicative]] [TP_[Modal particle to]] [_{VP} PRO finish it on time]

This analysis then serves to account for the similar interpretation sentences with *to* and those with a modal verb can have, and for the distributional coincidences between them. It may also explain why infinitive-*to* and modals cannot coexist, an instance of the general constraint that precludes two categories with equivalent value and function in the same clause. But since they are categorially distinct, their differences also follow. Thus, modals, being auxiliary verbs, are subject to processes (inversion, raising over the negative particle and optional contraction with it, etc.) forbidden to particles. Besides, *to*-infinitives are always dominated by a [-indicative] Mood Phrase, whereas modals do not present this restriction.¹⁴ And, more significantly, the TP associated with the modal particle *to*, not being in a local relationship with a verbal category, does not check Nominative Case but zero Case, i.e. the one in the empty category PRO.

Finally, note that our analysis of *to*-infinitives as clauses with the structure (24) implies that, contrary to subjunctive clauses, they can also be dominated by a [+assertive] Force Phrase. This is what we find in the complement infinitival clauses of verbs like *believe*, *claim*, *confess*, *know*, *report*, *say*, *think*, etc. all [+assertive] verbs in Hooper (1974)'s classification above. We expect these assertive complements to display certain differences vis-à-vis the unmarked [-assertive] infinitive clauses. This expectation is born out, and [+assertive] infinitive clauses always have a simultaneous reading which contrasts with the futurate value possible in [-assertive] ones (see Abusch 2004 for details):

36. Mary is believed *to* be in Paris now/*next month (compare: Mary hopes *to* be in Paris next month)

3. Conclusion

We have offered a structural account of modality around two features, [\pm assertive] and [\pm indicative], which must be checked covertly by the verb of the sentence in ForceP and MoodP, respectively:

37. [ForceP_[\pm assertion]] [MoodP_[\pm indicative]] [TP ([V_{modal}/Particle_{modal} to])] [VP

14. In languages like Spanish, where mood is productively realized on verbs, modal verbs can appear in the indicative (*Sé que debes madrugar mucho mañana*) or in the subjunctive (*Siento que debas madrugar tanto mañana*), depending, as usual, of the [\pm assertive] nature of the matrix predicate.

We have also argued that the features of the core functional category TP may vary depending on the particular options found in the categories that dominate it. Thus, when MoodP has the feature [+indicative], Tense retains its formal and lexical features, and situates the verb with respect to the Reference-Time; if the verb is a modal, it will place it (not the proposition it introduces) in time, unmarkedly situating it as simultaneous with the moment of speech. On the contrary, when MoodP has the feature [-indicative], Tense loses its lexical value with respect to the objective time axis, though still retains its [+DP] feature and its capacity to check the Nominative Case of the subject in the case of subjunctive sentences, and the Zero Case of PRO in *to*-infinitives.

In short, our proposal attempts to express the syntactic and semantic connection that exists among sentences with modal verbs, *that*-subjunctive clauses and *to*-infinitivals. We believe that, although tentative in many respects and therefore open to further research, an analysis of this sort may serve to integrate an important number of linguistically significant generalizations which can eventually lead to a better understanding of the morphosyntactic implications of logical modality.

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