A Feature Analysis of *to*-infinitive Sentences

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This paper analyses the syntactic structure of *to*-infinitive sentences in English, focusing on the grammatical features that may characterize them. In particular I argue that these clauses are introduced by the features [±assertion] and [-indicative], and that the particle *to* has a modal value which is a remnant of its prepositional origin. These assumptions will allow me to explain their differences and similarities not only with indicative and subjunctive sentential complements but also with other non-finite forms such as *–ing* participle clauses and the bare infinitive. The feature analysis that is defended here, together with the prepositional nature of the particle *to*, will also help account for some relevant contrasts between English and Spanish in these constructions.

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1. The syntax of *to*-infinitive complement clauses

In line with current generativist analyses of the sentence, it will be assumed that sentential structure comprises lexical and functional categories, and that the specification of the lexical/grammatical features that head them is the key to understanding the processes that lead to the final form of sentences and to their correct interpretation.[1] In this respect, the basic structure of a sentence must include a) a category or a group of categories which serve to connect the sentence with other sentences or with the discourse: the *illocutionary layer*, b) a category or a group of categories to codify the temporal and aspectual values of the sentences: the *inflectional layer* and c) a category or a group of categories that represent the relations between the different lexical elements of the sentence: *the thematic layer*.

Starting with the illocutionary layer, I have defended elsewhere (Ojea 2005) that the left periphery of the sentence must include information about its modality – i.e. its

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[1] Even though one of the basic assumptions of the Minimalist Program underlies this approach to infinitival sentences (namely, the adoption of the *feature* as the core grammatical unit), my goal here is basically descriptive, and I shall thus avoid technical details except where they are strictly needed.

(non) assertive nature – and its mood, the categories Force Phrase and Mood Phrase being the projection of those values:

1.   [$_{ForceP}$ ±assertion [$_{MoodP}$ ±indicative …

The notation Force Phrase has been taken from the seminal work by Rizzi (1997), which inaugurated a rich flow of works on the analysis of the left periphery of the English sentence. The term Force refers there to the illocutionary force of the proposition, that is, in a broad sense it alludes to its modality, to the speaker's degree of commitment to that proposition in terms of asserting, inquiring, promising, ordering… I have opted for the feature [±assertion] to subsume those options.[2]

But in Rizzi's proposal the obligatory complement of ForceP is the category Finite Phrase, which encodes the (non)finiteness of the clause. According to Huddleston (1984: 81), the term finite is related to its everyday use of 'limited', and alludes to the verbal forms which are limited with respect to person and number; to use his own example, a form like *takes* is finite because it is limited to occurrence with a third person singular subject. This is then just a question of morphological agreement, and even though it is true that certain predicates may select sentential complements with finite/non-finite verbal forms, I believe that there exists another type of grammatical information which is more relevant in this respect: the grammatical mood of the proposition, which is manifested on its verb.[3] A mere look at languages morphologically richer than English serves to show that mood is basically selected from outside (i.e. certain predicates and operators force the subjunctive mood, whilst others select the indicative), a fact which would justify its syntactic embodiment in some of the peripheral projections of the sentence. And, even more significantly, grammatical mood seems to be strictly associated with the (non)assertive nature of the proposition and, ultimately, with the assertive value of the selector, that is, MoodP qualifies as the natural complement of the category ForceP.

Hooper and Terrell (1974) were among the first to study the relationship between the semantic notion of *assertion* and that of grammatical *mood*. The generalization they defended was that in languages like Spanish, where mood distinctions are still productive, when the proposition expressed by a complement clause is asserted, this clause appears in the indicative, whereas when it is not asserted, it appears in the subjunctive mood. Later, Hooper (1975) refined the analysis intersecting the assertive/non-assertive distinction with the notion of *factivity*; and, as regards their assertive value, she classified the predicates that can have sentential complements into two main groups, as shown in table 1:

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[2] A proposition is asserted when it is susceptible of being assigned a truth value. In all the other cases (i.e. questions, orders, suggestions, volition…) it will be non-asserted.

[3] Although the two terms have sometimes been employed indistinctively, *mood* is used here to refer to the morphological means which may serve to express the different types of *modality*. It will also be argued that the notion of finiteness in English can eventually be subsumed under mood (i.e. non-indicative forms are basically non finite)

[+assertive]				[-assertive]	
think	say	predict	know	doubt	forget
believe	admit	remark	discover	deny	regret
suppose	answer	report	find out	be likely	resent
imagine	assure	agree	learn	be possible	be odd
guess	certify	decide	note	be probable	be strange
expect	claim	deduce	observe	be unlikely	be interesting
seem	explain	be afraid	remember	be impossible	be relevant
appear	maintain	be certain	realize	be improbable	be sorry

Table 1 Assertive and non-assertive predicates taking sentential complements (adapted from Hooper 1975: 92)

Hooper (1975) grounded this classification not only on semantic facts but also on the ability or inability of the predicate and its complement to undergo certain syntactic operations. For that, she focused on the combination of these predicates with finite sentential complements. One of the goals of this paper will be to extend her analysis and explore the potential of the notion of assertion to explain the properties of *to*-infinitive complement clauses as well. Given that in finite sentences in English the only grammatical mood is, strictly speaking, the indicative (since only here do we find distinctive inflectional morphemes), I will employ the feature [±indicative] to comprise under the negative specification all the other possibilities —i.e. subjunctive and the so-called non-finite forms.[4]

Coming back to my proposal in (1), it predicts four possible combinations of the features [±assertion] 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 of non assertive predicates, mainly sentences in the subjunctive mood and *to*-infinitives, and d) [+assertion, -indicative], the features that will characterize a subgroup of *to*-infinitive clauses. The present paper sets out to explore in detail the last two combinations, i.e. [-assertion, -indicative] and [+assertion, -indicative].

The first of them, [-assertion, -indicative], establishes a clear connection between *to*-infinitives and subjunctive clauses, since both share these features. It is interesting to note here that, quite recently, Los (1999) has convincingly argued that *to*-infinitives came to be regarded as the non-finite counterpart of subjunctive purpose clauses, and that in Old English they systematically appeared in contexts about non-actuated facts that were intended, promised, permitted or ordered by the speaker (i.e. in non-assertive contexts), where subjunctive clauses could also appear (see also Rohdenburg 1995 for

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[4] If we admit the literal sense of the term *finite* aforementioned (*cf.* Huddleston 1984), the subjunctive in English will also be a non-finite form, since it is precisely characterized by its lack of morphological agreement in person and number with the subject. In a way (see footnote 6) the subjunctive could be grouped with infinitives and gerunds as a non-tensed and non-finite form.

the competition of the two forms from the 16th to the early 19th century). She therefore defends that the actual ongoing competition in Old English was between *to*-infinitives and subjunctive clauses.[5] In present-day English, *to*-infinitives have clearly ousted subjunctive clauses in non-assertive contexts, but they can still be considered alternatives in many cases, this phenomenon being much clearer in languages with rich mood distinctions (see section 2.3). Therefore, I believe it makes sense to characterize both of them with the same illocutionary features:

2.   They demanded to be heard   They demanded that they be heard
3.   It is important not to be afraid   It is important that they not be afraid

As for the second combination, [+assertion, -indicative], these features in ForceP and MoodP may serve to clarify the different behaviour of *to*-infinitive clauses after assertive and non assertive predicates, as will be shown in next section.

Turning now to the inflectional layer, it has been customarily agreed that infinitival sentences do not have tense, this being the main reason why they cannot be assigned a truth value. But even if it is true that *to*-infinitives lack the morphological feature [±past] and do not display subject agreement either, this does not necessarily imply that they lack a tense frame (*cf.* Stowell 1982; Abusch 2004), or, for that matter, that they cannot be given a truth value. Of course, tense does not place the event here on the objective time axis (i.e. situating it with respect to the moment of speech), but it marks that event as temporally bound to the predicate that selects it. It will then be assumed that the category TP of *to*-infinitive complement sentences has an unvalued feature that is to be interpreted anaphorically with respect to the temporal features of the matrix predicate, and the temporal reading of *to*-infinitival clauses will be accounted for in terms of the conjunction of this anaphoric value with the semantics of the particle *to* itself.[6]

The proposals I have made so far lead us to the following functional structure in subordinate clauses:

4.   matrix predicate [$_{ForceP}$ [±assertion] [$_{MoodP}$ [±indicative] [$_{TP}$ [±valued]…

Predictably, there must be a head-to-head selection among the different nuclei in (4). Thus, the matrix verb selects the [±assertion] feature in Force, Force the [±indicative] feature in Mood, and both crucially restrict the possibilities in Tense. The unmarked cases will be the ones in which every option coincides, that is, an assertive

[5] A different view, namely that in OE *to*-infinitives were in competition with the bare infinitive, has been traditionally adopted in the literature (e.g. Sweet 1903; Jespersen 1961; Visser 1972; Lightfoot 1979).

[6] The anaphoric reading of the tense of infinitival complements with respect to that of the main clause is another point they have in common with subjunctive clauses, and may justify the inclusion of the latter in the group of non-tensed complements in English, as illustrated by (i):

   i)   I request/requested that Bill pick up the ball

predicate that selects a sentential complement with [+assertion] force, [+indicative] mood and a valued feature in tense (which can be [±past]), i.e. a subordinate indicative sentence; or, alternatively, a non-assertive predicate that selects a clause with [-assertion] force, [-indicative] mood and an unvalued feature in tense, i.e. a subordinate subjunctive, infinitival or gerund sentence.

Finally, an analysis of *to* will be pursued that connects this particle to its origin as a preposition which signalled a goal of motion.[7] I will argue that it projects a Modal Phrase whose value of futurity and, therefore, of potentiality, is a remnant of that origin (the future being understood as the goal, the endpoint of the temporal reference).[8] This in turn, may explain some of the differences between *to*-infinitives and other non-finite clauses such as *–ing* clauses, since the former will be systematically associated with non-factual readings. Moreover, this view of *to* as a modal preposition establishes a semantic relationship between *to* and the modal verbs, a relationship that may be reflected in the syntactic similarities between them which have been sometimes noted in the literature (eg. Gazdar *et al.* 1982; Huddleston and Pullum 2002); thus, like modals, *to* can appear separated from the verb that heads the predication, as in (5), may act as the carrier of the negation, as in (6), and allows for the gapping of the verbal phrase, as in (7):[9]

5. To always complain about your luck will not help you much
6. I would like him not to go
7. I do not want to

With this analysis of *to*, I clearly depart from the traditional view which considers it a meaningless particle, an idea quite pervasive in the literature (e.g. Jespersen 1961;

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[7] Grammarians such as Quirk *et al.* (1985: 687) have also explicitly claimed that the infinitive marker *to* may be viewed as related to the spatial preposition *to* through metaphorical connection.

[8] During the times of the Principles and Parameters approach, *to* was customarily analysed as a possible lexical projection of the category TenseP (IP at that time). But this view is practically impossible to reconcile with the current assumptions of the Minimalist Program, since, apart from important empirical problems (e.g. the placement of the Negative Phrase in the clause), it would technically imply specifying Tense with contradictory [±V] uninterpretable features, and to assume that these features can be checked both via merge and via movement (prior and after Spell Out). The proposal here does not face those problems, and is also compatible with other well-known formal approaches of Tense in which this category is treated as a dyadic predicate of temporal ordering whose external argument is the Reference-time and its internal argument the Event-Time (see Zagona 1990; Stowell 2007).

[9] Given the restriction in English that precludes two modals in sequence in the same clause, the modal character of *to* that I defend may arguably serve to explain as well why it can be followed by a bare form of any verb (lexical or auxiliary) except a modal, (i.e. *to go/to be going/to have gone/*to can go)*; the same reasoning may be extended to the impossibility of a modal followed by *to* (i.e. **can to go)*. Also note that, having become a modal particle, *to* has lost many of the characteristics of genuine prepositions (mainly in terms of modification and complementation *cf.* Radford 1997: 52), a fact that again connects it to modal verbs, which clearly display important syntactic and morphological differences with respect to other verbal forms.

Chomsky 1957; Buyssens 1987; Radford 1997, among others). Actually, I believe that it is precisely this modal-prepositional character of *to* that contributes to a large extent to make *to*-infinitives different from other non finite clauses, including bare infinitives, or from infinitival clauses in other languages like Spanish. But I do not adhere to the view that systematically associates *to* with notions like future, potentiality or hypothesis, either (see Bolinger 1978; Dixon 1984 or Wierzbicka 1988, among others). The idea that I would like to defend here is that the final reading of *to*-infinitives depends on the conjunction of the values of the different grammatical features that are present in the subordinate clause, in particular those in (8):

8.   ForceP$_{[\pm assertion]}$ [MoodP$_{[-indicative]}$ [TP$_{[unvalued]}$ [ModalP to [VP..

With this feature specification of *to*-infinitives I will attempt a classification of these clauses which may complement the standard. As is well-known, in formal grammars *to*-infinitive sentences have been customarily divided into three groups, established on the basis of what kind of subject (i.e. implicit or lexical) the infinitival clause has. Thus, one would distinguish between (subject or object) Control complements, as those in (9) and (10), and Exceptional Case Marking (ECM) complements, as in (11):

9.   I want [PRO to stay here]
10.   I persuaded Mary [PRO to stay here]
11.   I believe [him to be a good pianist]

I will look at *to*-infinitive sentences from a different angle, one which focuses on (the features of) the categories that inaugurate them and cuts across the classification above. In this respect there have been different attempts to correlate the semantics of the infinitival complement with the structural characteristics of their subjects in terms of the lack or existence of certain categories like Tense or Comp; but all of them meet empirical problems which tell against this intended connection (see Wurmbrand 2001 for a review of the relevant literature on the issue). I contend that the possibility of a lexical subject or a controlled null category in *to*-infinitive complements has to do with the Case properties of the matrix predicate, not with its (non) assertive value; actually, one can find both Control and ECM infinitive complements after [+assertive] predicates (e.g. 12, 13) or after [–assertive] ones (e.g. 14, 15):

12.   I decided [PRO to stay]
13.   I expected [them to stay]
14.   I wish [PRO to stay]
15.   I want [them to stay]

In what follows, it will therefore be assumed that all *to*-infinitival complements have the same sentential structure (as in 8), and in section 2.1. I will focus on the different readings we may obtain from the combination of the relevant features in that structure. Section 2.2.explores the differences between *to*-infinitivals and complements in the bare infinitive under this approach; and finally, in section 2.3 the implications that this

analysis may have for a comparison between English and Spanish in this particular area will be sketched.

2. Empirical predictions

2.1. On the reading of to-infinitival sentences

Apart from some of the non-assertive verbs and adjectives listed in Table 1 above, there are two other major groups of predicates that productively take *to*-infinitival complements.[10] The first is the group of volition and mandative verbs like *want, wish, desire, prefer, allow, beg, command, demand, recommend* or *urge*:

    16. I allowed them to stay home
    17. They begged him to help them
    18. They intended the appointment to be cancelled
    19. I want to follow you
    20. I wish to stay

The subordinate clauses in the examples above have a non-assertive reading that clearly matches the deontic or boulomaic sense of the matrix predicate. In other words, this group of verbs all select the [-assertion], [-indicative] features in the illocutionary layer of their sentential complements; and these features can in turn be checked by a subjunctive form, a modal particle or a modal verb, thus the equivalence among the three constructions:

    21. They begged   that I help him
                          me to help him
                          that I should help him
    22. She intended   that the appointment be cancelled
                          the appointment to be cancelled
                          that the appointment should be cancelled
    23. I wish   you were staying a little longer
              you to stay a little longer
              you could stay a little longer

The second group is that of emotive verbs like *hate, like, loathe, love*, etc., all of them non-assertive as well:

    24. I would hate to be left out
    25. I would like to leave it like that
    26. I would love to travel with you

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[10] This characterization of *to*-infinitive sentences does not pretend to constitute an exhaustive description of the possibilities, but a different approach to their analysis; this is why I have simply focused on those cases which can better exemplify my views on the topic.

These verbs also select the [-assertion], [-indicative] features in the illocutionary layer of their complements but, since present day subjunctive is not compatible with these predicates, the [-indicative] feature will only be possibly checked here by the modal particle *to* or by a gerund form. Recall that the former has a non-factual value which is not present in the latter and, therefore, as Quirk *et al* (1985) have noted, the infinitival option is to be preferred in contexts like (24-26) where the matrix predication (with the auxiliary *would*) favours a modal sense of potentiality; contrast, in this respect, (24-26) with (27-29):

27. ?I would hate being left out *vs*. I hate being left out
28. ?I would like leaving it like that *vs*. I like skiing
29. ?I would love travelling with you *vs*. I love travelling with you

This clearly argues for the modal character of the particle *to* that has been defended so far, and may also explain the contrast between non-finite sentential complements after other non assertive predicates, as in the following pairs, where, predictably, only in (31) and (33) does the subordinate clause presuppose the factuality of the subordinate event:

30. I'll remember to tell her about it
31. I remember telling her about it
32. Sheila tried to bribe the jailor
33. Sheila tried bribing the jailor

Yet the feature specification defended in (8) also allows for the possibility of the *to*-infinitival clause being introduced by a [+assertion] feature in ForceP, that is, as the complement of an assertive predicate. This is what we find after a small group of verbs such as *know, believe, consider, expect, promise, predict, seem…* When unmarked, these verbs will select for their complements the [+assertion], [+indicative] features in the illocutionary layer and a [+valued] tense (i.e. they will take a *that*-clause in the indicative mood), but may also allow for a negative specification of the features in mood and tense, as in (34):

34. ForceP$_{[+assertion]}$ [MoodP$_{[-indicative]}$ [TP$_{[unvalued]}$ [$_{Modal P}$ to [VP..

That the infinitive clause has an assertive value after verbs like these is reflected in the fact that truth or falsity can be predicated of it in these contexts, something which would never be possible if the clause had an introductory [-assertion] feature (cf. Bošković 1996). Compare in this respect (35-37), with (38-41):[11]

35. I know them to be happy, which is true
36. They believe her to be in Paris, which is true
37. I consider him to be a great painter, which is true

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[11] The corollary in (38)-(41) is impossible when intended to be just for the complement clause.

38. I allowed them to visit the ruins, *which was true
39. They intended the appointment to take place in June, *which was true
40. She wants to travel to Paris, *which is true
41. I would like to buy a new car, *which is true

The modality value of the particle *to* will be neutralized in these contexts by the assertive feature which introduces the subordinate clause, and this impedes the potentiality reading which was characteristic of the infinitival complement after non-assertive predicates.[12] This explains the different temporal reference of the *to*-infinitive after non-assertive verbs, as in (42-45), or after assertive verbs, as in (46-48):

42. I allowed them to visit the ruins *the following day*
43. They intended the appointment to take place *two weeks later*
44. I want to travel to Paris *next month*
45. I would like to buy a new car *next year*
46. I know them to be happy now / **in the future*
47. They believe her to be in Paris now / **in the future*
48. I consider him to be a great painter now / **in the future*

The temporal reference of the subordinate infinitive clause must necessarily match that of the matrix predicate unless the perfect auxiliary *have* is employed to mark the subordinate event as anterior to the matrix one, a possibility generally ruled out in non-assertive contexts, at least in those which have a deontic sense, such as (52) and (53):[13]

49. I know them to have been happy then
50. They believe her to have been in Paris
51. I consider him to have been a great painter
52. *They allowed them to have stayed at home
53. *They begged him to have helped them

Finally note that given the nature of the particle *to*, *to*-infinitive clauses will be more productively combined with those assertive predicates which have a futurate meaning:

54. They promised to be here on time
55. He was predicted to win

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[12] The *to*-infinitive clauses will not completely lose their modal reading after these assertive predicates, though. As Mair has put it, the presence of *to* "generally serves to express a combination of knowledge and subjective judgment" (1990: 200), which would not obtain if the complement of these verbs were a *that*-clause. And, significantly, *for...to* infinitives, where the introductory complementizer *for* adds an extra modal value, are never possible in these contexts (see Bresnan 1979; De Smet 2007).

[13] It is impossible to impose an obligation over a past (i.e. anterior) situation, thus the incompatibility of a complement clause with *have* after a deontic predicate.

To sum up so far: infinitival clauses with *to* can be the complement of assertive or non-assertive predicates. In the first case the proposition expresses an assertion whose temporal reference (unless auxiliary *have* is present) must match that of the main predicate, and though the modal sense of *to* is practically neutralized in these contexts, it still combines better with futurate predicates, more akin to the original temporal value of the preposition. On the contrary, when the matrix predicate is non-assertive, the unmarked case, the potentiality reading of *to* clearly determines the final interpretation of the complement clause.[14]

2.2. *The to-infinitive versus the bare infinitive*

The argumentation above could lead us to the following question: if *to* is a modal particle which typically conveys a hypothetical reading, why is it not the case that the bare infinitive, and not the *to*-infinitive, is selected as the complement of assertive predicates? I believe that the answer to this question has to do with the different syntactic structure that these two constructions have. Whereas *to*-infinitives are clauses, the bare infinitive after a lexical verb forms a small clause (SC), that is, the minimal predicative structure, and, as such, it contains a predicate and its arguments but none of the illocutionary or inflectional categories of (non small) clauses as in (4), above; therefore, they cannot be treated as free alternatives. The bare infinitive is basically found after perception verbs and causatives like *make* or *let*:[15]

56. I saw/heard him slam the door.
57. They watched her paint the fence
58. She made me wash up the dishes
59. They let him go

As expected, there does not always exist a *to*-infinitive counterpart to the bare infinitive construction (i.e. not all verbs allow for both, a full clause and a small clause, as their complement); for example, neither *watch* nor the causatives *make* and *let* above have a double alternative, and for those verbs where the possibility exists, the options are not simple contextual variants:

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[14] Note that in those *to*-infinitival clauses which do not have an argumental status with respect to the matrix predicate (e.g. adjunct purpose clauses), or which modify a non verbal head, the interpretation of the clauses will be largely dependent on these notions of potentiality and future that *to* imposes, as illustrated by (i) and (ii):
   i) They need a larger car to accommodate the whole family
   ii) Fuel prices to rise next week (example taken from Mittwoch 1990: 124)
[15] Incidentally, recall that verbs like *make* or *let* may select non verbal SCs as their complement as well; e.g. (i) and (ii):
   ii) She made me happy
   iii) He let them out.

60. Will you help me wash up the dishes?
61. Will you help me to wash up the dishes?

Here the first sentence implies an actual event taking place (where the addressee is asked to have an active participation), whereas in (61) the event is understood as non-actuated yet, the predicted reading of non-factuality that *to* brings about. Also consider the contrast between (62) and (63):

62. I saw him run
63. I see this to be true

According to Jespersen, after *see* and *hear* the *to*-infinitive may be used when these verbs do "not indicate immediate perception, but an inference" (1961: 280), this inference reading being clearly akin to the modal sense of the particle.

Therefore there are no grounds to consider that the bare and the *to*-infinitive are simply variants of the same construction.[16] If my proposal is on the right track, and leaving aside the particular structure we may assign to SCs in general, the syntax of pairs like (62) and (63), will differ along the following lines:[17]

64. …help [$_{VP}$ me wash up the dishes]
65. …help [$_{ForceP}$ [$_{MoodP}$ [$_{TP}$ me *to* wash up the dishes]

In the small clause (64) we just have a verbal predicate that merges with its arguments and projects, whereas in (65) we have a full grammatical specification (crucially illocutionary force, mood and tense) and a modal particle *to*, all of which conspire to give the subordinate clause a hypothetical and/or futurate reading that may explain contrasts like (60)/(61), or (62)/(63) above. Other pairs along the same lines are exemplified in (66-67) and (68-69) (examples taken from Duffley 1992: 14):

66. I had nine people call
67. I had nine people to call
68. They let him go
69. They allowed him to go

In (66) the subordinate clause is asserted, while in (67) it is not, and in (68) the event of going is understood as actually realized, while in (69) its realization may be situated in the hypothetical future.

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[16] This assumption has been rather frequent, though, in traditional grammar (e.g. Zandvoort 1957; Curme 1931).

[17] There are reasons to believe that small clauses should be introduced by a functional category AspP, but I shall not take a stand on this question here.

Finally note that when a verb which takes a bare infinitive as its complement also allows for a gerund form, the difference in interpretation between the two options will only be aspectual, and not modal as they were in sentences like (30-33) above:[18]

70. I saw/heard him slam the door *vs.* I saw/heard him slamming the door
71. They watched her paint the fence *vs.* They watched her painting the fence

The question why assertive predicates do not take the bare infinitive as their complement may then be reduced to a lexical restriction on the part of those predicates (i.e. they select one particular syntactic category over another), and, more interestingly for my goal here, the differences between bare infinitive complements and *to*-infinitivals will support the (unmarked) non-assertive reading and the modal function of the particle *to* that has been defended so far.

2.3. Some predictions for a contrastive analysis English/Spanish

My analysis of *to*-infinitives has rested on two basic assumptions: the first is that, when unmarked, these clauses are complements of non assertive predicates and only after a small group of assertive predicates may the *to*-infinitives be also possible. The second is that *to* retains its prepositional origin and thus projects a prepositional ModalP whose contribution to the meaning of the sentence is mainly one of potentiality and futurity. Now, given that these infinitival sentences are always [–indicative], a prediction follows that in those languages where the subjunctive mood is morphosyntactically more productive than in English: a) subjunctive clauses will systematically substitute infinitival clauses when the head of ForceP is [–assertion], but not when it is [+assertion], and b) certain restrictions due to the prepositional nature of *to* will not be present if that language does not employ an equivalent particle in its infinitival complements.

Spanish is such a language, and therefore, as (72-77) show, the examples equivalent to (16-19) and (24-25) will all appear in the subjunctive mood:[19]

72. *Les permití que quedaran/*quedaron en casa*

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[18] The contrast between *to*-infinitives and *–ing* complements in terms of mood and aspect does not exhaust the grammatical differences between the two. Note, for example, that the *-ing* suffix also contributes with nominal features which in some cases may even preclude the eventive reading of the verbal form (e.g. My father taught me to drive vs. My father taught me driving).

[19] I have exemplified with *to*-infinitive clauses which have an explicit subject to obtain a clear correspondence with Spanish, since the two constructions alternate here precisely at this point: when the subject of the main clause and of the complement are co-referential the infinitive is used; when they are not, it is the subjunctive that is employed:
  i) *Quiero ayudar a mi vecino*
  ii) *Quiero que tú ayudes a mi vecino*

I allowed them to stay home

73. *Le pidieron que les ayudara/*ayudó*
     They begged him to help them
74. *Intentaron que la cita se cancelara/*canceló*
     They intended the appointment to be cancelled
75. *Quiero que me siga/*seguiría*
     I want him to follow me
76. *Odiaría que me dejaras/*dejarías de lado*
     I would hate you to leave me out
77. *Me encantaría que lo dejaras/*dejarías así*
     I would like you to leave it like that

On the contrary, none of the examples of *to*-infinitives after an assertive predicate allows for an equivalent sentence in the subjunctive:[20]

78. *Sé que son/*sean felices ahora*
     I know them to be happy now
79. *Creen que ella está/*esté en París*
     They believe her to be in Paris
80. *Considero que es/*sea una gran pintora*
     I consider her to be a great painter
81. *Prometieron que estarían/*estuvieran aquí a tiempo*
     They promised to be here on time
82. *Los meteorólogos predijeron que el tiempo sería/*fuera cálido*
     The meteorologists predicted the weather to be warm

As for the restrictions that the particle *to* imposes in English, its prepositional nature may prevent the subordinate clause in which it appears from being the complement of another preposition (Huddleston and Pullum 2002: 1184); this in turn restricts the possibilities for these sentential categories to act as adverbial modifiers to only those contexts which have a sense of purpose or result (i.e. connected to the original meaning of *to*). Obviously, this restriction is not found in a language like Spanish, which lacks an equivalent particle altogether, and therefore infinitival modifiers with different adverbial senses are frequent in this language (see Hernanz 1999 for a more extensive treatment of the possibilities):

83. *Debes estudiar más duro para aprobar este examen* (Purpose)
     You must study harder (in order) to pass this exam
84. *Lávate las manos antes de comer* (Time)
     *Wash your hands before to eat

85. *La han multado por conducir demasiado rápido* (Cause)

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[20] Some assertive predicates become non-assertive when negated; therefore the equivalent negative sentences to (79) and (80) will take a subjunctive complement:
   i)   *No creo que esté en París ahora*
   ii) *No considero que sea una gran pintora*

*They have fined her because to be driving too fast
86. *Se fueron a la cama sin cenar* (Manner)
    *They went to bed without to have dinner
87. *De haberlo sabido, me habría quedado en casa* (Condition)
    *If to have known it, I would have stayed home
88. *A pesar de comer muy poco, ha engordado* (Concession)
    *Even though to eat frugally, he has put on weight

Sketchy though this comparison between English and Spanish has been, I believe it supports the view adopted here about the role of the particle *to* and of the notion of non-assertion in the syntactic analysis and eventual interpretation of *to*-infinitive sentences.

3. Conclusion

This paper has approached the syntactic analysis of *to*-infinitive sentences under the assumption that *to* projects a ModalP unmarkedly connected to the features [-assertive] [-indicative] in the illocutionary shell of the clause. This view rests on historical grounds (the origin of *to* as a preposition, and the competition between *to*-infinitives and subjunctive clauses in Old English), synchronic facts (the syntactic and semantic similarities of *to*-infinitives with the subjunctive and with modal verbs in English) and contrastive facts (the equivalence of *to*-infinitive sentences with subjunctive clauses in languages with a productive mood distinction as Spanish).

The feature analysis defended here has also served to formalize some of the semantic peculiarities of those constructions where the *to*-infinitive markedly functions as the complement of an assertive predicate, and also its main differences with the bare infinitive and with *–ing* clauses in the contexts in which they can alternate.[21]

Works Cited

Abusch, Dorit 2004: 'On the Temporal Composition of Infinitives'. Jacqueline Guéron and Jaqueline Lacarme, eds. *The Syntax of Time*. Cambridge: MIT P. 27-53.
Bolinger, Dwight 1978: 'A Semantic View of Syntax: Some Verbs that Govern Infinitives'. Mohammad Ali Jazayery, and Edgar C. Polomé, eds. *Linguistic and Literary Studies in Honor of Archibald A. Hill*. The Hague: Mouton. 9-19.
Bošković, Zeljko 1996: 'Selection and the Categorial Status of Infinitival Complements'. *Natural Language and Linguistic Theory* 14: 269-304.
Bresnan, Joan. 1979: *Theory of Complementation in English Syntax*. New York: Garland.
Buyssens, Eric 1987: 'The Preposition *for* with an Infinitive Clause'. *English Studies* 68: 336-47.
Chomsky, Noam 1957: *Syntactic Structures*. The Hague: Mouton.
Curme, George Oliver 1931: *Syntax: A Grammar of the English Language*. Boston: D.C. Heath and Company.

De Smet, Hendrik 2007: '*For…to*-infinitives as Verbal Complements in Late Modern and Present-Day English: Between Motivation and Change'. *English Studies* 88.1: 67-94.

Dixon, R.M.W 1984: 'The Semantic Basis of Syntactic Properties'. *Berkeley Linguistics Society Proceedings* 10: 583-95.

Duffley, Patrick J. 1992: *The English Infinitive.* London: Longman.

Gazdar, Gerald, Geoffrey K Pullum and Ivan A. Sag 1982: 'Auxiliaries and Related Phenomena in a Restrictive Theory of Grammar'. *Language* 58.3: 591-638.

Hernanz, M. Lluïsa 1999: 'Infinitives'. Ignacio Bosque and Violeta Demonte, eds. *Gramática Descriptiva de la Lengua Española.* Vol. 2. Madrid: Espasa. 2197-56.

Hooper, Joan Bybee 1975: 'On Assertive Predicates'. John. P. Kimball, ed. *Syntax and Semantics* 4. New York: Academic P. 91-124.

Hooper, Joan Bybee and Tracy Terrell 1974: 'A Semantically Based Analysis of Mood in Spanish'. *Hispania* 57.3: 484-94.

Huddleston, Rodney 1984: *Introduction to the Grammar of English.* Cambridge: Cambridge UP.

Huddleston, Rodney and Geoffrey K. Pullum 2002: *The Cambridge Grammar of the English Language.* Cambridge: Cambridge UP.

Jespersen, Otto 1961 (1927): *A Modern English Grammar.* Part V, Syntax (Fourth Volume). London: Allen and Unwin.

Lightfoot, David 1979: *Principles of Diachronic Syntax.* Cambridge: Cambridge UP.

Los, Bettelou 1999: *Infinitival Complementation in Old and Middle English.* The Hague: Thesus.

Mair, Christian 1990: *Infinitival Complement Clauses in English.* Cambridge: Cambridge UP.

Mittwoch, Anita 1990: 'On the Distribution of Bare Infinitive Complements in English'. *Journal of Linguistics* 26: 103-31.

Ojea, Ana 2005: 'A Syntactic Approach to Logical Modality'. *Atlantis* 27.1: 53-64.

Quirk, Randolf, Sidney Greenbaum, Geoffrey Leech and Jan Svartvik 1985: *A Comprehensive Grammar of the English Language.* London: Longman.

Radford, Andrew 1997: *Syntactic Theory and the Structure of English.* Cambridge: Cambridge UP.

Rizzi, Luigi 1997: 'The Fine Structure of the Left Periphery'. Liliane Haegemann, ed. *Elements of Grammar.* Dordrecht: Kluwer. 281-337.

Rohdenburgh, Günter 1995: 'On the Replacement of Finite Complement Clauses by Infinitives in English'. *English Studies* 76: 367-88

Stowell, Tim 1982: 'The Tense of Infinitives'. *Linguistic Inquiry* 13.4: 561-70.

Stowell, Tim 2007: 'The Syntactic Expression of Tense'. *Lingua* 117.2: 437-63.

Sweet, Henry 1903: *A New English Grammar.* Vol. 2. Oxford: Clarendon.

Visser, F. Th. 1972 (1966): *A Historical Syntax of the English Language.* Vol. 2. Leiden: Brill.

Wierzbicka, Anna 1988: *The Semantics of Grammar.* Amsterdam: Benjamins.

Zagona, Karen 1990: 'Times as Temporal Argument Structure'. Ms. U of Washington.

Zandvoort, Reinard Willem 1957: *A Handbook of English Grammar.* London: Longman.

Wurmbrand, Susane 2001: *Infinitives: Restructuring and Clause Structure.* The Hague: Mouton.