

# NEGATION IN CATALAN. SOME REMARKS WITH REGARD TO *NO PAS*

M. Teresa Espinal

Universitat Autònoma de Barcelona

In this paper I shall approach certain questions that can be posed in the study of Catalan negative constructions: (a) how many negative markers can be distinguished; (b) how the difference between *no* and *no pas* should be described in the core grammar of this language, and (c) what sort of syntactic representation should be assigned to negative sentential constructions in Catalan. The structure of the paper is organized as follows. Section 1 is devoted to describing the syntactic distribution of the various negative markers existing in Catalan. It is proposed that, apart from *no*, there are two more negative markers: *no pas* 1, which is a negative head, and *no pas* 2, which is a negative specifier. Section 2 describes the semantic properties that characterize these negative markers. It is argued that the association with focus is not an inherent property of the logical semantics of *no pas*, and that what singles out this operator, in contrast with *no*, is that it has a quantificational domain over a set of conceptual entities of which a subdomain is selected as the negative contrasted item. Section 3 deals with the sort of syntactic structure that should be assigned to Catalan negative sentences and it introduces the proposal that the relevant structure has a NegP as the root node and an AgrP as its complement. TP is the complement of the latter functional category.

## 1. Syntactic Distribution

I shall approach the first question by briefly sketching out the basic syntactic distribution of the simple lexical item *no* and the compound lexical item *no pas* in Central Catalan.<sup>1</sup> A close examination of the order in which negative structures are internalized in the process of first language acquisition and an inquiry into the frequency of appearance of the various existing

negative structures suggest that it is convenient to distinguish within the grammar of this language between marked and unmarked negative constructions, with the syntactic distribution shown in (1).

(1)

	UNMARKED	MARKED	
<i>no</i>	<i>no V</i>	<i>no X</i>	UNMARKED
<i>no pas</i>	<div style="border: 1px solid black; padding: 2px; display: inline-block;"> <i>no V* pas</i> </div> <div style="margin-left: 40px;"> <i>no pas 1:</i>  <i>Neg°</i> </div>	<div style="border: 1px solid black; padding: 2px; display: inline-block;"> <i>no pas X</i> </div> <div style="margin-left: 40px;"> <i>no pas 2:</i>  <i>SPEC [ + NEG]</i> </div>	MARKED

It is important to notice that V can be [ $\pm$  FIN], and V\* is either a V or a complex verb. On the other hand, X cannot be a finite verb form.<sup>2</sup>

Some examples which illustrate this syntactic distribution are given in (2).

- (2)
- a. La Maria no va aprovar  
the Maria not PAST pass  
'Maria did not pass'
  - b. \*La Maria va no aprovar
  - c. No tots els estudiants van aprovar  
not all the students PAST pass  
'Not all the students passed'
  - d. La Maria no va pas aprovar  
the Maria not PAST pas pass  
'Maria did not pass' (cancelling or confirming the speaker's expectations)<sup>3</sup>
  - e. La Maria no va aprovar pas

- (2) f. \*La Maria va pas aprovar  
 g. \*La Maria va aprovar pas  
 h. No pas LA MARIA no va aprovar  
 not pas the Maria not PAST pass  
 'It was not Maria who passed' (cancelling or confirming the speaker's expectations on Maria)  
 i. \*No pensava que la Maria aprovaria pas  
 not think-PAST that the Maria pass-COND pas  
 'I didn't think that Maria would pass'  
 j. \*No temia poder pas aprovar la Maria  
 not fear-PAST be able pas pass the Maria  
 'I had no fear of being able to pass Maria'  
 k. No crec que aprovi pas la Maria  
 not think that pass-SUB pas the Maria  
 'I don't think that { Maria is going to pass, I'm going to pass Maria }'

Examples (2a,b,c) show the distribution of the simple lexical item *no*, either preceding a verb form or a non-verbal item. However, in this paper I am more concerned with negative *no pas* constructions.

Notice that in (2) *no pas* appears in two different syntactic environments (compare (2d,e) with (2h)). With regard to this fact two distinct negative markers will be postulated. *No pas I*, as illustrated in (2d,e), is characterized by coappearing with a verb form (either simple or complex) and by being a discontinuous lexical item. Note also that in the dialect that I describe, *pas* cannot occur alone, without *no* (see examples (2f,g)), which suggests that —unlike French and Occitan— in current Central Catalan *pas* is not an independent lexical unit, but a morpheme which is lexically and syntactically inseparable from *no*. Furthermore, the ungrammatical sequences given in (2i,j) reveal that the series of verbs that interrupt the compound lexical item *no pas I* cannot contain a sentential boundary. In this respect, the grammaticality of an example

such as (2k) seems to be related to the tense-mood of the subordinate clause. According to Picallo (1984), the Tense node of a subjunctive clause lacks the features necessary to be fully specified as [+ TNS], for it is bound to the Tense specification of the main clause. On the other hand, *pas* at S-structure must always be c-commanded by *no* (cf. May (1985)), which means that there cannot be any maximal projection between *no* and *pas*. Therefore, in the syntactic context illustrated in (2k) it seems as if the CP node of the subordinate clause in the subjunctive tense is not visible with regard to binding effects.

One possible interpretation of these data is to assume that *no pas I* is —like *no*— the head of a NegP.<sup>4</sup> What differs between them is that *no pas I* requires an explicit complement at S-structure, and this complement must have the form of an inflected verb, as the answers in (3B) reveal.

- (3) A. Vindrà la Maria?  
       come-FUT the Maria  
       'Will Maria come?'  
       B. a. No  
       b. \*No pas  
       c. No vindrà pas

From a syntactic point of view it is important to point out that *no pas* can also occur at a different syntactic environment, exemplified so far in (2h). *No pas 2*, as I shall refer to this negative marker, is in a similar syntactic distribution to other lexical items, such as *només*, *solament* 'only', *encara* 'still' and *fins i tot* 'even'. In fact, all these adverbials can occur at several syntactic positions, modifying either the verb or some other constituent of the sentence. Among them, *no pas* introduces a negative polarity effect. More examples which illustrate the location of these adverbials in syntactic positions other than at the left of the verb are given in (4), (5) and (6).

- (4) a. { Només, solament, fins i tot, encara } VOSALTRES sereu sancionats  
 [ only, only, even, still ] you be-FUT punished  
 'Only, even, still } you will be punished'
- b. No pas VOSALTRES no sereu sancionats  
 not pas you not be-FUT punished  
 'It's not you who will be punished'
- (5) a. Només una mica de PA ens han donat  
 only a little of bread us have given  
 'Only a little bread has been given to us'
- b. No pas gens de PA no ens han donat  
 not pas nothing of bread not us have given  
 'No bread at all has been given to us'
- (6) a. La Maria compra pa només al forn  
 the Maria buys bread only at the bakery  
 'Maria buys bread only at the bakery'
- b. La Maria compra pa no pas al forn, sinó a la pastisseria  
 the Maria buys bread not pas at the bakery, but at the pastry shop  
 'Maria buys bread not at the bakery but at the pastry shop'

In (2h), as in (4b), (5b) and (6b), there is no superficial discontinuity between *no* and *pas*. This property seems to suggest that *no pas* in these examples is —as before— a single lexical item which occupies a single syntactic position. Notice, furthermore, that it would be incorrect to claim that in this sort of structure *no pas* is the head of a NegP, for it would be quite anomalous for items of the adverbial category to have indistinctly nominal, quantified or prepositional complements: a specific property of *no pas* 2 is that it can precede any major lexical category, with the exception of finite verb forms. If adverbs which behave like quantifiers are not heads, the only position they can fill is the SPEC position of a major syntactic category: NP, QP, PP, etc.

A further distributional property relates to the notions of scope and focus, due to the fact that those lexical items which in other languages behave like *no pas*, *només*, *solament*, etc. are known in the linguistic literature — among other terms— as "focus adverbs", "scopal adverbs", "scalar particles" and "focusing particles". Since the constituent associated with this type of adverbial has been sometimes named focus and other times scope, in the next section I shall describe the distribution of *no pas* with regard to focus and scope.

## 2. *No pas* As a Quantifier-like Operator

*No pas*, just like *only*, is always semantically associated with some sentential constituent, but this semantic association does not have to be revealed in the syntax through precedence structural relations.

Most often, the constituent associated with *no pas* is either identified with the focus of the sentence (see (4b) and (5b)) or with a constituent of a contrastive structure (*no pas* X, *sinó* Y 'not X, but Y'), as exemplified in (6b). In the first case, the constituent associated with *no pas* tends to be intonationally more prominent.<sup>5</sup> However, it is not right to assume that *no pas* is automatically associated with the prosodic focus of the sentence, for it is possible to find examples where the focus of the sentence does not coincide with the constituent that *no pas* precedes.<sup>6</sup>

Let us consider the paradigm of sentences given in (7).

- (7) a. La Maria no ha pas vingut  
       the Maria not has pas come  
       'Maria has not come'
- b. LA MARIA no ha pas vingut  
       'It is Maria who has not come'

- (7) c. La Maria no ha pas VINGUT  
           'Maria has not COME'  
       d. No pas LA MARIA no ha vingut  
           'It is not Maria who has come'

In (7a) there is no prosodic focus, whereas in the other examples the constituent in capital letters is the most stressed element and corresponds to the bearer of prosodic peak. (7a), therefore, illustrates that the association with prosodic focus is neither an essential property for the occurrence of *no pas*, nor a necessary condition for licensing this operator at LF.

What should be noticed is that these examples show an important distinction between negative structures with *no* and those with *no pas*, for only *no pas* contains within its scope the contrast focus of the sentence.

According to Brugman (1986), the contrast focus of a certain structure has to be identified with the contrasted item, which need not be identical with the stressed element, but can properly include the bearer of prosodic peak. In the examples I am describing, the contrast focus does not necessarily have to correspond to the constituent that *no pas* precedes at any level of syntactic representation. Actually, in (7a-c) the contrasted item, or quantificational domain (in Rooth's (1985) terms), for the meaning of *no pas* can be any sentential constituent, either the VP, or the NP, or the main verb. This is so because at the level where instructions for meaning representation are codified (i.e. at LF), the negative operator modifies and c-commands every constituent within its absolute scope, which —following May (1985)— is the CP, the most immediate maximal projection dominating all sentential operators. Therefore, the quantificational domain of an operator such as *no pas* can be any constituent within its absolute domain.<sup>7</sup>

In accordance with this claim, (7a-c) may be interpreted in the terms exemplified in the paraphrases in (8), (9) and (10).

- (8) a. La Maria no ha pas vingut, qui ha vingut ha estat el Joan  
the Maria not has pas come, who has come has been the Joan  
'Maria has not come, the one who has come is Joan'
- b. La Maria no ha pas vingut, simplement ha telefonat  
the Maria not has pas come, simply has phoned  
'Maria has not come, she has simply phoned'
- (9) a. LA MARIA no ha pas vingut, qui ha vingut ha estat EL JOAN  
'Maria is the one who has not come, the one who has in fact come is Joan'
- b. LA MARIA no ha pas vingut, ELLA simplement ha telefonat  
'Maria is the one who has not come, in fact she has simply phoned'
- (10) a. La Maria no ha pas VINGUT, en realitat s'ha limitat a TELEFONAR  
'Maria has not actually come, in fact all she has done is to telephone'
- b. La Maria no ha pas VINGUT, però en Joan sí que ha vingut  
'Maria has not actually come, but Joan has in fact come'

One of the things these data suggest is that, in order to represent adequately the semantic vagueness of the sequences in (7a-c), at LF the negative adverb should be in a sentential position from which it could c-command every constituent of the negative structure. This position could be an adjunct IP position.

- (11) a. La Maria no ha pas vingut  
LF: [CP [C' [?? no pas [IP la Maria ha vingut ]]]]
- b. LA MARIA no ha pas vingut  
LF: [CP [SPEC<sub>i</sub> la Maria ] [C' [?? no pas [IP e<sub>i</sub> ha vingut ]]]]
- (11) c. La Maria no ha pas VINGUT  
LF: [CP [C' [C<sub>i</sub> vingut ] [?? no pas [IP la Maria ha e<sub>i</sub> ]]]]



Notice that any of these representations introduce vague interpretations, because the scope of *no pas* is the set of constituents it c-commands at LF, and this set includes but is not necessarily identified with the emphasized constituent.

A further observation is that most often the unmarked reading which corresponds to (7b) or (7c) is that interpretation according to which the emphasized constituent is taken as providing the set of relevant entities which bear the quantificational domain of *no pas*. The reason why this happens should be attributed to the position that the constituent marked with the abstract operator [+ EMPH] occupies at LF. I assume that, since the constituent identified with the prosodic focus of the sentence occurs at the most prominent LF position, it corresponds to the kind of entity over which —other things being equal— it is more reasonable to understand as the *no pas* quantificational domain. Otherwise, in any vague example it is going to be the contextual information which will circumscribe the target of negation.

Contrasting with (7a-c), the LF corresponding to (7d) would have the logical representation in (12).

(12) No pas LA MARIA no ha vingut

LF: [CP [SPEC<sub>i</sub> no pas la Maria ] [C' [?? no [ip e<sub>i</sub> ha vingut ]]]]

In this structure the absolute scope of negation is still the whole CP, because it is the minimal maximal projection dominating every constituent within the negative sentential structure. What is crucial is that in (12) a vague interpretation is not licensed, and this fact can only be explained if the position that *no pas* has at LF is taken into consideration. Note that in this structure *no pas* is placed within the SPEC of the CP, together with the emphasized constituent.<sup>8</sup>

In conclusion, the fact that *no pas* might be associated with a prosodic focus does not seem to be part of its logical semantics. What really defines this adverb semantically is that it has a quantificational domain or contrast focus. Therefore, the semantic distinction between *no* and

*no pas* must be attributed to their different logical specifications. As operators, they both have a certain scope or c-command domain, which corresponds to the maximal CP projection; but *no pas* has —in addition to that— a quantificational domain. The constituent which instantiates this quantificational domain must be some entity within its absolute scope.

(13) *Quantificational domain of no pas*

- a. It coincides with the constituent it specifies at S-structure and at LF in the case of the negative marker *no pas* 2 (e.g. (2h), (4b), (5b), (6b), (12)).
- b. It coincides with any constituent within its absolute scope when the negative marker is *no pas* 1, whether an emphatic constituent exists or not (e.g. (11a-c)).

In order to specify this quantificational domain, it is required that at some level of meaning representation later than LF a variable substitute some constituent within the absolute scope of the negative adverbial; that is, I assume that the enrichment of an expression of a language into a mental representation is indirectly achieved through a logical representation (cf. Kempson (1988)). Accordingly, the LFs of (11) and (12) should be translated into new logical representations where the contrasted constituent is abstracted away from the sentential structure. Thereby, the two readings being licensed by each one of the LFs in (11) should be represented by means of two different logical formulae that differ as to which constituent is abstracted away, either a set of individuals or a set of predicates. On the other hand, the structure in (12), not being vague, has just one semantic representation, which could be represented as in (14a).

- (14) a.  $\langle \text{no pas} \langle \lambda x [V(x)](m) \rangle \rangle$   
 b.  $\langle \text{no pas} \langle \lambda P [P(m)](V) \rangle \rangle$

(14a), to take the first of these formulae, says that *m* is an *x* so that '*no pas* [ *V* (*x*) ]', that is, with regard to a model in which *V* denotes 'ha vingut' and *m* denotes a specific individual, 'la Maria', the formula denotes the member of the set of *x* in relation to which the predicate 'ha vingut' cannot be applied, cancelling or confirming the speaker's expectations.

On the other hand, (14b) says that *V* is a *P* so that '*no pas* [ *P* (m) ]', that is to say, with regard to the same model this formula denotes that, among the set of *P*, Maria has not come, once again contrary to or reinforcing the speaker's expectations.

In summary, the logical content of *no pas* specifies that it is a quantifier-like operator. This means that it always circumscribes a set of conceptual entities (or quantificational domain) of which a subdomain is chosen as the contrasted negative item. Moreover, it implies that there is some likelihood of either the truth or the falsity of the proposition being asserted. Thus, for example, in order to interpret (12), the hearer should be able to relate the proposition being expressed by the utterance (the not coming of Maria) with some other accessible data; and only after this interaction of information will (s)he be able to infer whether the speaker has presented this proposition against his/her expectations or to confirm a given set of assumptions.

So far, the existence of two distinct lexical items (i.e. *no pas 1* and *no pas 2*) which hold different syntactic requirements but share the same logical content has been postulated. The next step will be to consider the third of the questions posed at the beginning of this paper: what sort of syntactic representation should be assigned to negative syntactic structures.

### **3. The Structure of Negative Sentences**

Leaving apart those syntactic contexts where the negative marker specifies an XP, I shall devote my attention to the study of negative sentential structures.

At least three more questions should be addressed in this discussion: (a) what sort of syntactic relation exists between Negation, Agreement and Tense; (b) what acts as a specifier and as a complement of Negation, and (c) what sort of formalism makes possible the right collocation of *pas*, if we start from the assumption that *no pas 1* is a lexical head.

Following Pollock's (1989) proposal on negation in both English and French, I shall assume that in Catalan both *no* and *no pas* *I* may occur at a head position which projects into a NegP. Accordingly, the NegP should be considered a non-defective projection, for it is supposed to have both a specifier and a complement position.

### 3.1. *Specifier of Negation*

We might now wonder what is a possible SPEC of a NegP. The examples in (15) can be analysed as having the negative quantifiers (*ningú* 'nobody', *res* 'nothing', *enlloc* 'nowhere', *mai* 'never' and *cap* 'none') at the [ SPEC, NegP ] position. According to this analysis, these constituents would be coindexed with some argument or adjunct empty position inside the sentence at the output of a quantifier raising rule that would take place before S-structure.<sup>9</sup>

- (15) a. Ningú (no) ha trucat (pas)  
           nobody not has phoned pas  
           'Nobody phoned'
- b. Res (no) és (pas) indispensable  
           nothing not is pas indispensable  
           'Nothing is indispensable'
- c. Enlloc (no) ens trobaríem (pas) millor  
           nowhere not us be-COND pas better  
           'Nowhere would we feel better'
- d. Mai més (no) el tornaré (pas) a veure  
           never more not him again pas to see  
           'I'll never see him again'
- e. Cap estudiant (no) va aprovar (pas) l'examen  
           no student not PAST pass pas the exam  
           'No student passed the exam'

What these examples make clear is that at S-structure the set of quantifiers must occupy a hierarchic position which is higher than *no / no pas I*, for anyone of (15a-e) has negative content even without any explicit negative adverb. That is to say, the negative quantifier is sufficient to negate the sentence, and this fact can only be explained if at S-structure the quantifier is in a position from which it c-commands the INFL features: Tense and Agreement.

Let us compare in this respect the data in (16):

- (16) a. No li exigeixen (pas) que faci res  
           not him-DAT require pas that do nothing  
           'They don't require him to do anything'
- b. Ningú (no) li exigeix (pas) que faci res  
           nobody not him-DAT requires pas that do nothing  
           'Nobody requires him to do anything'<sup>10</sup>
- c. \*Li exigeixen que faci res  
           'They require him to do nothing'

Notice that the negative quantifier *res* 'nothing', which appears at complement position, is not sufficient to determine sentential negation, and —because of that— it must be licensed by some other negative item. What is interesting is that this syntactic licensing can be carried out either through a negative adverb or through some other negative quantifier c-commanding the inflected verb. Accordingly, the sentences in (15) and (16b) are all negative, even in the absence of *no / no pas I*, because the negative quantifiers c-command the INFL features and, consequently, can guarantee sentential scope to negation. In any case, these negative quantifiers seem to reveal that the NegP is in a hierarchic position higher than Agreement and Tense.

In relation to this discussion there is a further difference between the examples in (15) and (17) which is worth mentioning.

- (17) a. No pas LA MARIA \*(no) vindrà  
           not pas the Maria not come-FUT  
           'It is not Maria who will come'
- b. No pas gens de PA \*(no) ens queda  
           not pas nothing of bread not us left  
           'No bread at all we have left'

In contrast with the examples in (15) (where the negative quantifier precedes the verb and the negative adverb is optional), in (17) the negative adverb must be made explicit. This distinction should be attributed to the different structural position of the constituents preceding the inflected verb. In (15) these constituents are negative quantifiers which specify a NegP and locally c-command the INFL features (i.e. there is no syntactic barrier preventing this relationship from being carried out). By contrast, in (17) the constituents preceding the negative adverb are emphatic constituents which are assumed to fill the [SPEC, CP] position. From this position they cannot locally c-command the INFL features, and therefore this structure requires a negative adverbial close to the inflected verb.

Let us now consider what sort of complements a negative adverb may have, and the sort of connection which exists between Negation, Agreement and Tense.

### 3.2. *Complement of Negation*

From a Generative Grammar standpoint, different proposals — mainly those schematized in (18a-c)— have been addressed. In addition, I think that the structure in (18d) should also be taken into account.

- (18) a. [TP [NegP [AgrP ]]] (cf. Pollock (1989))  
       b. [AgrP [NegP [TP ]]] (cf. Belletti (1988), Solà (1989))  
       c. [NegP [TP [AgrP ]]] (cf. Laka (1988), Zanuttini (1989))  
       d. [NegP [AgrP [TP ]]]

Next, I shall present the set of Catalan data that must be accounted for, and the analysis which seems to be most appropriate to approach these data.

A first property to be characterized is the non-clitic nature of Catalan negation. Both in English and French the negative item may show a clitic form (e.g. English *n't* and French *ne* ). In Catalan, however, negative adverbs —following the Italian paradigm (cf. Zanuttini (1989, 1990))— may be stressed. In (19) capitalization stands for intonational prominence.

- (19) a. En Joan NO vindrà  
the Joan not come-FUT  
'Joan will not come'  
b. No vindrà PAS en Joan  
not come-FUT pas the Joan  
'Joan will not come'

A second property characterizing Catalan negative adverbs is that both *no* and *no pas* differ from Catalan pronominal clitics with regard to the syntactic position they fill in the syntactic structure. See the paradigm of examples in (20).

- (20) a. No el vaig pas veure  
not him PAST pas see  
'I didn't see him'  
b. No el vaig veure pas  
c. No vaig pas veure'l  
d. No vaig veure'l pas  
e. \*El no vaig pas veure  
f. \*No vaig veure pas el

Whereas clitics have to precede the finite forms of the verb and follow the non-finite forms, *no* must always precede both the verb —either finite or non-finite— and the clitics adjoined to it, and *pas* must always follow both the verb form —either finite or non-finite— and the clitics adjoined to it. This syntactic distribution is schematized in (21).

- (21) a. *no* + (cl) + V  
 b. V + (cl) + *pas*

As already noticed by Zanuttini (1990), if the syntactic structure of languages like Italian and Catalan was the one in (18a) —postulated by Pollock (1989)—, then we should expect that the movement of the negative marker from the head position of NegP to the head of TP, together with the pronominal clitics, might lead to some sort of reordering process among these items. However, this reordering —at least regarding *no*—, never takes place. On the other hand, although I assume that *pas* must be reordered correctly at S-structure, it clearly differs from the clitic pronominal system as far as the second morpheme of *no pas I* is not restricted to follow non-finite forms of the verb.<sup>11</sup>

From these comments we can conclude the following: if the NegP is assumed to be a syntactic projection higher than TP and AgrP, then there is no reason to suppose that Catalan negative markers are clitics and that they must be raised up to a higher position.<sup>12</sup> The hypothesis that the NegP is the highest node would also predict the possibility that both *no* and *pas* can bear stress (cf. Zanuttini (1990)), as well as the fact that in Catalan the verb can never occur to the left of *no*.

- (22) a. \**Vaig no veure'l* (*pas*)  
 PAST not see-him *pas*  
 'I didn't see him'



- (22) b. \*Vindrà no (pas)  
 come-FUT not pas  
 'He will not come'
- c. \*Ser no (pas) puntual és un mal costum  
 be-INF not pas punctual is a bad habit  
 'Not to be punctual is a bad habit'

In addition to accounting for the non-clitic nature of negation and the relative position of negation with regard to the verb, the analysis of sentential negation must also predict the morphological characteristics of the Catalan verb system.

According to the Mirror Principle (cf. Baker (1985)), it is predicted that morphological derivations must directly reflect syntactic derivations (and vice versa). This means that, taking into consideration the morpheme structure of the verb forms and, more specifically, the relative order of tense and agreement morphemes with respect to the verb, the projection of Tense cannot be higher than the projection of Agreement (cf. Belletti (1988, 1990b), Solà (1989)).

- (23) a. pintaven  
 / pínt + á + bə + n /  
 paint + 1conj.+ imperfective tense + 3p.pl.  
 'They painted'
- b. dormiríem  
 / dórm + í + ríə + m /  
 sleep + 3conj. + conditional tense + 1p.pl.  
 'We would sleep'

As illustrated in (23), if the syntactic and morphological order of Catalan verb forms is V+T+Agr, then at D-structure AgrP must be higher than TP; which is quite the reverse of what Pollock (1989) postulates.

Paying attention to this remark, and assuming that in Catalan —as in French, Italian and Spanish— affixation is done through a head movement rule which raises all verbal heads to higher hierarchic positions (in order not to violate the Head Movement Constraint and the Empty Category Principle; cf. Chomsky (1981), Travis (1984)), then the proposals (18b) and (18d) are the only ones that can correctly predict the right order of verbal suffixes in this and similar languages. But, if at the same time we attempt to explain the non-clitic nature of Catalan negative markers, then we are left with the syntactic relation between functional categories postulated in (18d).

In summary, the answer to the question of what acts as complement of negation seems to point to the functional category AgrP, which in turn would have TP as its complement.<sup>13</sup>

The advantage of (18d) is that it provides an account of the sort of data given in (24).

- (24)
- a. No obrir (pas) la porta quan truquen pot ser prudent  
not open-INF pas the door when call may be sensible  
'Not to open the door when someone is calling may be sensible'
  - b. No obrint (pas) la porta, és difícil que et passi res  
not open-GER pas the door is difficult that you happens something  
'Not opening the door, it is unlikely that anything will happen to you'
  - c. \*No oberta (pas) la porta, hauràs d'entrar pel garatge  
not open-PP pas the door have-FUT to go-in through the garage  
'The door not (being) open, you will have to go in through the garage'
  - d. \*No obre (pas) la porta  
not open-IMP pas the door  
'Do not open the door'
  - e. No obri (pas) la porta  
not open-SUB pas the door  
'Do not open the door' (2 p. sg.)

- (24) f. No obriu (pas) la porta  
 not open-IND pas the door  
 'Do not open the door' (2 p. pl.)<sup>14</sup>

In order that a negative item might be licensed as the bearer of sentential negation, a condition on the assignment of sentential scope must be satisfied.

(25) *Constraint on the Assignment of Sentential Scope to Negation*

Negation can take sentential scope only if —at S-structure — it is in a position from which it c-commands both the TP and the AgrP (cf. Zanuttini (1989:14))

In accordance with this condition, the negative adverbs which occur in (24c,d) cannot be licensed as propositional operators, for in these examples they coappear with verb forms which are not marked for Tense.

With regard to past participial clauses, I follow the idea, already pointed out by Belletti (1989, 1990b), that they are AgrPs which lack a temporal specification. This AgrP corresponds to the projection which in the full clausal structure represents the past participial complement of Aux: AgrPObject (cf. Chomsky (1989)). In this syntactic context negation is not allowed, because NegP fills a position outside the past participial AgrP.

Lack of Tense and Agreement features with the subject can also be postulated in relation to true imperative forms. Notice that this mood is fully defective: in most Catalan verbs the imperative is reduced to a single form, which is used in association with the second person just because the imperative is supposed to appeal to the addressee's attention, but note that a verb form such as the one in (24d) (*obre*) does not bear any second person agreement features.<sup>15</sup>

Consequently, (24d) is ungrammatical, because a negative adverb occurs with an imperative form which is characterized by its lack of Tense and subject Agreement features.

The examples in (24e,f) illustrate what are actually known as imperative suppletive forms, either taken from the present indicative tense or the present subjunctive tense. The verb form in (24e) (*obri*), taken from the subjunctive, may be defined by means of the features [-T, +Agr] (cf. Picallo (1984)). Being positively defined for at least one of these features, the adverbs *no* and *no pas* I can occur with this verb form without leading to any sort of ill-formedness. Likewise, the verb form in (24f) (*obriu*), taken from the indicative, is positively defined for both Tense and Agreement and, therefore, it can freely appear with either negative adverb.

With regard to the infinitive and gerund forms, exemplified in (24a,b) (*obrir*, *obrint*), notice that in Catalan they do not show any sort of Agreement features with the subject of the sentence. Nevertheless, it seems reasonable to assume that these forms hold some aspectual features (imperfective in the infinitive forms, and progressive in the gerund forms) which are inseparable from their temporal specifications. In accordance with this assumption infinitives and gerunds may be said to have at least a Tense projection and, as a consequence, can freely coappear with a negative adverb.

As a conclusion, the set of data which has been described in this section provides several arguments for postulating that the NegP must be in a structural position higher than AgrP and TP.

In the final section I shall address the question of what sort of formalism could allow the location of the negative morpheme *pas* in the appropriate syntactic position within a sentential structure. I am going to assume the existence of a process of syntactic incorporation (cf. Baker (1988)) according to which the verb complex is adjoined to the head of the NegP. My proposal is that only after the application of this verb movement, which also affects infinitive forms, *pas* can find an appropriate position within the new syntactic constituent built through adjunction.

### 3.3. Incorporation to Negation

It has already been argued (cf. Llinàs (1990)) that in Catalan a complex verb Aux + V is an X<sup>0</sup> syntactic unit, which implies that this verb sequence cannot be interrupted by any independent syntactic constituent, for example an AdvP or a NP (cf. Espinal (1983)).

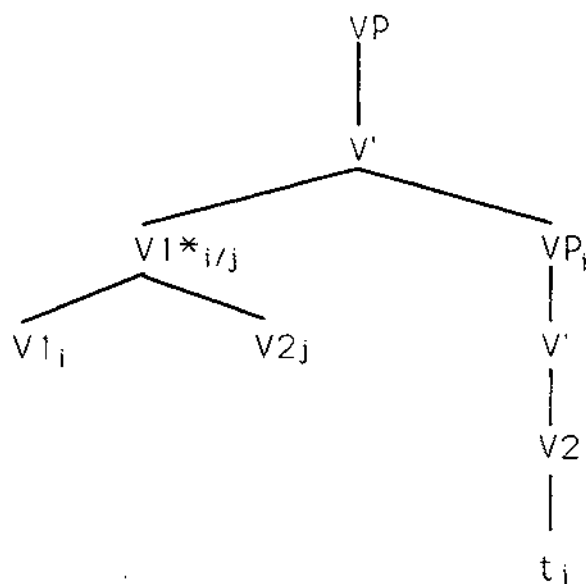
- (26) a. \*Ha sovint telefonat?  
has often phoned  
'Has he often phoned?'  
b. \*Va en Joan telefonar?  
PAST the Joan phone  
'Did Joan phone?'

The only constituents that can interrupt the components of this verb complex are a group of items strongly related to the verb: either the clitic pronouns or the negative morpheme *pas*, as the examples in (27) illustrate.

- (27) a. Quan va haver-*la* vista, se'n va anar  
when PAST have-her seen, left  
'Once he had seen her, he left'  
b. No ha *pas* vingut  
not has pas come  
'He has not come'

In order to explain this distribution, I am going to have recourse to a process of syntactic incorporation, which results in the configuration specified in (28).<sup>16</sup>

(28) *Process of Syntactic Incorporation* (cf. Llinàs (1990))

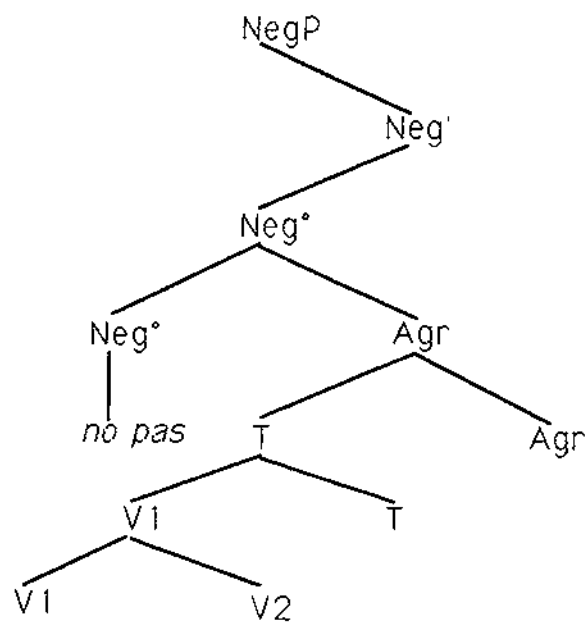


It has been observed that, once this incorporation process has been carried out, a clitic may change its precedence structural relations with regard to the complex verb (either before the finite verb, or after the non-finite verb), without affecting the grammaticality of the sequence.

- (29) a. *La va veure*  
           her PAST see  
           'He saw her'  
       b. *Va veure-la*

In a parallel way, my proposal is that after the verb incorporation process has applied, the verb complex is successively adjoined first to T, then to Agr and finally to Neg.<sup>17</sup> Along the same lines as it is currently assumed that T and Agr attract V only if they are provided with a certain morphological strength, I assume that, when negation is present, Neg attracts V. Further incorporation of this complex constituent to the head of CP is ruled out because no morphological or syntactic information would be attached to V. The result of this head-to-head incorporation process is illustrated in (30).

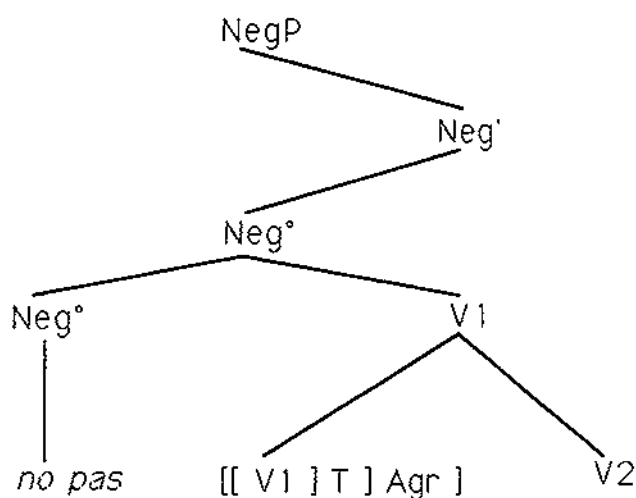
(30)



Notice that this process of syntactic incorporation applies both to the right and to the left. More specifically, when a verb is moved in order to be adjoined to another lexical head (either an auxiliary verb or a negative adverb), it incorporates to the right. However, when a verb head (even a complex verb head) is adjoined to a non-lexical head (for example, Tense and Agreement), then it incorporates to the left.

Since the verb forms in V2 (participles, gerunds and infinitives) have already undergone agreement attachment (cf. Belletti (1990a,b)), no more affixes can attach to them, and therefore the Tense and Agreement features specified in (30) can only be attached to the head of V1. Once this morphological process has applied, a syntactic structure such as (31) is obtained.

(31)



It is precisely at this point when *pas*, following lexical requirements peculiar to *no pas I*, is reordered within the new Neg° constituent and, as a result, is placed in any postverbal position that can be found within this complex constituent. The data in (32) provide evidence in support of this claim.

- (32) a. No ha *pas* estat trucant  
           not has *pas* been ringing  
           'It has not been ringing'
- b. No ha estat *pas* trucant
- c. No ha estat trucant *pas*

Notice that whatever the syntactic position of *pas* may be, *no* is still c-commanding both Tense and Agreement and, therefore, the sentential scope of this operator is adequately licensed at the level of LF.



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## Notes

<sup>1</sup> This is the dialect broadly spoken in the provinces of Barcelona, Girona and Tarragona.

<sup>2</sup> Actually, the structure *no* X seems to be lexically and syntactically restricted to certain quantifiers: *no tot(s)* 'not all', *no gaire(s)* 'not many', to certain quantifier-like adverbials: *no només*, *no solament* 'not only' and to other specific lexical items.

- (i) a. No tots els estudiants aniran a la universitat  
'Not all the students will go to the university'
- b. No gaires estudiants aniran a la universitat  
'Not many students will go to the university'
- c. No només els millors estudiants aniran a la universitat  
'Not only the best students will go to the university'
- d. Se celebrarà una conferència internacional dels països no alineats  
'An international conference of the non-aligned countries will be held'

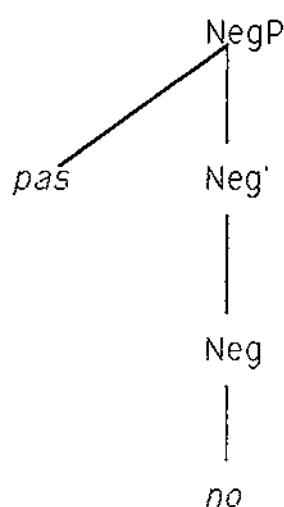
<sup>3</sup> From now on each example containing *no pas* can be interpreted either as a presupposition-cancelling type of negation (rejecting some of the speaker's assumptions with regard to what is being said), or as a presupposition-confirmation type of negation (reinforcing these assumptions) (cf. Espinal (1990), Wilson-Sperber (1988)).

<sup>4</sup> Analysing *pas* as a specifier (cf. Pollock (1989)), of the same sort as clitics, articles and weak possessive forms would incorrectly predict that *pas* at S-structure should be able to emerge at the left of *no*. However, this possibility only yields ungrammatical sequences.

- (i) \*La Maria pas no va aprovar  
 the Maria pas not PAST pass  
 'Maria did not pass'

On the other hand, assuming the structure in (ii)

(ii)



would require that *no* should be raised to a higher structural position. However, as we shall be able to see in Section 3, there are arguments to support the claim that the NegP is the highest sentential projection, which at S-structure c-commands both Tense and Agreement.

<sup>5</sup> This is one of several values attributed to the term focus in the literature. Other times the focus instantiates the new information of the sentence. See Koktová (1987) for a review of the notions of scope and focus.

<sup>6</sup> See the works by Koktová (1986) and Vallduví (1990) for support of the thesis that adverbial adjuncts that operate on the focus and the constituents that are in fact the focus do not have to be next to each other at S-structure.

<sup>7</sup> We can talk about the quantificational domain of an operator to refer to that constituent, semantically associated with it, which provides a set of relevant alternates within a given discourse.

<sup>8</sup> As a general remark it is possible to point out that, when a quantifier-like operator occurs at presentential position, the contrast focus can never be the whole sentence.

<sup>9</sup> As already pointed out by Haegeman-Zanuttini (1990), this approach suggests that an interesting configurational parallelism holds between *qu*- 'wh-' constituents and negative constituents: negative quantifiers —similar to 'wh-' constituents— seem to participate in a SPEC-Head relation with a head marked [+NEG]; therefore, they may both be said to move from a sentence internal position to a clause onset position.

<sup>10</sup> With regard to (16b) one remark should be made: when the negative adverb is made explicit, *res* behaves as a negative quantifier within a negative concord schema, and means 'nothing'; however, when there is no negative adverb, *res* in postverbal position can behave either as a negative quantifier or as a polarity item meaning 'something'.

<sup>11</sup> The fact that at S-structure *pas* must follow a verb has been interpreted both by Solà (1989) and Llinàs (1990) as being a consequence of its presumed clitic nature. However, under this analysis, neither the possibility that *pas* is a possible bearer of stress nor its requirement to follow a verb form —irrespective of its inflectional features— can be properly accounted for.

<sup>12</sup> See Rivero (1990), who proposes a distinction between languages where Neg c-commands Tense (e.g. most of Romance and Slavonic languages), and languages where Neg is c-commanded by Tense in syntax (as in French, English, Czech and Slovak).

<sup>13</sup> Notice that this approach to sentential negation bears a specific analysis for the subject. As currently assumed in GB theory, one possibility is to generate the subject as the SPEC of AgrP,

but in negative structures this NP would have to be moved higher up to [ SPEC, NegP ] under conditions yet to be specified. Another possibility — which would actually have the advantage of avoiding the problem of having to raise the subject to [ SPEC, NegP ]— would take this NP as a VP adjoined constituent (cf. Koopman-Sportiche (1988)), and would assume that the position of [ SPEC, AgrP ] is filled by a *pro* with whom it shares the same index. According to this view, any sequence with a preverbal subject should be analysed as having a left dislocated or topicalized constituent adjoined to CP (cf. Solà (1989)).

<sup>14</sup> INF stands for infinitive, GER for gerund, PP for past participle, IMP for imperative, SUB for subjunctive and IND for indicative. These forms are assumed to have the following feature specifications:

- (i) a. INF = [ +T, -Agr ]
- b. GER = [ +T, -Agr ]
- c. PP = [ -T, -Agr ]
- d. IMP = [ -T, -Agr ]
- e. SUB = [ -T, +Agr ]
- f. IND = [ +T, +Agr ]

Although (24d,e,f) are all intended to be understood as imperative negative sentences, (24d) is the only one that introduces a true imperative verb form.

<sup>15</sup> It should be noticed that in Catalan the second person singular morpheme is /s/.

<sup>16</sup> This output structure reveals that V2 has moved to adjoin to V1 through a process that implies the creation of a new constituent: V1\*. In this structure the V2 position is governed by V1 prior to movement, because of Tense marking. But, once V2 has been raised, V1\* also counts as an antecedent governor for the trace, for the indices *i* and *j* percolate up to this new constituent. Hence, both the HMC and the ECP are satisfied.

17 V<sup>o</sup>/Aux<sup>o</sup> incorporation into Neg has independently been proposed by Rivero (1990) in order to account for the superficial word order found in the West Slavonic languages Czech and Slovak.

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*Escola Universitària de Traductors i Intèrprets*

*Universitat Autònoma de Barcelona*

*E-08193 Bellaterra (Barcelona)*