On the D-structure position of negative sentence adverbials in French<sup>\*</sup>

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# ABSTRACT

The author evaluates aspects of recent work by Pollock (1989), Belletti (1990) and Zanuttini (1991), in particular one fundamental assumption made there about the syntax of negative clauses in French. While accepting Pollock's claim that the clitic *ne* is generated as the  $X^0$  head of its own phrasal projection, the author rejects the claim (first made by Pollock (1989: 418) and subsequently endorsed by Belletti (1990: 30) and Zanuttini (1991: 35)) that *pas* is an  $X^{max}$  phrasal category base-generated as the specifier of *ne*, i.e., in the specifier position within NegP. The author offers a three-sided argument against such an analysis, invoking: (a) a significant generalisation regarding the specifier position within functional projections; (b) the relationship between elements like *pas* and indefinite direct objects in clauses containing a transitive verb; and (c) the syntax of adverbials in general. The author goes on to consider Obenauer's (1983; 1984) work on `quantification at a distance' and Battye's (1989; 1991) work on `nominal quantification'. He argues for a unified account of negative sentence adverbials in French and posits accordingly that *pas* is generated in a lower position in clause structure, either adjoined to VP or as the head N of a determiner-less direct object indefinite DP.

#### **0.0 Introduction**

In this article, cast within the strictly modular GB framework (see Chomsky (1981, 1986a/b) and Haegeman (1991)), our aim is to consider an aspect of the syntax of those elements in French which often appear in association with the negative particle *ne*, e.g., *pas* (not), (negative) *plus* (no longer), *guère* (hardly/rarely), *rien* (nothing) and *personne* (no-one). Despite the fact that these negative elements (which, for want of a more suitable term, we shall label `adverbials' for the time being) are common features of French, serious analysis of their syntax was missing from theoretical linguistics for a number of decades due to the lack, within the Chomskyan paradigm at least, of any sufficiently articulated model of sentence structure. This situation was rectified by the publication of Pollock (1989), offering as it did a framework which put the syntax of negation in Romance languages, for example, squarely on the research agenda. Since then, a number of important studies of sentential negation phenomena, in particular in Romance, have appeared, e.g., Belletti (1990) and Zanuttini (1991). We shall refer to the work of these three authors in greater detail below.

Examples of the kind of negative structure we shall be considering are given in (1)-(4) below, simple sentences containing intransitive and transitive verbs:

- (1) Intransitive:
  - a Elise fume.
  - b Elise ne fume **pas/plus**.
  - c \*Elise ne fume plus pas/pas plus.
  - d Elise va au cinéma ce soir.
  - e Elise ne va **pas/plus** au cinéma.
  - f \*Elise ne va plus pas/pas plus au cinéma.
- (2) Transitive (definite direct object):
  - a Elise aime son papa.
  - b Elise n'aime **pas/plus** son papa.
  - c \*Elise n'aime plus pas/pas plus son papa.

- d Elise fait ses devoirs.
- e Elise ne fait **pas/plus** ses devoirs.
- f \*Elise ne fait **plus pas/pas plus** ses devoirs.
- (3) Transitive (indefinite direct object):

а	Elise		achète	(régulièrement)	un	journal.
b					des	journaux.
c					*de jou	urnal/-aux.
d	Elise	n'	achète	pas/plus	*un jou	urnal.
e					*des	journaux.
f					de	journal/-aux.
g	Elise	n'	achète	plus pas/pas plus	*un joi	urnal.
ĥ					*des	journaux.
i					*de jou	urnal/-aux.

(4) Transitive (negative direct object):

а	Elise		voit	trois hom	mes et une femme
b	Elise	ne	voit	personne	
c	Elise	ne	voit	plus personne	
d	*Elise	ne	voit	pas personne.	
e	Elise		boit	le whiske	у.
f	Elise	ne	boit	rien.	-
g	Elise	ne	boit	plus rien.	
ħ	*Elise	ne	boit	pas rien.	
g h	Elise *Elise	ne ne	boit boit	plus rien. pas rien.	

Even in purely descriptive terms, this array of data illustrates the complex phenomonology represented by sentential negation in French. On the basis of our affirmative sentences (i.e., (1a/d), (2a/d), (3a/b), (4a/e)) it is clear that various conditions determine the distribution of the negative adverbials under consideration:

- The presence of *ne...pas/plus* in sentences (1b/e) (containing an intransitive verb) and (2b/e) (containing a transitive verb governing a definite direct object) seems 'straightforward' enough; *ne* precedes while *pas/plus* follows the finite verb form.
- 2) Pas and plus cannot co-occur. See strings (1c/f), (2c/f), etc.
- 3) Where the sentence contains a transitive verb governing an indefinite direct object, e.g., the strings in (3), the situation is more complicated. In affirmative sentences, the indefinite direct object must be realised either with the singular indefinite article (3a) or as a plural partitive structure (3b), while, in negative sentences, it must be realised as what Selkirk (1977) terms a pseudo-partitive structure (3f) (singular & plural). (With respect to the technical terminological distinctions we are drawing here, the reader is asked to bear with us for the moment. We shall give flesh to the issues below.)
- 4) Where the direct object of a transitive verb is replaced, as it were, by a negative substitute argument, as in (4b/f), it can co-occur with *plus*, as in (4c/g), but not *pas*, hence the ungrammaticality of (4d/h).

We do not intend to address all the issues raised by the above data and observations; rather we see our work here as a modest contribution to a wider research agenda aiming, ultimately, to provide a general theory of sentential negation.

On a fairly intuitive level, it is possible to distinguish between two types of element associated with *ne* in these structures:

- (a) arguments, e.g., *rien* and *personne*, which receive a  $\Theta$ -role (as in (4b/c/f/g)); and,
- (b) non-arguments, e.g., pas and (negative) plus (also guère), which, presumably, receive no Θ-role (as in (1b/e)).

Given their apparent status as non-arguments, and, hence, their appearance in A'-positions<sup>1</sup>, the members of this second group can be said to have a 'true' adverbial function. Rather than *identifying* (albeit negatively) some participant within the discourse (like *rien* (the identification of what is (not) drunk) and *personne* (the identification of what is (not) seen)), the members of this group seem to *modify* the entire proposition (in the sense that they negate it).

As our title suggests, in this article we shall be concentrating on the syntax of members of this second group of elements, i.e., negative sentence adverbials like *pas*. In particular, we wish to consider the position in clause structure in which these elements are (base-)generated. In our discussion, attention will be focused on the syntax of *pas*. The extent to which our account of the syntax of *pas* can be applied to other negative sentence adverbials, such as those exemplified in (1)-(4) above, will be the subject of later work.

Our discussion will be structured in the following way. For concreteness and in order to make explicit the assumptions we are making, we shall begin, in section 1, with a review of a number of accounts of sentential negation in Romance which have appeared recently within the Government-Binding framework, i.e., Pollock (1989), Belletti (1990) and Zanuttini (1991). As far as we can tell, the theoretical foundation which is common to these three accounts of sentential negation in Romance, and which we shall endorse below, i.e., the NegP analysis, is currently favoured in the literature<sup>2</sup>. (The reader is referred to the literature, especially Pollock (1989), for a justification of the NegP hypothesis.) In section 2, we concentrate on the claim, first made in Pollock and subsequently endorsed by Belletti and Zanuttini, that *pas* is a maximal projection occupying the specifier position of NegP at D-structure<sup>3</sup>. Although this claim is quite compatible with most, if not all, generally accepted versions of X-bar theory (see Jackendoff (1977)), we present three independent lines of argument to support our view that it is in fact untenable. Having argued against this analysis, we then go on, in section 3, by way of an interlude, to review recent work by Battye on what he terms `nominal quantifiers' in French, based on:

- (a) work by Obenauer on 'quantification at a distance'; and,
- (b) more recent work by Abney on the so-called `DP-analysis'.

In section 4, we return to the issue at hand and argue that *pas* is best analysed, not as the D-structure specifier of NegP, but rather as one of Battye's `nominal quantifiers'. Our conclusions are brought together in the summary in section 5.

# 1.0 The NegP analysis of negation in Romance

In major recent comparative work, Pollock (1989), Belletti (1990) and Zanuttini (1991) have offered analyses of clause structure, and have taken somewhat more than a cursory glance at sentential negation phenomena in Romance. For example, as part of his theoretical formalisation of the intuitive idea that verb inflection encodes (at the very least) both agreement and tense features, Pollock claims that the familiar Infl node heading IP (roughly the Aux node of earlier transformational models) should be analysed in a much more articulated fashion than had been common practice (despite Chomsky's claim, made in (1955), that the dual morphological characteristics of inflection, i.e., tense and agreement, should be reflected in some level of (abstract) syntactic representation). More specifically, Pollock posits a reanalysis of the *single* 

<sup>&</sup>lt;sup>1</sup> As we shall see, we may need to reconsider this point.

<sup>&</sup>lt;sup>2</sup> But see Williams (1991) who argues that *pas* is in fact the negator proper while *ne* is nothing more than a scope marker for sentential negation.

 $<sup>^{3}</sup>$  As we shall see below, Belletti does in fact posit that elements akin to *pas* can also be generated in a different position.

functional category I(nflection) (heading IP, above VP), in terms of (at least) *two* functional categories, namely Agr and T (heading AgrP and TP respectively), which *independently* encode agreement and tense features respectively. Thus, in Pollock's analysis of (French and English) clauses, the ultimate head of IP (renamed TP), T, encodes tense features only. Instead of selecting the *lexical* projection VP as its complement, T selects a further *functional* projection, AgrP, as its complement, the ultimate head of which, Agr, encodes agreement features only<sup>4</sup>. It is the lower of these two functional heads, Agr, which finally selects VP as its complement. In this analysis, Verb Movement, i.e., Koopman's (1984) (head-to-head) V-to-I movement, is reinterpreted as V-to-Agr-to-T movement, whereby an uninflected verbal root, generated under the lexical V node, can 'pick up', as it were, the relevant agreement and tense features as it moves (courtesy of the generalised movement rule Move- $\alpha$ ), via Agr, to the highest head position encoding verbal inflectional morphology, i.e., T, the position which the fully inflected verb occupies at S-structure in simple declarative sentences. Aux-to-Comp movement (I-to-C movement) straightforwardly falls out as T-to-C movement.

Belletti's analysis is similar to Pollock's in a number of respects; one point on which the two authors differ is with respect to the relative ordering of the functional projections TP and AgrP. Belletti posits that AgrP is the higher of the two projections<sup>5</sup>. Although we have no new contribution to make to this particular debate, we do note, with Belletti, that Baker's (1988) 'Mirror Image Principle' of morphology would support Belletti's analysis here over Pollock's. The following examples of Italian verbs from Belletti (1990: 28) illustrate how this more articulated model of verbal morphology (together with her ordering of TP relative to AgrP) can account for the data. (Similar examples can be used from French.)

(5) a Legg-eva-no Read-imp-3pl *They read* (imperfect)
b Parl-er-ò Speak-fut-1sg *I will speak*

Here, the verbal suffix corresponding to `tense' is closer to the lexical root than the verbal suffix corresponding to `agreement'. It is therefore argued that the features encoded under the functional T node are `incorporated', to use Baker's (1988) term, before those encoded under the functional Agr node. This is most straightforwardly accounted for if AgrP is positioned higher in clause structure than TP, as in fact Belletti and Zanuttini argue, contrary to Pollock<sup>6</sup>. For the purposes of our discussion, where it is necessary to analyse I in terms of its Agr and T components, we shall adopt Belletti's relative ordering of AgrP and TP as opposed to Pollock's. Where the relative ordering of the projections TP and AgrP is not pertinent to the issue at hand, we shall avoid the controversy by referring, anachronistically, as it were, to IP. In particular, where we speak of the specifier position within IP (SpecI), we intend the reader to understand the specifier position within the highest maximal functional projection whose head encodes `inflectional' verbal morphology, e.g., agreement/tense features, whatever that projection turns out to be (TP or AgrP)

<sup>&</sup>lt;sup>4</sup> The fact that Pollock posits that TP is higher in clause structure than AgrP is a consequence of his analysis of the functional head T. By suggesting that T is an operator whose variable is the clause, T must be the highest element within the clause.

<sup>&</sup>lt;sup>5</sup> Zanuttini agrees with Belletti on this point.

<sup>&</sup>lt;sup>6</sup> A possible alternative might be to analyse AgrP, not as the complement of TP, but rather as its specifier. This is something which Pollock (1989: 384fn19) does in fact contemplate, but which we shall not pursue here.

in the work referred to above).

In addition to TP and AgrP, Pollock (1989: 365), Belletti (1990: 29) and Zanuttini (1991: 10) assume (in negative clauses in French and English, at least) the presence of a (functional) projection NegP (Negative Phrase). Pollock and Belletti suggest that NegP intervenes between TP and AgrP. Thus, Pollock posits a TP-->NegP-->AgrP ordering, whereas Belletti argues for an AgrP-->NegP-->TP ordering. In both cases though, NegP is selected as the complement of the higher of the two `inflectional' heads, while the ultimate head of NegP, Neg, selects the lower of the two `inflectional' projections as its complement. See (6) below for a representation of the CP-structure we shall be assuming throughout (after Pollock (1989: 397), but adopting, for the reasons mentioned above, Belletti's relative ordering of TP and AgrP):

(6) CP

Ċ Spec С AgrP Spec Agr Agr NegP Spec Neg TP Neg Spec T Т VP Spec V V

Turning now to the specific details of negation in French, Pollock (1989: 414) and Belletti (1990: 29) suggest that the negative clitic particle *ne* belongs to the category Neg and, as such, is typically generated as the head of the NegP projection, with the maximal projection *pas* as its typical specifier, as illustrated in the partial tree in (7) below. Here, *pas* enters into a specifier-head agreement relation with *ne* in such a way that the two elements together are interpreted as a single instance of negation.

(7)	Ν	зgР		
	XP	Neg		
	pas	Neg <sup>0</sup>		
		ne		

In this analysis, then, *pas* appears to the left of *ne* at D-structure. The reverse ordering of these two elements at S-structure is analysed by Pollock (1989: 414) as a consequence of the clitic

nature of *ne*: it will always cliticise onto the higher T position<sup>7</sup>. In finite clauses, then, (cf. (8d)), ne will cliticise up to the fully-inflected verb hanging under the T node. Evidence to support the contiguity being postulated here between ne and the finite verb comes from structures like (8) below in which the fully inflected verb moves to the C position, i.e., in familiar 'Subject-Auxiliary Inversion' structures. Where sentential negation also appears, as in examples (8d/e), the clitic form *ne* appears to move with the inflected verb. Given that the landing site for this (head-to-head) movement is the head position C (see (8c)), and that the extraction site must, on current assumptions, be the head position I (T or Agr, see above), then the clitic ne must first be adjoined to the inflected verb under I (following Kayne's (1991) analysis of cliticisation as adjunction to a functional head).

- (8) Il est venu. а
  - Est-il t venu? b
  - $\begin{bmatrix} C \\ I \\ i \end{bmatrix}$  Est  $\begin{bmatrix} -il \\ I \\ i \end{bmatrix}$  venu? Il n'est pas venu. с
  - d
  - N'est-il *t* pas venu? e
  - $[_{C} [_{I_{i}} N'est]]$  -il  $[_{I_{i}} t]$  pas venu? f

One alternative analysis of the behaviour of the clitic *ne* - one which is more in keeping with Baker's (1988) Head Movement Constraint (HMC), itself essentially reducible to the Empty Category Principle (ECP) - would be to suggest that Verb Movement (in negative clauses, at least) should be seen not as V-to-T-to-Agr movement but rather as V-to-T-to-Neg-to-Agr movement (adopting, again for concreteness, Belletti's ordering of TP relative to AgrP), whereby the  $[_{T}V+T]$  complex would combine with the *ne* element under Neg before the entire three-part constituent [Neg+V+T] moves up to the Agr position<sup>8</sup>. This analysis avoids the need for  $[_TV+T]$ to move directly to Agr, over the top of Neg, as it were, an account which is something of a problem within the terms of Baker's analysis of incorporation, i.e., (adjacent) head-to-head movement. At the same time, it provides an equally elegant account of the behaviour of *ne* in inverted structures as exemplified in (8) above.

As a second alternative, we might wish to adopt Roberts' (1991) line of thought and consider the possibility that the HMC and the ECP should not be applied quite as strictly as originally thought. In his paper, Roberts suggests that it might not be sufficient just to say that X<sup>0</sup> movement and XP movement are independent of one another. It might be necessary to further distinguish between arguments and non-arguments. Thus, in addition to saying that the movement of heads and the movement of maximal categories are independent of one another, it would be necessary to say that the movement of argument X<sup>0</sup> and XP categories does not interfere with the movement of non-argument X<sup>0</sup> and XP categories respectively. This line of reasoning is interesting to us within the context of sentential negation in that, if we accept, with Roberts, for example, that Neg is an A'-head while Agr and T are both A-heads, then the presence of the head Neg between the heads Agr and T would not interfere with (i.e., prevent) head-to-head movement from T to Agr over the top of Neg. Although it could be argued that Roberts' innovation to the ECP/HMC leaves us with a less restrained theory of grammar, we believe that the consequence of this innovation for the analysis of sentential negation being proposed here is a desirable one, i.e., that the categorial syntactic status of the constituent which is incorporated into the Agr head is the same in both affirmative and negative sentences.

Finally, we come to the analysis of sentential negation proposed by Zanuttini. Zanuttini

<sup>&</sup>lt;sup>7</sup> Remember that Pollock posits that TP features higher in clause structure than both NegP and AgrP.

<sup>&</sup>lt;sup>8</sup> In fact, Pollock (1989: 421) himself envisages the possibility of V-to-Agr-to-Neg-to-T movement in English. See the previous footnote.

adopts a number of the claims made in the work by Pollock and Belletti cited above. She accepts the re-interpretation of IP in terms of TP and AgrP and endorses the claim that negative markers in Romance similar to *ne* in French head a functional projection, i.e., NegP, with negative elements akin to French pas as typical (XP) specifiers within NegP. In respect of the Pollock/Belletti debate as to the relative ordering of AgrP and TP, Zanuttini falls on the side of Belletti, placing AgrP higher in the tree structure than TP. The new contribution which Zanuttini makes to the issue of sentential negation concerns the functional projection NegP. Whereas both Pollock and Belletti agree that a *single* projection NegP appears between AgrP and TP (if at all) (and despite their disagreement with respect to the relative ordering of AgrP and TP), Zanuttini claims that there are in fact *two* positions in which NegP can be realised in the tree structure. The first of these coincides with the one posited by Pollock and Belletti, i.e., between AgrP and TP; the second position in which Zanuttini claims NegP can appear, in Romance for example, is immediately above VP. To distinguish between the two positions in which NegP can appear, Zanuttini labels the higher NegP-1 and the lower NegP-2. In some languages, e.g., English, Zanuttini goes as far as to suggest that both NegP-1 and NegP-2 can be realised, i.e., both above and below TP, in one and the same clause. (The reader is referred to Zanuttini's own work.) The tree structure in (9) below illustrates Zanuttini's model:

(9) CP



With reference to French, we shall have little to say about whether the two `parts' to sentential negation are associated with NegP-1 or NegP-2. In the light of Pollock's (1989) claim that French (main verb) infinitives undergo short Verb Movement, i.e., from V to the lower of the two functional heads encoding verbal inflectional morphology<sup>9</sup> (in contrast to finite verbs which move to the higher of these two functional heads), we shall assume that French negative

<sup>&</sup>lt;sup>9</sup> In Pollock's own presentation, of course, the lower of the two functional heads encoding verbal inflectional morphology is Agr. Given that we have adopted Belletti's (1990) ordering of AgrP relative to TP, we shall assume that the short Verb Movement which infinitives undergo in French involves movement from V to T. This is perhaps more credible that Pollock's original account in the sense that an infinitive in French is more intuitively associated with Tense features than with Agreement features.

clauses realise (at least) NegP-1, i.e., NegP between AgrP and TP. Our motivation for this assumption is the fact that, where clauses containing infinitives are negated, as in (b) below, both *ne* and *pas* precede the verb:

- (10) a Pierre ne mange pas.
  - b Pierre dit ne pas manger.
  - c \*Pierre dit ne manger pas.

Having presented the relevant features of the work by Pollock, Belletti and Zanuttini, we turn now to a critique of one particular aspect of the work, i.e., the proposed analysis of *pas*.

# 2.0 Arguments against the proposed account of pas

We would like to accept the analysis of *ne* put forward by Pollock and more or less adopted by Belletti and Zanuttini, i.e., that the element is a non-referential clitic base-generated as the zero-level head of a functional projection NegP, itself generated either:

- (a) between the two inflectional projections TP and AgrP as posited by Pollock and Belletti;
- or, if we adopt the flexibility of Zanuttini's model,
  - (b) above VP.
- We shall therefore not concern ourselves here with the issues surrounding either:
  - (a) whether *ne* is the head of NegP-1 or NegP-2; or,
  - (b) the relative ordering of TP and AgrP. (The reader is referred to our earlier comments on both these issues.)

Rather, we shall concentrate on one feature, common to all three versions of the NegP analysis cited above, which we reject, i.e., the claim that *pas* is typically base-generated as the specifier of *ne*, i.e., in the specifier position of NegP(-1). In section 4 below, we present and subsequently argue in support of our (not entirely new) alternative analysis, based on work by Battye and Obenauer (reviewed in section 3). In this section, we attempt to justify our rejection of the Pollock/Belletti/Zanuttini analysis of *pas*. Our argumentation will involve:

- (a) a non-trivial generalisation regarding the specifier position within maximal functional projections (section 2.1);
- (b) the close relationship between *pas* and indefinite direct objects in negative clauses containing a transitive verb (section 2.2); and,
- (c) the general nature of `adverbials' and the theory of grammar (section 2.3).

#### 2.1 The specifier position of functional categories:

Stowell (1981) distinguishes formally between two types of syntactic projection. His argument is by no means new; rather, it reflects the distinction made in traditional grammar between `content' words (lexical categories) and `form' words (functional/grammatical categories). The principles of X-bar syntax can be seen to apply not only to the projections of lexical categories, but also to the projections of functional categories such as: complementisers (C), inflection (I) (i.e., tense (T) and agreement (Agr)), determiners (D) and, presumably, negators (Neg).

Over and above the intuitive, pre-theoretical difference between functional and lexical categories, i.e., between form words and content words, the set of functional categories can be distinguished from the set of lexical categories in more formal terms. First, functional categories cannot be exhaustively characterised using Chomsky's (1974) and Stowell's (1981: 21-51) putatively primitive syntactic features  $[\pm N]$  and  $[\pm V]$ , whereas lexical categories can: Noun =

[+N, -V]; Verb = [-N, +V]; Adjective = [+N, +V]; Preposition =  $[-N, -V]^{10}$ . Second, it is widely recognised that the members of the set of functional categories form an essentially closed set, allowing little if any creativity, e.g., in the class of complementisers and determiners. Furthermore, if we consider the maximal projection of the familiar functional categories of C(omplementiser), I(nflection) and D(eterminer), a third, more theory-internal, contrast between the projections of lexical and functional categories becomes apparent. Consider the strings in (11a & 12a) below together with their D- and S-structure representations in the light of the claim that clause subjects are base-generated VP-internally in the SpecV position<sup>11</sup>, as opposed to the SpecAgr (or SpecT) position hypothesised by Pollock (1989: 384):

(11) a Vous aimez ce mec.

You love this bloke.

b D-structure:

 $\begin{bmatrix} CP \ [Spec \ e] \ [C' \ [C \ C] \ [IP \ [Spec \ e] \ [IP \ [IP \ e] \ e] \ [IP \ e] \ [IP \ e] \ e] \ [IP \ e] \ [IP \ e] \ e] \ [IP \ e] \ e] \ [IP \ e] \ e] \ e] \ [IP \ e] \ e] \ e] \ e] \ e] \ e] \ e[IP \ e] \ e] \ e[IP \ e] \ e] \ e[IP \ e] \ e] \ e] \ e[IP \ e] \ e] \ e[IP \ e] \ e] \ e] \ e[IP \ e] \ e] \ e[IP \ e] \ e] \ e] \ e[IP \ e] \ e] \ e] \ e[IP \ e] \ e] \ e[I$ 

 $\begin{bmatrix} CP \\ Spec \end{bmatrix} \begin{bmatrix} C' \\ C \end{bmatrix} \begin{bmatrix} C \\ C \end{bmatrix} \begin{bmatrix} C \\ P \end{bmatrix} \begin{bmatrix} Spec \end{bmatrix} \begin{bmatrix} VOUS_j \end{bmatrix} \begin{bmatrix} T \\ I \end{bmatrix} \begin{bmatrix} aimez_i \end{bmatrix} \begin{bmatrix} VP \\ Spec \end{bmatrix} \end{bmatrix} \begin{bmatrix} VP \\ Spec \end{bmatrix} \begin{bmatrix} VP \\ Spec \end{bmatrix} \begin{bmatrix} VP \\ Spec \end{bmatrix} \end{bmatrix} \begin{bmatrix} VP \\ Spec \end{bmatrix} \begin{bmatrix} VP \\ Spec \end{bmatrix} \end{bmatrix} \begin{bmatrix} VP \\ Spec \end{bmatrix} \begin{bmatrix} VP \\ Spec \end{bmatrix} \end{bmatrix} \begin{bmatrix} VP \\ Spec \end{bmatrix} \begin{bmatrix} VP \\ Spec \end{bmatrix} \end{bmatrix} \end{bmatrix} \begin{bmatrix} VP \\ Spec \end{bmatrix} \end{bmatrix} \begin{bmatrix}$ 

(12) a Quel film regardez-vous? What film are you watching? b D-structure:

 $\begin{bmatrix} CP[S_{pec} e] \\ CP[S_{pec}$ 

 $[_{CP}[_{DPi}[_{Spec} e]]_{D'}[_{D} quel][_{NP} film]][_{C'}[_{C} regardez_{k}][_{IP}[_{Spec} vous_{j}][_{I'}[_{I} t_{k}][_{VP} [_{Spec} t_{j}][_{V'}[_{V} t_{k}][_{DP} t_{j}]]]]]]$ 

Consider also the English DP given in (13) below (see Abney (1987)):

- Hitler's defeat of Poland (13) a D-structure: h  $[ _{DP} [ _{Spec} e ] [ _{D'} [ _{D} \phi ] [ _{NP} [ _{Spec} Hitler ] [ _{N'} [ _{N} defeat ] [ _{DP} Poland ] ] ] ] ]$ S-structure: с
  - $\begin{bmatrix} DP \\ Spec \end{bmatrix} \begin{bmatrix} Spec \\ Hitler_i's \end{bmatrix} \begin{bmatrix} D \\ D \end{bmatrix} \begin{bmatrix} D \\ P \end{bmatrix} \begin{bmatrix} Spec \\ NP \end{bmatrix} \begin{bmatrix} Spec \\ T_i \end{bmatrix} \begin{bmatrix} N \\ Spec \end{bmatrix} \begin{bmatrix} DP \\ Spec \end{bmatrix} \end{bmatrix} \begin{bmatrix} DP \\ Spec \end{bmatrix} \begin{bmatrix} DP \\ Spec \end{bmatrix} \begin{bmatrix} DP \\ Spec \end{bmatrix} \end{bmatrix} \begin{bmatrix} DP \\ Spec \end{bmatrix} \begin{bmatrix} DP \\ Spec \end{bmatrix} \end{bmatrix} \begin{bmatrix} DP \\ Spec \end{bmatrix} \begin{bmatrix} DP \\ Spec \end{bmatrix} \end{bmatrix} \begin{bmatrix} DP \\ Spec \end{bmatrix} \begin{bmatrix} DP \\ Spec \end{bmatrix} \end{bmatrix} \begin{bmatrix} DP \\ Spec \end{bmatrix} \begin{bmatrix} DP \\ Spec \end{bmatrix} \end{bmatrix} \begin{bmatrix} DP$

In the D-structures (11b) and (12b) of sentences (11a) and (12a) respectively, we have represented three functional categories, C, I & D, within their respective projections, CP, IP & DP. (For simplicity's sake, we have not expanded IP as TP and AgrP. However, the claim we are making

<sup>11</sup> To our knowledge, the claim that clause subjects are base-generated within VP was first made, within the theoretical paradigm adopted here, by Sportiche (1988). In her article, Sportiche suggests that subject DPs (NPs) are adjoined to the predicate VP to form a 'super'-VP (VP\*). The analysis which we have adopted here, i.e., that clause subjects are basegenerated in the specifier position within VP, is endorsed, for example, by Zanuttini (1991).

<sup>&</sup>lt;sup>10</sup> Of course, this set of primitives was rejected by Jackendoff (1977) whose own system attempted to make functional categories amenable to analysis in terms of categorial primitives also. However, what we are saying here is equally valid for Jackendoff's set of syntactic categorial primitives. Then, instead of exhaustively describing the four major lexical categories in terms of the features  $[\pm N, \pm V]$ , we could do it using the features  $[\pm subj, \pm obj]$ . See Jackendoff (1977: 31-3).

<sup>&</sup>lt;sup>12</sup> This S-structure representation has in fact been simplified somewhat. Within the framework of Chomsky (1986b), the wh-phrase extracted from within VP would need first to be adjoined to its host VP.

also holds for this more articulated representation of clause structure.) With respect to these (D-)structures, the reader will note that the specifier position within each functional projection is empty:

- The specifier position within IP is unfilled at D-structure: its S-structure content, i.e., 1) the external argument (subject) of V, is moved there from [NP, VP] by (successive) application(s) of Move- $\alpha$ .
- The specifier position within CP is unfilled at D-structure; its S-structure content, e.g., 2) a *wh*-constituent, is moved there by (successive) application(s) of Move- $\alpha$ .

If we further consider the English NP in (13), a parallel situation can be identified:

The specifier position within DP is unfilled at D-structure; its S-structure content (i.e., the genitive-marked DP) is moved there from SpecN by application of Move- $\alpha$ .

This can be contrasted with the specifier position within the lexical projections VP and NP. In (b) above, SpecV is the position in which the verb's external argument, i.e., its subject, is basegenerated. Further, in (13b) above, SpecN is the position in which the deverbal noun's external argument is base-generated prior to being moved to the specifier position within DP, presumably for Case reasons, i.e., in order to be assigned genitive Case.

We would therefore like to claim that this is a third way in which the projection of functional categories differs from the projection of lexical categories, i.e., that the specifier position within a functional projection is characteristically empty at D-structure, while the same restriction does not appear at least to apply to the specifier position within a lexical projection. On the basis of these data and this analysis, it would seem that we are in a position to make some sort of non-trivial generalisation regarding the specifier position within functional projections, namely that it is always empty at D-structure (for reason or reasons yet to be determined). We shall assume, for the time being, that this is indeed a valid generalisation; see (14).

(14) Functional specifiers  $X^{0} \neq [\pm N, \pm V]^{13}$ , If: Spec X = e at D-structure. then:

It must be stressed that what we are saying about the specifier position within functional projections clearly does not hold at S-structure. Within the terms of the conventional IP analysis of verb inflection, the external argument of verbal predicates, generated under SpecV, must move up to occupy the specifier position of IP, a functional projection, at S-structure in order to be assigned nominative Case. Within the framework of Pollock's analysis of inflection in terms of AgrP and TP, the verb's external argument must move to the specifier position of TP via the specifier position of AgrP for the same reason (or vice versa if we accept the relative ordering of these two projections proposed by Belletti and adopted by Zanuttini). In addition, it is possible for the specifier position of CP to be filled at S-structure (e.g., by some wh-element) as the whquestion exemplified in (12c) above shows. Finally, as the English DP structure in (13c) above illustrates, the specifier position within DP, empty at D-structure, can be occupied, at S-structure, by the NP generated under SpecN which moves there for the Case reasons mentioned above. We therefore assume that the generalisation we made in (14) above is a valid one<sup>14</sup>, but we stress that it applies at D-structure only.

We now return to Pollock's analysis of negative clauses in French. We have assumed, with

<sup>&</sup>lt;sup>13</sup> If we were to adopt Jackendoff's (1977: 31-3) set of primitive categorial features, this condition would read as follows:

Functional specifiers If:  $X^0 \neq [\pm obj, \pm subj],$ 

Spec X = e at D-structure. then:

<sup>&</sup>lt;sup>14</sup> In fact, we shall need to reconsider this generalisation later.

Zanuttini, for example, that Neg is a functional rather than a lexical category and, hence, that NegP is a functional rather than a lexical maximal projection. While we do not have any immediate *theoretical* basis for this assumption, it does seem *intuitively* correct. Furthermore, the set of items which can be substituted for *ne*, for example, is the empty set. *Ne* is the only (non-null) element which can appear as the ultimate head of NegP. Lexical creativity does not get much more restricted than this!<sup>15</sup> It certainly looks as though we have *prima facie* grounds for classifying Neg among the set of functional categories.

With this classification in mind, it will be apparent that Pollock's analysis of NegP does not fit in well with the generalisation (14) which we are hoping to make. By postulating that *pas* is *base-generated* in the specifier position in NegP, we immediately have a counterexample to our claim that the specifier position within maximal functional projections is characteristically empty at D-structure. If we accept Pollock's analysis of *pas*, NegP is a functional projection whose specifier position is *not* empty at D-structure. Given our desire to maintain the generalisation made in (14) above, which has proved unproblemmatical so far, we suggest that this aspect of Pollock's analysis of negation in French should be rejected. If we postulate, rather, that *pas* is generated elsewhere, i.e., lower in clause structure (without ruling out the possibility that *pas* is moved to occupy the specifier position within NegP at S-structure in the same way that subjects move from some VP-internal position to SpecI), we are able to maintain our generalisation, made in (14).

This is then our first argument against Pollock's analysis of *pas*. Our second argument involves the close relationship between *pas* and indefinite direct objects in clauses containing a transitive verb, and it is to this that we now turn our attention.

# 2.2 The contiguity between *pas* and other constituents:

In this subsection, we shall consider the familiar distributions in (15-17) below which are similar to those illustrated in (3) above. We would like to argue that Pollock's claim that *pas* is generated in the specifier position in NegP, i.e., above VP, is unable to provide an account of the data.

(15)	a b	Elle Elle	me donne me donne	de l' *d'	argent. argent.	
	c d	Elle ne Elle ne	me donne pa me donne pa	as *de l' as d'	argent. argent.	
(16)	a b c	La petito La petito La petito	e Elise e Elise e Elise	veut veut veut	un des *de	frère. frères. frère(s).
	d	La petite	e Elise ne	veut pas	*un	frère.

<sup>&</sup>lt;sup>15</sup> The objection might be raised at this point that *ne* is not in fact the only element which can appear as the head of NegP. It might be argued, for instance, that the negative particle *non* can, in a number of structures involving constituent as opposed to sentential negation, function like *ne* in relation to *pas*. Where it does in fact function in this way, it seems reasonable to postulate that it also appears under a Neg node. We are quite happy to accept this argument, adding only that it also seems plausible to suggest that the relationship between *ne*, on the one hand, and *non*, on the other, is nothing more than the relationship between a clitic and its non-clitic equivalent, whereby the presence of the [+clitic] feature is contextually determined (*ne* for sentential negation, *non* for constituent negation). Hence, *ne* and *non* can be viewed as no more than allomorphs of a single morpheme and, to all intents and purposes, are identical. See Harris (1978: 25).

	e f	La petite Elis La petite Elis	se ne se ne	veut pas veut pas	*des de	frères. frère(s).
(17)	a b c	Elise Elise Elise	cherche cherche cherche	un des *d'	amant. amants. amant(s).	
	d e f	Elise ne cher Elise ne cher Elise ne cher	rche pas rche pas rche pas	*un *des d'	amant. amants. amant(s).	

In each of the affirmative example strings, i.e., (15a), (16a/b) and (17a/b), the indefinite direct object of the transitive verb is introduced by what has traditionally been described as a partitive article (15a), a plural indefinite article ((16b) & (17b)) or a singular indefinite article ((16a) & (17a)). Leaving to one side ((16a) & (17a)) for the moment, Battye (1991, section 4: 37-41) claims that the structure of the plural and partitive direct objects which figure in the affirmative sentences in (15a) and ((16b) & (17b)) can, and therefore should, be given a unitary account. He goes on to offer such an account, which he labels `partitive', using terminology borrowed from Selkirk (1977). Not wishing to repeat Battye's work here, we shall limit ourselves to an illustration of the structure Battye proposes for these `partitive' structures (1991: 38). (The reader is referred to Battye's (1991) article, and the references cited there, for the details of his analysis.) The tree structure in (18) should make clear the unwarranted nature of the distinction (at the level of the terminology, at least) between the so-called partitive and plural indefinite articles.

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(18)
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 $DP_{-def}$   $D'_{-def}$   $D_{-def}$  PP  $\phi$  N' PP variable P' P DP de l'argent les bouquins

Essentially, Battye analyses each of these direct objects - within the framework of Abney's DPhypothesis - as an indefinite DP (DP, def) headed by an empty determiner ( $\phi$ ) whose complement NP is in turn headed by a variable<sup>16</sup>. The complement of the variable is a PP headed by the

<sup>&</sup>lt;sup>16</sup> Again, the reader is referred to Battye's (1991) article and to Abney (1987) for a justification for the distinction which these researchers draw between definite and indefinite DPs.

preposition *de*. What is clearly important is the convincing claim that this structure holds both for what has traditionally been labelled the partitive article and the plural indefinite article, thus rendering the terminological distinction meaningless. It also goes a long way, as Battye (1991: 21) mentions, to ending the speculation as to the exact categorial status of the element *de* which, in structures like those under consideration here, had been thought to be more like part of a composite determiner than a preposition. (See Battye (1991: 26fn4) for a brief review of the labels which authors have attached to *de* as used here.) In Battye's analysis, the *de* which appears in these structures is clearly a preposition. (We shall encounter a different *de* below.)

If we now consider the negative sentences (15b/16b/17b) above, it is clear that something quite different is going on within the indefinite direct object of the transitive verbs. As the asterisks against strings (15c), (16e) & (17e) indicate, the co-occurrence of sentential negation, on the one hand, and an indefinite direct object introduced by Battye's `partitive article', on the other, is unacceptable. That is to say, where sentential negation is present in a clause containing a verb governing an indefinite DP, the variable which heads the NP complement of the empty indefinite determiner cannot, in turn, take as its complement a PP headed by *de*. Furthermore, as illustrated by the asterisk against strings (16d) and (17d), the singular indefinite article is also incompatible with sentential negation<sup>17</sup>.

In examples (15b/16b/17b) above, then, there is clearly some sort of relationship between the presence of sentential negation and the morphology of the (indefinite) direct object of the transitive verb. To use the terminological distinction borrowed by Battye (1989; 1991) from Selkirk (1977) once again, the positive sentence in (15a) allows the indefinite direct object of the transitive verb to be realised as a partitive structure, i.e., [PP P [DP DP ]], e.g., [PP de [DP les bouquins ]] (*des bouquins*), while the negative sentence in (15b) obliges the direct object to be realised as a pseudo-partitive structure, i.e., [NP Case-marker [NP NP ]], e.g., [NP de [NP bouquins ]] (*de bouquins*) whereby the variable takes an NP complement, and the prepositional Casemarker *de* is adjoined to the NP for Case theoretic reasons. (See (19) below.) This, in general terms, is the situation which has to be accounted for but which we feel Pollock's (1989) proposals cannot account for.



# bouquins

Battye (1991) assumed that the partitive and pseudo-partitive structures are in fact licensed by virtue of their being complements of an empty variable. By definition (see Chomsky (1981: 175, 185)), an element  $\alpha$  is a variable iff:

(i)  $\alpha = [_{NP} e ];$ 

<sup>&</sup>lt;sup>17</sup> In fact, these strings can, with appropriate intonation, be rescued and interpreted. However, *un* does not then have the interpretation of an `indefinite article'; rather, it is interpreted as a cardinal numeral.

(ii)  $\alpha$  is in an A-position;

(iii) there is an operator  $\beta$ , such that  $\beta$  locally A'-binds  $\alpha$ ; and

(iv)  $\alpha$  has Case.

Without going into detail, we would like to highlight two potential problems, the first of which was raised by one of the anonymous reviewers of Battye's (1991) article. This particular reviewer had difficulty accepting the joint thesis: (a) that a variable could be generated at Dstructure, and; (b) that a variable could take a complement. Indeed, in Battye's analysis, the empty indefinite determiner,  $[_{D} \phi]$ , subcategorises for a variable (at D-structure). Battye (1991: 39) posits that the variable is bound by some empty operator present in Logical Form. Furthermore, the variable takes its own complement, i.e., a PP headed by de. To avoid the situation which the anonymous JFLS reviewer found so difficult to accept, we would like to propose a slight modification to Battye's original (1991) account of the partitive article<sup>18</sup>. We would like to suggest that the empty operator whose presence Battye posits in Logical Form is in fact base-generated as the head of the complement of the empty indefinite determiner:  $[{}_{\rm D} \phi]$ . Further, we suggest that the operator moves, in Logical Form if not before, such it has a variable, i.e., its trace, to A'-bind which it must do for the structure to be well-formed. In this way, we avoid the dual problem outlined above. First, the variable does not need to appear at D-structure since its appearance (in Logical Form) is due to an application of Move- $\alpha$ . Second, since the PP headed by de is the complement of an operator at D-structure, we do not need to posit that a variable takes its own complement.

This revision to Battye's (1991) original proposals is relevant to our discussion here of the negative element *pas*. In particular, in the same way that Battye suggests that an empty operator A'-binds the variable in (18) above in Logical Form, so he suggests that the negative element *pas* A'-binds the variable which figures in comparable negative structures, i.e., the pseudo-partitive structure illustrated in (19) above. If this is indeed the case, we are going to find ourselves in exactly the same situation which the anonymous reviewer found so unacceptable in Battye's (1991) article. We would again have to suggest not only that a variable appears at D-structure but also that it takes its own complement, here an NP. Not wishing to preempt the proposals we make below, we shall leave the matter in abeyance for the time being, returning to it in section 4.

The second problem for Pollock's (1989) analysis of *pas* is that, if it were base-generated is the specifier position within NegP (and if it were therefore unproblemmatical to generate a variable at D-structure), we are still unable to account for the differing subcategorisation frames which the variable has. When bound by an empty operator in Logical Form, i.e., in positive sentences, the variable subcategorises obligatorily for a PP complement; when bound by *pas*, i.e., in negative sentences, however, it subcategorises obligatorily for an NP complement. It is not entirely obvious to us how the nature of the variable's binder could have a consequence on its complement (if we were obliged to allow a variable to have a complement).

This, then, is our second reaon for rejecting Pollock's (1989) claim that the negative element *pas* is base-generated in the specifier position within NegP. Having considered two rather theory-internal grounds for doubting the validity of the 'standard' NegP analysis of *pas*, i.e., as the D-structure specifier of *ne* within NegP, we shall, in the next subsection, turn our attention to a less theory-specific reason for rejecting this feature of Pollock's (1989) article, i.e., a consideration of the syntax of adverbials in general.

#### **2.3** The syntax of adverbials:

In this subsection of our article, we intend to demonstrate that Pollock's account of *pas* (which was subsequently endorsed by Belletti and Zanuttini) is quite incompatible with its status, in

<sup>&</sup>lt;sup>18</sup> The thinking here is not entirely our own; rather, it is the result of numerous conversations with Adrian Battye on the subject.

functional (if not in categorial) terms, as an 'adverbial'. By terming *pas* an adverbial, we mean no more than to say that *pas* clearly functions like a lexical adverb, i.e., as a modifier of something. The similarities between negatives and adverbials did not in fact escape Pollock, who notes (1989: 370, 377) that there is 'a significant correlation in French between the placement of negation and that of adverbs' both in tensed and infinitival clauses. Given that *pas* can modify either another constituent, as exemplified in (20) below, or a proposition, as in the data we have reviewed so far, we would hope to be able to provide a unitary analysis of *pas*, i.e., one which is compatible both with its rôle in constituent negation and with its rôle in sentential negation. This is exactly what we intend to do.

(20) a A: Ca-va? B: Pas mal! A: How are you? B: Not bad! b A: Qui est-ce qui veut un café? B: Pas moi! A: Who's for coffee? B: Not me! Pas vrai! с *Never! Pas* possible! d *Impossible!* A: Tu as du fric? e B: *Pas* un sou! A: Got any money? B: Not a penny!

f Etre ou ne *pas* être, telle est la question. *To be or not to be, that is the question.* 

Within the terms of X-bar grammar and primitive syntactic features (irrespective of whether we adopt Chomsky's (1974) or Jackendoff's (1977) system), the categorial status of adverbs has traditionally been something of a problem. While clearly belonging to a lexical as opposed to a functional category, adverbs do not tie in well with Chomsky's system of categorial primitives which we adopted above, i.e.,  $[\pm N, \pm V]^{19}$ . The functional and distributional relationships which adverbs bear to adjectives have led some researchers (e.g., Emonds (1976: 12)) to subsume the two types of element under the same category, i.e., adjective/adverb, bearing the features: [+N, +V]. Indeed, this is the view which we shall support here. According to this analysis (albeit in quite unforgivably simplified terms), an adverb is nothing more than a positional variant of an adjective, whereby an adjective appears when a noun is being modified while an adverb appears when a verb, adjective or proposition is being modified. Similarly, the structural configuration of adverbs runs parallel to that of adjectives. Given that adjectives are typically adjoined constituents, either to N' or NP (in the DP-hypothesis), we shall assume that adverbs also appear in adjoined positions.

The question which this analysis of adverbs does not address, but which it provides the basis for, involves adverbials, i.e., those constituents which do not necessarily bear the same categorial features as adjectives/adverbs, but which nevertheless function in similar fashion to adverbs. Given that adverbial modifiers have an identical function to adverbs, we shall assume that they are licensed in tree-structures in the same way as adverbs, i.e., adjoined to the

<sup>&</sup>lt;sup>19</sup> The reader is referred to our earlier footnote with respect to Jackendoff's (1977) alternative set of categorial primitive features.

constituent which they modify<sup>20</sup>. Thus, the class of VP modifying adverbials will be adjoined to VP or V in the same way as VP adverbs, while sentence adverbials will be adjoined at some higher point in tree structure as per sentence adverbs. (See Belletti (1990), based to a large extent, but not exclusively, on Italian, for an analysis of VP/sentence adverbs within the syntactic model we are assuming here, and the positions in which their appearance is licensed.) We are therefore arguing that adverbials are typically licensed in adjoined structures. We shall assume that *pas* is no exception to this generalisation. We shall leave in abeyance for the time being the issue of whether *pas* is a VP or sentence adverbial. This issue will be addressed below. What is important for the purpose of this section of our article is the fact that an analysis of a constituent like *pas* in terms of adjunction (i.e., with the structure:  $\begin{bmatrix} a & a \\ a & a \end{bmatrix}$ ) is clearly incompatible with Pollock's claim that *pas* is base-generated as the specifier of NegP. A specifier position is not an adjoined position.

Note also that, in Pollock's own presentation, not all negative adverbials are generated in the specifier position within NegP. He postulates that negative adverbials ('adverbs' as he terms them) other than *pas* are base-generated lower down in tree structures. For example, he posits (1989: 414) that *rien* appears in the specifier position of a NegP, headed by *ne* and generated in some post-verbal A-position, only to be moved to the specifier position of the clause NegP (see (21) where the trace  $e_i$  indicates the position in which *rien* is generated).

# (21) [<sub>IP</sub> Pierre (n') [<sub>I</sub> $a_i$ ] [<sub>VP</sub> [<sub>Adv</sub> *rien<sub>i</sub>*] $e_i$ mangé $e_i$ ]].

More importantly still, Pollock argues (1989: 414) that the negative adverbials *point*, *plus* and *guère* are generated in `a negative adverbial position in VP-initial position'. He is no more precise than this but we can assume some VP-adjoined position. If these elements are in fact VP modifying adverbials, then we would naturally endorse Pollock's claim here. However, we do not agree with everything about Pollock's analysis of these negative adverbials. First, and contrary to Pollock, we would like to include *pas* within this category of elements. Second, we disagree with his claim (1989: 414) that the entire NegP, headed by *ne* and with *point*, *plus* or *guère* in specifier position, is generated lower in the structure, i.e., adjoined to VP. This reservation notwithstanding, it is clear that there is a need, acknowledged by Pollock, for some negative adverbials of the type associated with *ne* to be generated lower in clause structure than the specifier position within the NegP positioned between the maximal functional projections bearing inflectional features: TP and AgrP.

Additional evidence to support an analysis which sees negative adverbials in French of the type under consideration here as being generated in (VP-)adjoined positions is provided by Belletti (1990) in cross-linguistic work on Romance. According to Belletti (1990: 57), 'negative adverbs' in Italian *must* be able to appear in some VP-initial position. As above, we can assume this to mean some adjoined position. If our objective is to arrive at a grammar which is as constrained as possible, it should in the first instance be assumed that this is the *only* position in which these negative adverbs can be base-generated. The possibility that adverbs can appear in a multitude of positions at D-structure should only be envisaged in the light of positive evidence. Therefore, where we have reason to assume that adverbs of this class appear in the specifier position of NegP at S-structure, we should look first towards an analysis in terms of movement by virtue of the generalised movement rule Move- $\alpha$  which would lead to a more constrained model and which, all other things being equal, must be favoured against a model which allows these adverbs to be generated in more than one type of position, i.e., a VP-adjoined position, on the one hand, and the specifier position within NegP, on the other.

Taking all this evidence and analysis together, a significant generalisation could be captured

<sup>&</sup>lt;sup>20</sup> Sportiche's (1988: 429) `Adjunct Projection Principle' and Chomsky's (1986b: 16) general theory of adjunction, together, oblige `modifiers' to appear adjacent to their (non-argument  $X^{max}$ ) `modifiee' or the head of their `modifiee'.

if all these `negative adverbials' (including pas, which, as we mentioned above, Pollock excludes from being generated lower in clause structure than the specifier position within NegP) were generated in a lower position and, where necessary, subsequently raised to the specifier position within NegP which would, by definition, be empty. (See section 2.1.)

Having presented three independent arguments against Pollock's (1989) proposed analysis of *pas*, we would like to conclude this section by suggesting that the most important argument against Pollock's account of *pas* is the fact that there exists an alternative account of *pas* which elegantly characterises all the data which Pollock considers while avoiding the problems outlined above. In section 4, we propose such an account and argue our case. In section 3, we take something of an aside to consider some recent work by Battye and Obenauer, the results of which will be useful later.

# 3.0 'Quantification at a distance' and 'nominal quantification'

Before we proceed to offer our account of the syntax of pas which, in our opinion, is quite compatible with the spirit of the work of Pollock, etc., cited above, but which perhaps avoids some of the possible weaknesses of Pollock's proposal, we would ask the reader to bear with us while we consider some recent work by Battye, itself related to earlier work by Obenauer amongst others. In fact, much of the thrust of the argument in this section of the article hinges crucially on the work of Obenauer (1983; 1984) and Battye (1989; 1991). We acknowledge these authors at this point, and shall then take the liberty of not explicitly repeating our indebtedness to them in the course of the section. The reader is of course referred to these authors' own work for more details.

Consider the sentences in (22):

- (22) a J'ai lu beaucoup/trop/assez de romans.
  - J'ai lu beaucoup/trop/assez des romans que tu m'as donnés. b
  - с J'ai beaucoup/trop/assez lu t de romans.
  - d J'ai beaucoup/trop/assez lu t des romans que tu m'as donnés.

In the sentences in (22), made familiar by Obenauer (1983; 1984), beaucoup, etc., can be said, in an intuitive, pre-theoretical sense, to quantify the noun romans. This holds irrespective of the fact that the scope of the quantification might be thought to differ between (22a/b) on the one hand and (22c/d) on the other. In examples (22a/b), the scope of the quantifier is restricted to the direct object of which it forms a part ([ $_{DP}$  beaucoup [ de romans ]])<sup>21</sup>, while in examples (22c/d), labelled `quantification at a distance' (henceforth QàD) by Obenauer (1984), the scope of the quantifier extends to the entire predicate<sup>22</sup>. This semantic contrast between the two pairs of sentences in (22) is reflected in the position of the quantifier. As mentioned above, in (22a/b), beaucoup is part of the direct object which it quantifies. In (22c/d), in contrast, the position of *beaucoup* is clearly not within the direct object; rather, it appears in some VP-initial position.

The account of these structures adopted in Battye (1991) and Obenauer (1983; 1984) is hinted at by the appearance of the symbol t in sentences (22c/d) above. As Battye terms it, 'the position marked t is that with which the quantifier ... beaucoup ... [is] associated' (Battye 1991:

<sup>&</sup>lt;sup>21</sup> Working within an earlier theoretical framework, Obenauer (1983; 1984) offered the following structural analysis:

<sup>(</sup>a) V [<sub>NP</sub> QP de N'] for non-QàD structures; and,
(b) QP V [<sub>NP</sub> ec de N'] for QàD structures.

<sup>&</sup>lt;sup>22</sup> Obenauer (1983: 68; 1984: 156) suggests that QàD structures are regarded as somewhat loose (relâché) by purists.

23). Essentially, both Obenauer and Battye posit that, in examples (22c/d), i.e., where *beaucoup*, etc. do not appear within the direct object, the position which it would otherwise occupy within the direct object is filled by some null element. Thus, both researchers suggest that the direct objects in (22c/d) have the structure [ $_{NP}$  EC [ de(s) romans ]], where EC represents an empty category of some kind. Both Obenauer and Battye assume that, in QàD structures, *beaucoup*, etc., and the empty category are `linked' within the terms of Binding Theory, i.e., that the empty category is (A'-)bound by *beaucoup*, etc. In Obenauer's (1983: 68-9) terms, the empty category is `localement lié par le quantifieur lexical qui ... se trouve en position A' (`locally bound by a lexical quantifier in an A'-position').

With respect to the question of whether this binding is a result of movement or not, Obenauer neither commits himself one way or the other, nor does he express any interest in the issue, being much more concerned with the *interpretation* of QaD structures. For Obenauer (1984: 157-8), since S-structure configurations alone are important for analysing the interpretation of a given sentence, nothing rests on the transformational history of a structure. Kayne (1975: 29ff) and Battye (1991: 23ff), however, are bolder on this point. In the case of the former, no movement is invoked in the relationship between *beaucoup* and the empty category (but see Milner (1978: 690-2) for a critique of Kayne (1975: 29ff) on this point). In the case of the latter, the association between *beaucoup*, etc., and the empty category in these constructions is the relationship between an antecedent (in a pre-verbal A-position) and its trace. (What Battye (1991: 23) actually says with respect to QaD structures is that the quantifiers "seemingly 'float' backwards off the noun phrase in direct object position". We have interpreted this as a movement approach to QàD, although Battye himself does not propose any structural analysis of the mechanics involved.) For our part, we would like to postpone detailed discussion of any possible approaches to QàD within a movement framework until section 4 where we shall be able to include negative sentence adverbials in the discussion. The reader is referred to Kayne (1975), Battye (1991), Milner (1978: 690-2) and the references cited there for details of the arguments for and against a movement analysis of QàD.

A necessary corollary of Battye's (movement) analysis (according, at least, to Battye (1989)) is that the quantifier item which appears, on the surface, either attached to or detached from its NP must also be able to function independently as an adverbial constituent. This can be seen to be true in examples (23) below, where the quantifier appears in a clause containing an intransitive verb (23a) and in a clause containing a transitive verb governing a definite direct object (23b). Given that there is no indefinite direct object, *beaucoup*, etc., cannot possibly start out within such a position.

- (23) a J'ai beaucoup/trop/assez voyagé.
  - b J'ai beaucoup/trop/assez applaudi la soliste.

This is not to say that the reverse also applies. As Milner (1978: 690-2) illustrates, it is not the case that all adverbial elements which can function as in (23) can also function in association with the indefinite direct object of a transitive verb. For example, although both *énormément* and *abondamment* can appear as VP-adverbials, the former can appear in association with an indefinite direct object while the latter can not, as illustrated in (24b/c) below, taken from Milner (1978: 691, his example (53)).

- (24) a J'ai énormément lu. / J'ai abondamment lu.
  - b J'ai énormément lu de livres. / \*J'ai abondamment lu de livres.
  - c J'ai lu énormément de livres. / \*J'ai lu abondamment de livres.

Indeed, Milner uses these distribution patterns to argue (against Kayne (1975)) that QàD structures are derived from non-QàD structures. His argument is centred on the ungrammaticality of *\*J'ai abondamment lu de livres* which contrasts strongly with the acceptability of *J'ai abondamment lu*. Kayne argues that elements like *énormément/abondamment* are base-generated

in VP-initial position not only in strings (24a) but also in strings (24b) above. If this is indeed the case, we have the problem of accounting for why the two strings in (24a) are acceptable while, in (24b), only the string containing *énormément* is grammatical. If, alternatively, and as Milner (1978) proposes, the QàD strings in (24b) are derived from the non-QàD strings in (24c), then the unacceptability of the string in (24b) containing *abondamment* can be accounted for in straightforward fashion. This particular element cannot appear in a (derived) QàD structure for the simple reason that it cannot appear in the relevant (base-generated) non-QàD structure.

With respect to the syntactic category of these `adverbials', Battye (1991) claims that, unlike other quantifiers in French (where the term quantifier refers to the semantic nature of the elements concerned as opposed to any syntactic categorial feature), the quantifiers exemplified in sentences (22) are neither adjectives (cf. *quelques*) nor determiners (cf. *plusieurs*). Rather, Battye (1989; 1991) adopts Abney's (1987) DP-analysis to argue that these elements, marked with the feature [+quantification], are in fact generated as the head of their own full NP complements of an empty D. (Cf. Obenauer (1983; 1984: 155) who analyses *beaucoup*, etc. as categorial adverbs.) The reader will doubtlessly have noticed the similarities between what Battye is saying here and what he had to say regarding the traditional partitive article and plural indefinite article, which we reviewed in section 2.2 above. Here, the nominal quantifier *beaucoup* functions in similar fashion to the (nominal) operator-variable we posited in those indefinite DPs, the difference being that, unlike the operator-variable, which subcategorises for a PP complement, *beaucoup*, etc., can select either a PP or an NP complement. (See (18/19).) Thus, Battye calls this the class of `nominal quantifier'.

In summary, then, the class of `nominal quantifier' in French can be seen to be characterised by a number of properties, namely:

- (a) They bear the primitive syntactic categorial features of nouns, i.e., [-V, +N].
- (b) They bear the pseudo-semantic feature [+quantification].
- (c) They can be licensed as the head of the NP complement of an empty D within an indefinite DP, itself governed by a verb, i.e., as the verb's direct object.
- (d) They can appear in QàD structures (in the case of lexical `nominal quantifiers', at least).
- (e) They can function, independently of an indefinite direct object DP, as a (VP-) adverbial.

As an alternative to Pollock's (1989) account of negative clauses in French, and of *pas* in particular, we would like, in section 4 below, to propose, after, e.g., Battye (1989: 29fn11), that *pas* be subsumed under Battye's (1991) class of `nominal quantifier'. That is, instead of analysing *pas* as a maximal projection, i.e., as the specifier of *ne* within NegP, we analyse this element rather as the head of an NP generated lower in clause structure, independently of NegP. We therefore posit that the categorial status of the element is noun, in exactly the same way that Battye (1989) analyses *beaucoup*, *trop* and *assez* as nouns. This is credible, at least if one considers the derivation of *pas* from the Latin nominal *passum* (`a step').

(25) NP

Spec N

N Comp

*pas* ...

#### 4.0 pas as a nominal quantifier

In this section, we would like to endorse the claim, made by Battye (1989: 29fn11), that *pas* can indeed be subsumed under the category of nominal quantifiers, i.e., like *beaucoup*, etc. In fact,

in his own writing, Obenauer (1983; 1984) also subsumes (*ne...*)*pas* under the same category of elements as *beaucoup*, etc. However, unlike Battye, Obenauer classes all these elements as adverbs. Moreover, having illustrated the use of *ne...pas* in QàD structures<sup>23</sup>, Obenauer states quite explicitly that he does not intend to concern himself with any analysis of the syntax of sentential negation. In a somewhat similar vein, Battye (1989) includes *pas* in his inventory of 'nominal quantifiers' in a footnote, but does not go any further. We would like to support Battye's claim here, i.e., that *pas* is a nominal. To do so, we shall endeavour to show that *pas* belongs to the same group of elements as *beaucoup*, etc, which we have already analysed as nominals. Working on the logic that elements of the same type behave in the same way, we shall show that the distribution of *pas* reflects that of *beaucoup*, etc.

First, like *beaucoup*, etc., and as predicted by Battye (1989), *pas* can be used, not only in association with indefinite direct objects, but also in clauses which do not contain indefinite direct objects, i.e., independently as an adverbial constituent, as in examples (26) below:

(26)	a b c	La petite Elise La petite Elise La petite Elise ne	;	voya voya voya	age age beaucoup (e age pas	tc.)	dans le nord de la France dans le nord de la France dans le nord de la France
(27)	a b c	La petite Elise La petite Elise La petite Elise n'	a	a a	beaucoup (etc.) pas	voyagé voyagé voyagé	dans le nord de la France. dans le nord de la France. dans le nord de la France.
(28)	a b c	La petite Elise La petite Elise La petite Elise n'	aime aime aime		beaucoup (etc.) pas		les monuments de Paris. les monuments de Paris. les monuments de Paris.
(29)	a b c	La petite Elise La petite Elise La petite Elise n'	a a a		beaucoup (etc.) pas	aimé aimé aimé	les monuments de Paris. les monuments de Paris. les monuments de Paris.

As this array of data shows, *pas* not only fills the same slot, in linear terms, at least, as *beaucoup*, etc.; it also has the same adverbial function.

Second, in the same way that the distribution of *beaucoup*, etc. in QàD structures is restricted (as discussed in Obenauer (1983; 1984)), so the distribution of *pas* seems to be subject to the same restriction. To be precise, among the class of transitive verbs in French, Obenauer (1983; 1984) distinguishes between those which are compatible with QàD and those which are not. The first group is illustrated in (30) below (Obenauer's examples (6), (1983: 68)), the second in (31) (Obenauer's examples (12), (1983: 70)):

(30) a A. a trop lu de romans policiers.

b Max a (très) peu composé de sonates.

(31) a \*Le critique a peu apprécié de films.

- b \*Son regard a beaucoup impressionné de minettes.
- c \*La réorganisation a beaucoup accéléré de procédures.
- d \*La nouvelle a beaucoup inquiété d'experts.
- e \*Une fois installé loin de la ville, il a beaucoup regretté d'amis.

<sup>&</sup>lt;sup>23</sup> As mentioned in an earlier footnote, Obenauer (1983; 1984) comments that QàD structures are regarded by purists as being somewhat loose. Presumably, he would include QàD structures involving *ne...pas* within this judgement!

Obenauer accounts for these differences in terms of what he calls `VP-quantification'. What Obenauer means by this is simply that, in QàD structures, i.e., where *beaucoup*, etc., are separated from the direct object they quantify, the quantification relationship is upheld by virtue of *beaucoup*, etc., quantifying the entire VP and, hence, the direct object. Working on the assumption that, where *beaucoup*, etc., appear in QàD structures, their adverbial reading is in terms of frequency as opposed to intensity (as a consequence of their original position within the direct object), QàD will not be possible with just those transitive verbs which are incompatible with a frequency reading for this type of adverbial element, e.g., those in (31) above, which Obenauer classifies as intensity verbs. What is important here is that the appearance of *pas* in (QàD) structures containing transitive verbs from this group also produces strings which are bizarre<sup>24</sup>, as illustrated in (32) below, which are otherwise identical to (31) above:

- (32) a \*?Le critique n'a pas apprécié de films.
  - b \*?Son regard n'a pas impressionné de minettes.
  - c \*?La réorganisation n'a pas accéléré de procédures.
  - d \*?La nouvelle n'a pas inquiété d'experts.
  - e \*?Une fois installé loin de la ville, il n'a pas regretté d'amis.

While accepting that the fact that these strings are not considered totally unacceptable is a potential problem for our analysis here, we nevertheless conclude that *pas* belongs to the same group of elements as *beaucoup*, etc.

Having argued that *pas* can indeed be subsumed under the category of elements as *beaucoup*, etc., we shall, in the following two subsections, attempt to provide an account of the syntax of all these items with reference to Battye's `nominal quantification'. We shall do this with respect to two quite distinct constructions. In section 4.1, we look at *pas* as it is used to negate sentences containing a transitive verb governing an indefinite direct object. In section 4.2, we look at how *pas* is used to negate other sentences. Finally, in section 4.3, we consider where our analysis of the syntax of *pas* leaves us with respect to a number of issues.

# 4.1 *pas* as a nominal quantifier (in clauses containing a transitive verb with an indefinite direct object DP):

In this subsection, we shall be assuming the  $(DP_{-def})$  structure in (33) below as the canonical D-structure from which sentences (22) above are derived:

(33)  $\left[ _{DP} \left[ _{Spec} e \right] \left[ _{D'} \left[ _{D} \phi \right] \left[ _{NP} \left[ _{Spec} e \right] \left[ _{N'} \left[ _{N} pas \right] \left[ _{NP} NP \right] \right] \right] \right] \right]$ 

This structure is identical to (18) above, except:

- (a) for the presence of the lexical quantifier noun *pas* in the position occupied, in (18), by the operator/variable; and,
- (b) for the fact that *pas* subcategorises for an NP as opposed to a PP complement.

*Pas* is the zero-level head of the NP complement of an empty determiner  $[_{D} \phi]$ . In turn, *pas* takes its own NP complement. As a nominal, *pas* will absorb the accusative Case assigned under government by the verb. Thus, for the NP complement of *pas* to receive Case, the prepositional Case-marker *de* is inserted.

<sup>&</sup>lt;sup>24</sup> While native speakers do not, in general, find these examples totally unacceptable, in contrast to the strings in (31), these strings are considered by some native speakers to be somewhat odd, especially examples (32c-e). The fact that these examples are considered less unacceptable than the totally ungrammatical strings in (31) might be due to the fact that, although frequency adverbs are in theory incompatible with these transitive verbs, where that frequency is reduced to zero, i.e., with *pas*, the incompatibility is not as marked.

We shall account for the appearance of *pas* in QàD structures derivationally, i.e., in terms of Move- $\alpha$ . Below, we offer an account of how the familiar superficial structures, illustrated in (22) above, might be derived. Given that we wish to maintain Battye's claim that *pas* is a member of the same group of quantificational `adverbials' as *beaucoup*, etc., and the variable, we shall endeavour to make our analysis compatible with the behaviour of all these elements.

If we first compare our basic structure (33) above with Obenauer's original QP (Quantifier Phrase) analysis of QaD and related structures, in (34) below, a major difference between the two becomes apparent:

## (34) $[_{NP} [_{OP} QP] de N']$

The major difference to which we are referring concerns the status, in terms of X-bar theory, of the quantificational `adverbial'. In Obenauer's model, the quantifier is a maximal projection in its own right. In our model, in contrast, *pas*, *beaucoup*, etc. are  $X^0$  (i.e., N) constituents, daughters of an N' node and sisters of a maximal projection.

This difference is significant in that the versatility of the generalised movement rule, Move- $\alpha$ , is determined in part by the status, again in terms of X-bar theory, of the relevant constituent. Although X<sup>max</sup> constituents can be adjoined to other X<sup>max</sup> constituents and can be moved into (higher) empty specifier positions, the movement which an X<sup>0</sup> constituent can undergo is much more restricted. The only movement available to a head constituent is:

(a) cliticisation, i.e., adjunction to a functional head (see Kayne (1991)); or,

(b) incorporation (see Baker (1988)) into an (immediately<sup>25</sup>) higher head position, e.g., in the way that a lexical verb is incorporated into the T position, then into the Agr position in order to be associated with the necessary tense and agreement features, as discussed above.

Thus, by positing that *beaucoup*, etc., are  $X^{max}$  constituents, Obenauer was able to argue that they can appear in some (adjoined) VP-initial position (either base-generated there or moved there courtesy of Move-*a*). On the face of it, this option is not going to be open to us if we posit that *beaucoup*, etc. are head constituents. The constraints of X-bar theory will not permit a head constituent to be base-generated in a position adjoined to the maximal projection VP, while the constraints which apply to Move-*a* will not allow a head to be moved from a VP-internal X<sup>0</sup> Aposition to a VP-adjoined X<sup>max</sup> A'-position. This is a problem which needs to be resolved if our account of the syntax of *pas* is to be compatible with the way we understand the behaviour of *beaucoup*, etc., i.e., in terms of Obenauer's VP-quantification outlined above, which we would like to account for within a movement framework.

Our approach to this problem will hinge crucially on an initial application of Move- $\alpha$ , the results of which are variously referred to in the literature as extraposition, right dislocation or Heavy NP Shift. Essentially, what is involved is the movement of a maximal projection (here the NP complement of *pas*, *beaucoup*, etc.) from within a DP to an adjoined position, to the right of VP, as shown in (35) below, which is possible since the NP can take its Case- marker with it.

<sup>&</sup>lt;sup>25</sup> See our comments, in section 1 above, on Roberts' (1991) proposals to loosen this restriction.



Once the complement of *pas* has been moved to the right, the DP of which *pas* is the head N is free to move independently, i.e., without the need for the NP complement to be moved as well. Given Obenauer's analysis of the restriction which bars strings such as those illustrated in (31/32) above, i.e., in terms of VP-quantification, we assume that Move- $\alpha$  adjoins this DP to VP, as illustrated in (36) below<sup>26</sup>.

(36)					VP			
		$DP_j$				VP		
		D		V	VP		$NP_i$	
	D ø		NP	NP N <sup>'</sup>	NP	V		
			N			V	DP	de journaux
		N		NP		achète-	$t_j$	
		pas		$t_i$				

By adjoining the DP containing *pas* (or *beaucoup*, etc. in the case of QàD structures) to VP, we can provide an explanation for the strings in (31) and (32) above which Obenauer/our informants find unacceptable or somewhat bizarre respectively. We would like to suggest, however, that the DP does not appear in this VP-adjoined position at S-structure; rather, we propose:

(a) that a second application of Move- $\alpha$  adjoins this DP to TP; and then,

(b) that a third application of Move- $\alpha$  moves it to the specifier position within NegP, as shown in (37) below.

 $<sup>^{26}</sup>$  We therefore assume that the antecedent of the extraposed NP can properly bind its trace, the complement of *pas*, i.e., by means of reconstruction.

(37) AgrP



Once in the specifier position within NegP, the negative (DP) element *pas* enters into a specifier-head agreement relationship with the negative clitic particle *ne* under the head Neg node, before *ne* cliticises onto the higher Agr node. In this way, although there are two `parts' to sentential negation in these French constructions, only one instance of negation is understood. This also provides a rationale for why QàD is effectively compulsory in the case of *pas*. Consider (38)-(39) below. In contrast with *beaucoup*, etc., *pas* cannot remain in its D-structure position. Were it to do so, it could not enter into a specifier-head agreement relationship with *ne* under the Neg node and, as a consequence, there would arguably be two instances of negation within the same clause, each possibly canceling the other out and leading to a positive interpretation. We are therefore arguing that the NegP with which *ne* is associated is the same NegP as the one with which *pas* is associated. Given that we have been assuming, for the reasons mentioned briefly in section 1.0 above, that the NegP with which *pas* is associated is no lower in clause structure than the lower of the two functional projections encoding verbal inflectional morphology, we conclude that the only NegP which is realised in French is the one which Zanuttini (1991) labels NegP-1, i.e., that NegP in French cannot be the complement of TP.

(38) a J'ai vu  $[_{DP}$  beaucoup de films].

b

Le professeur a corrigé [<sub>DP</sub> trop de papiers].

- c Monsieur le curé a bu  $[_{DP}$  assez de vin].
- (39) a \*Je n'ai vu [ $_{DP}$  pas de films].
  - b \*Le professeur n'a corrigé [<sub>DP</sub> pas de papiers].
  - c \*Monsieur le curé n'a bu  $[_{DP}$  pas de vin].

#### **4.2** *pas* as a nominal quantifier with adverbial function (in other clauses):

In this subsection, we shall turn our attention to clausal structures which do not contain a

transitive verb governing an indefinite direct object DP, i.e., clausal structures for which it would not be possible to posit that the negative element *pas* is base-generated within the direct object DP. We shall therefore be considering:

- (a) clauses containing an intransitive verb, as in (23a) above; and,
- (b) clauses containing transitive verbs governing a definite direct object DP, as in (23b) above.

In our analysis, which we would like to apply to both these sentence patterns, we shall argue, contrary to Pollock, that, where *pas* is used to negate a proposition of kind (a) or (b) above, i.e., where there is no indefinite direct object DP within which *pas* could appear at D-structure, *pas* is nevertheless not base-generated in the specifier position within NegP. Quite apart from the reasons we detailed in section 2 above for our rejection of any analysis which suggests that *pas* is base-generated in the specifier position within NegP, we shall, in addition, naturally wish to make our proposals here reflect as much as possible:

- (a) the proposals we made in the previous subsection; and,
- (b) the syntax of *beaucoup*, etc.

Thus, instead of thinking in terms of *pas* being base-generated in the specifier position within NegP, we would like to argue that, in structures of type (a) and (b) above, the nominal quantifier *pas* is in fact being used adverbially and that it is generated in a position in which adverbials are typically generated, i.e., in an adjoined position. In this respect, we are once again suggesting that the distribution of *pas* is essentially parallel to that of *beaucoup* and other VP adverbials. Consider again (26)-(29). What is of note with respect to the sentences illustrated in (26)-(29) above is the fact that each (b) and (c) sentence would be perfectly grammatical if *beaucoup/ne...pas* were not present. This is clear from the acceptability of the four (a) sentences, which are identical to their respective (b) and (c) counterparts, modulo *beaucoup/ne...pas*. This state of affairs is in sharp contrast with what we encountered in the previous section where we considered the distribution of *pas*, etc., in clauses containing transitive verbs governing indefinite direct objects. Consider again (22), repeated here for convenience as (41), along with (40):

- (40) a Je n'ai pas acheté *t* de bouquins.
  - b Il ne me donne pas *t* d'argent.
- (41) a J'ai lu beaucoup/trop/assez de romans.
  - b J'ai lu beaucoup/trop/assez des romans que tu m'as donnés.
  - c J'ai beaucoup/trop/assez lu *t* de romans.
  - d J'ai beaucoup/trop/assez lu *t* des romans que tu m'as donnés.

If we were to remove *beaucoup*, etc., or *ne...pas* from these sentences, the remaining structures would no longer be grammatical, cf. (42)-(43) below.

- (42) a \*J'ai acheté de bouquins. b \*Il me donne d'argent.
- (43) a \*J'ai lu de romans.
  - b \*J'ai lu des romans que tu m'as donnés.

In an intuitive sense, we can attribute the ungrammaticality of the (42)-(43) strings above by reasoning that, since *pas* (or *beaucoup*, etc.) is base-generated as the head N of an indefinite direct object (irrespective, for *beaucoup*, etc., at least, of whether QàD is involved or not), these elements form an integral part of a vital A-position (even in QàD structures, obligatory in the case of *pas*, whereby the association is maintained by an antecedent-trace binding relationship). Thus, the absence of *pas* or *beaucoup*, etc., effectively means that part of the content of the vital A-position is missing, whence the ungrammaticality of (42) and (43) above.

Clearly, something completely different is going on in sentences (26)-(29) where the

presence or absence of *pas* and *beaucoup*, etc., has no bearing whatsoever on the grammaticality of the sentence. Not surprisingly, the distribution of these elements resembles that of adverbials in this respect, whose presence is only rarely compulsory. The explanation which is usually advanced to account for the fact that the presence of adverbials is usually optional suggests that they typically occupy A'-positions, e.g., adjoined positions. What we would like to argue here is that, where *pas* and *beaucoup*, etc., appear in clauses where they are not associated with some indefinite direct object DP, they are generated in VP-adjoined positions, as illustrated in (45) below which represents sentence (44).

(44) La petite Elise n'aime pas les monuments de Paris.



Given the account of *pas* which we proposed in the preceding subsection, i.e., Obenauer's (1983; 1984) analysis of VP-quantification in French, it seems reasonable to believe that [ $_{DP} pas$ ] is adjoined to VP in the sentences under consideration here. In order to be associated with the negative clitic particle *ne* under the Neg node, we suggest that *pas* is subsequently adjoined to TP, then moved to the specifier position within NegP, exactly as in the previous section and as illustrated above in (45).

Having provided an analysis of the syntax of *pas* which, we feel, accounts for the data while avoiding some of the problems inherent in other current proposals, we now consider a numbers of issues which we are now in a position to better understand.

#### 4.3 Further thoughts:

# 4.3.1 Functional specifiers revisited:

The reader will remember, in section 2.1 above, that we noted that there seemed to be a generalisation to be made with respect to the specifier position within maximal functional projections. We formalised this generalisation as stipulation (14), repeated here for convenience

as (46). This allowed us to argue against Pollock's proposed analysis of *pas* as the D-structure specifier of the functional constituent *ne* under the Neg node.

(46) Functional specifiers If:  $X^0 \neq [\pm N, \pm V]$ , then: SpecX = e at D-structure.

In section 2.1, we were, however, unable to explain the generalisation which (14/46) represents. We are now in a position to offer a possible explanation<sup>27</sup>. This will depend crucially on the categorial analysis we have made of the element pas and will lead us to reconsider (14/46). As a nominal, heading its own NP projection, itself the complement of a D, pas will need to be licensed in some way. Within GB, nominals minimally require a Θ-rôle and Case. Ignoring the issue of Case for the moment, we can exclude pas from being base-generated in the specifier position of NegP for the simple reason that it cannot be assigned a  $\Theta$ -rôle in that position. It is widely recognised that functional heads (Neg in this case) cannot combine with their complements (TP in this case) to assign a composite  $\Theta$ -rôle to their specifier position (via Neg under sisterhood). Thus, if *pas* were base-generated in the specifier position within NegP, it could not be assigned a  $\Theta$ -rôle. The desirable consequence of this analysis is that generalisation (14/46), which we resorted to in section 2.1 above but for which we had no explanation, does not need to be stated at all. It is not the case that the specifier position within a maximal functional projection is characteristically empty at D-structure; rather, nominals are prevented from being base-generated in this position since they would not be assigned a  $\Theta$ -rôle there. Of course, this does nothing to prevent [DP pas] from being moved to the specifier position within NegP from its base-generated position.

As for the issue of the  $\Theta$ -rôle assigned to *pas* when it is base-generated in a VP-adjoined position, we can assume that a (secondary) 'adverbial'  $\Theta$ -rôle can be assigned to a nominal in a suitable adverbial position, e.g., the VP-adjoined position. In effect, we are suggesting that *pas* is assigned a  $\Theta$ -rôle under these circumstances in much the same way as *a lot* is assigned one in (47) below:

(47) a Bob likes Brian a lot.b John runs a lot.

# 4.3.2 Distributional asymmetries:

The attentive reader may have become somewhat sceptical in the light of our attempts to analyse *pas* in parallel fashion to *beaucoup*, etc. She will perhaps have noted certain distributional asymmetries between indefinite DPs containing *beaucoup*, etc., on the one hand, and those containing *pas*, on the other. In particular, although our analysis accounts for the facts:

- (a) that both types of indefinite DP appear in direct object position;
- (b) that neither type of indefinite DP appears in 'prepositional object' position; and,
- (c) that QàD is effectively compulsory when *pas* is involved,

we have made no mention of the fact that indefinite DPs containing *beaucoup*, etc. can appear in subject position while those containing *pas* cannot, as shown in (48)-(49).

- (48) a *Beaucoup de viande* a été mangée chez Adrian ce soir-là.
  - b Par la même occasion, *trop de vin* a été bu.
  - c *Beaucoup de monde* nous a vus dans un état pitoyable.
- (49) a *\*Pas de viande* n'a été mangée chez Adrian ce soir-là.

<sup>&</sup>lt;sup>27</sup> In fact, the following was suggested to us by Chris Lyons to whom we are grateful.

- b \**Pas de vin* n'a été bu.
- c \**Pas de monde* ne nous a vu dans un état pitoyable.

The reader will recall that we accounted for the effective compulsory nature of QaD in sentences containing pas as a consequence of the fact that pas must enter into a specifier-head relationship with *ne*, presumably at S-structure. Thus, in the structures we have considered, the DP of which *pas* is the head N must move up from its D-structure position to occupy the specifier position within NegP. Furthermore, the unacceptability of the strings in (48)-(49) can also be explained with reference to the need for pas to enter in to a specifier-head agreement relationship with *ne*. Unlike objects, a subject (or external argument) is not assigned structural Case in its base position. Hence, it must move up to occupy the specifier position within AgrP where is can be assigned nominative Case as a consequence of its specifier-head agreement relationship with Agr. However, if the subject DP which moves to occupy the specifier position within AgrP is an indefinite DP with pas as its ultimate head N, then pas, will be located higher in clause structure than the specifier position within NegP. This is because NegP is the complement of Agr, i.e., lower in clause structure than AgrP. Any movement of pas from the specifier position within AgrP to the specifier position within NegP (for *pas* to be able to enter into a specifier-head agreement relationship with *ne* under the Neg node) would then be excluded in the way that all demotion movements are excluded, i.e., as an ECP violation.

#### **5.0 Summary**

In this article we attempted to apply the results of work by, for example, Obenauer (1983; 1984) and Battye (1991 in particular), to Pollock's (1989) analysis of sentence negation in French and more recent adaptations by other authors. Pollock's (1989) coverage of negation phenomena in French and English can, we think, be described not unfairly as sketchy to say the least. This is quite understandable given the import of the main aspect of the work, i.e., the presentation of his more articulated theory of the syntactic representation of verbal inflection.

Nevertheless, we have had cause to doubt some of the claims Pollock makes in respect of sentence negation in French. In particular, we have found cause to argue against his claim that the element *pas* is generated in the specifier position within NegP. Our argument was based on a consideration of three factors: (a) the non-trivial generalisation which we tried to make concerning the specifier position within functional projections at D-structure; (b) an analysis of the relationship between *pas* and indefinite direct objects in clauses containing transitive verbs and of how this relationship cannot be adequately accounted for if *pas* is generated above VP; and, (c) a general concern for our theory of grammar to be as restrained as possible and a more specific desire to limit, subject to relevant empirical considerations, the number of positions within the clause in which adverbials can be generated.

We went on to show that an alternative account of *pas*, based on work by Obenauer on `quantification at a distance' and work by Battye on `nominal quantifiers', not only manages to be empirically adequate but also avoids the problems we highlighted with respect to Pollock's (1989) original account.

We demonstrated that *pas* should be analysed as being generated in a lower position in clause structure than Pollock had envisaged. We showed that, as one of Battye's (1989) nominal quantifiers, *pas* is base-generated either:

- (a) as the ultimate head N of the NP complement of an empty D, i.e., in the case of an indefinite direct object; or,
- (b) as a DP in its own right (with adverbial function) adjoined to VP.

In both cases, we have suggested that *pas* must move up to occupy, at S-structure, the specifier position with NegP, where it can enter into a specifier-head agreement relationship with the negative clitic *ne* under the Neg node.

We did not address the issues surrounding those other elements in French which are usually

associated with the negative clitic particle *ne*, which we leave for the time being on the research agenda.

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#### References

Abney, S. (1987). <u>The English Noun Phrase in its Sentential Aspect</u>. Unpublished PhD dissertation, MIT

Baker, M. (1988). <u>Incorporation. A Theory of Grammatical Function Changing</u>. Chicago: University of Chicago Press

Battye, AC. (1989). <u>Aspects of Quantification in French in its Regional and Diachronic</u> <u>Varieties</u>. Draft ms., University of York

Battye, AC. (1991). Partitive and pseudo-partitive revisited: reflections on the status of `de' in French. Journal of French Language Studies, 1: 21-43

Belletti, A. (1990). Generalized Verb Movement. Turin: Rosenberg & Sellier

Chomsky, N. (1955). <u>The Logical Structure of Linguistic Theory</u>. New York: Plenum (1975)

Chomsky, N. (1974). <u>The Amherst Lectures</u>. Unpublished lecture notes distributed by Documents Linguistiques, University of Paris VII

Chomsky, N. (1981). Lectures on Government and Binding. Dordrecht: Foris Publications

Chomsky, N. (1986a). Knowledge of Language. New York: Praeger Press

Chomsky, N. (1986b). Barriers. Cambridge, Mass.: MIT Press

Emonds, JE. (1976). <u>A Transformational Approach to English Syntax</u>. New York: Academic Press

Haegeman, L. (1991). Introduction to Government & Binding Theory. Oxford: Basil Blackwell

Harris, M. (1978). <u>The Evolution of French Syntax: A Comparative Approach</u>. London: Longman

Jackendoff, R. (1977). <u>X-bar Syntax: A Study of Phrase Structure</u>. Cambridge, Mass.: MIT Press

Kayne, RS. (1975). French Syntax: The Transformational Cycle. Cambridge, Mass.: MIT Press

Kayne, RS. (1991). Romance clitics, verb movement, and PRO. Linguistic Inquiry, 22: 647-86

Koopman, H. (1984). The Syntax of Verbs. Dordrecht: Foris Publications

Milner, JC. (1978). Cyclicité successive, comparatives, et cross-over en français (première partie). Linguistic Inquiry, 9: 673-93

Obenauer, H-G. (1983). Une quantification non-canonique: la quantification à distance. Langue Française, 58: 66-88

Obenauer, H-G. (1984). On the identification of empty categories. <u>The Linguistic Review</u>, 4: 153-202

Pollock, J-Y. (1989). Verb movement, universal grammar, and the structure of IP. Linguistic Inquiry, 20: 365-424

Roberts, I. (1991). Long Head Movement in Romance. Paper presented at the Workshop on Romance Syntax, Institute of Romance Studies, University of London, UK, 14.12.91

Rowlett, P. (1992). <u>On the D-structure position of negative sentence adverbials in French</u>. Paper presented at the 20th Romance Linguistics Seminar, Trinity Hall, Cambridge, UK, 4.1.92 and at the 18th Incontro di grammatica generativa, University of Ferrara, Italy, 29.2.92

Selkirk, E. (1977). Some remarks on the noun phrase structure. In: Culicover *et al.* (eds.), <u>Formal Syntax</u>. New York: Academic Press, pp. 285-316

Sportiche, D. (1988). A theory of floating quantifiers and its corollaries for constituent structure. Linguistic Inquiry, 19: 425-49

Stowell, T. (1981). Origins of Phrase Structure. Unpublished PhD dissertation, MIT

Williams, ES. (1991). <u>French *pas* and English *not*</u>. Paper presented at the Workshop on Romance Syntax, Institute of Romance Studies, University of London, UK, 14.12.91

Zanuttini, R. (1991). <u>Syntactic Properties of Sentential Negation: A Comparative Study of</u> <u>Romance Languages</u>. Unpublished PhD dissertation, University of Pennsylvania