To appear in Transactions of the Philological Society, 105.3: 339-64

THE SPECIFIER-HEAD RELATIONSHIP: NEGATION AND FRENCH SUBJECT PROFORMS

By Paul Rowlett

University of Salford

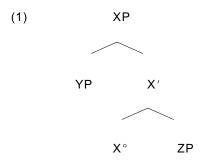
1. Introduction

This article¹ and the three others in this thematic collection are about heads and specifiers, the relationship between them, and how this relationship can change over time. A theme which emerges is the notion that the spec(ifier)—head relationship is cyclic, in other words, the synchronic relationship between the head and its specifier within a given phrase in a given language can be characterised as a location at a particular point on a cycle, while the diachronic development of the relationship can be seen as a directional stepwise shift around that cycle. The article is organised as follows: Section 2 introduces the theoretical framework. Section 3.1 sketches a well known diachronic phenomenon — the history of sentential negation — which readily lends itself to an analysis in terms of a cyclic spec—head relationship, and shows how the stages in the cycle have been characterised theoretically. Section 3.2 considers another set of data — pre- and postverbal subject proforms in French — which is similarly suitable for such an approach. Section 4, finally, introduces the three other contributions to the collection.

^{1.} My interest in the topic of the spec(ifier)—head relationship stems from work I completed a decade ago on negation in French (Rowlett 1998: ch. 3). The idea for this thematic issue of *TPhS* came after initial consideration of broad theoretical issues which formed the basis of a paper delivered to PhilSoc in Feb 2001. This article has benefited from comments from that and other audiences, from comments from David Willis who read a pre-final draft, and from feedback from anonymous reviewers of an earlier article (Rowlett 2002); I would like to record my thanks here for this feedback. For those parts of this article which are drawn from Rowlett (2007a), produced with the support of a Research Leave Grant from the Arts and Humanities Research Council, thanks go to Adam Ledgeway, who provided extensive useful feedback on an early draft.

2. THEORETICAL BACKGROUND

This article and the others in this collection are couched more or less explicitly within recent Chomskyan syntactic theory (see Chomsky 2000 for an overview). The configurational use of the term specifier is as old a X' theory itself, going back at least as far as Chomsky (1970) and Jackendoff (1977). While there is some disagreement over the precise definition of specifier (see below and, for example, Cann 1999), and whether a theory of syntax needs to recognise specifiers (see, for example, Cormack 1999), it is intuitively clear what is behind the notion in syntactic terms, and phrasal constituents of various kinds are commonly deemed to 'function as the specifier of' a head, within a structure defined more or less locally (see Adger et al. 1999a for background discussion), as in (1), in which YP is the specifier of X°/X':

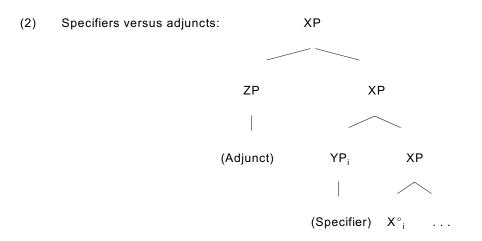


In (1) YP combines with (a projection of) X° , either by Merge or by Move, whereby the relationship between YP and X°/X' is functionally, if not configurationally, asymmetric: YP is a dependant/ argument and X°/X' is a head/functor, and YP crucially satisfies a requirement expressed by a feature of X°/X' . If the requirements expressed by the features of X°/X' can be satisfied without recourse to a specifier, then no specifier will appear (Rowlett 2002). Thus, the presence and nature of YP are determined by the features of X°/X' (rather than the other way round). Merge and Move differ with respect to whether YP is a syntactic object which exists independently of X' (Merge), or (the copy of) a subpart of X' (Move) instead. YP or X° may be non-overt. The formal mechanism relating YP and

^{2.} The structural complexity assumed in minimalist syntax is exploited only to the extent that it illuminates the discussion. Where the intricacies of exploded IP and CP are irrelevant, I use the labels INFL and COMP.

X°/X′ is checking, based on compatibility between features of YP and those of X°/X′ (Rowlett 1998: 111), a notion which supersedes mere spec-head agreement.³ Further, spec-head checking is the only checking relationship between a head and a phrase, the head-comp(lement) relationship (as between X° and ZP in (1)) now being regarded as secondary to the head-to-head checking configuration.

Not all scholars have been prepared to accept a configurational definition of syntactic specifier. Hoekstra (1991), for example, rejects such an approach. For him, there is an unwelcome redundancy between the configurational definition of specifier (the specifier of X°/X′ is the YP sister of X′) and a second definition of specifier, based on the notion of agreement (the specifier of X°/X′ is the YP 'agreeing' with X°/X′). Given that spec–head checking (whether based on agreement or compatibility) is needed for independent reasons, Hoekstra (p. 24) removes the redundancy by abandoning the configurational notion of specifier, relying uniquely on agreement instead: 'A specifier is an adjunct which agrees with the head.' Thus, specifiers are assimilated to adjuncts in being sisters of XP. Specifiers differ from adjuncts in respect of their relationship with X°/X′: specifiers agree with X°/X′ (YP in (2)); adjuncts do not (ZP in (2)).



^{3.} Feature compatibility between heads and specifiers is a notion taken up by Cann (1999). One a priori plausible alternative mechanism by which the features of a head and its specifier might contribute to the interpretation of the phrase is unification (see, for example, Cann 1999: 25). This would mean that heads and specifiers have equal status within phrases, and is therefore at odds with the notion of an asymmetric relationship between the two.

For my purposes, Hoekstra's issue is irrelevant. What survives — and what is important here — is that, one way or another, the specifier can be defined.⁴

3. CYCLIC SPEC-HEAD RELATIONSHIPS

An important insight into the relationship between a head and its specifier, one which is relevant to the notion of cyclicity, stems from recent work by Cinque (1999, 2006) on the structure of the clause above VP. The empirical basis of Cinque (1999) is a number of cross-linguistically sturdy generalisations regarding the clause-internal linear order of members of various classes of higher adverbial. Cinque derives these word-order generalisations from properties of UG, and does so in two stages. First, he suggests that the adverbials each have the interpretation they do because they check a particular functional feature, borne by the verb, and that, to do this, they merge, within an 'exploded' IP above VP, as the specifier of an F° to which the verb bearing the functional feature moves, either overtly or covertly:

Second, Cinque concludes that the order in which the functional features are checked on F° heads above VP (and, therefore, the order in which the adverbials are merged as specifiers) is determined by UG, and therefore invariant:

$$(4) \qquad \mathsf{MoodP}_{\mathsf{speech}\,\mathsf{act}} > \mathsf{MoodP}_{\mathsf{evaluative}} > \mathsf{MoodP}_{\mathsf{evidential}} > \mathsf{Mod}(\mathsf{ality}) \mathsf{P}_{\mathsf{epistemic}} > \mathsf{T}(\mathsf{ense}) \mathsf{P} \; (\mathsf{Past}) > \\ \\ \mathsf{TP} \; (\mathsf{Future}) > \mathsf{MoodP}_{\mathsf{irrealis}} > \mathsf{ModP}_{\mathsf{alethic}} > \mathsf{Asp}(\mathsf{ect}) \mathsf{P}_{\mathsf{habitual}} > \mathsf{AspP}_{\mathsf{delayed}} > \mathsf{AspP}_{\mathsf{predispositional}} > \\ \\ \mathsf{NoodP}_{\mathsf{irrealis}} > \mathsf{NoodP}_{\mathsf{i$$

^{4.} Duffield (1999: 127) talks of 'a distinguished, usually peripheral, phrasal position uniquely related to some subjacent head H through agreement, predication, or (indirectly through) selection.'

 $AspP_{repetitive(I)} > AspP_{frequentative(I)} > ModP_{volitional} > AspP_{celerative(I)} > TP \ (Anterior) > AspP_{terminative} > \\ AspP_{continuative(I)} > AspP_{perfect} > AspP_{retrospective} > AspP_{proximative} > AspP_{durative} > AspP_{progressive} > \\ AspP_{prospective} > AspP_{inceptive(I)} > ModP_{obligation} > ModP_{ability} > AspP_{frustrative/success} > ModP_{permission/ability} > \\ AspP_{conative} > AspP_{completive(I)} > VoiceP > PerceptionP > CausativeP > AspP_{inceptive(II)} > \\ (AspP_{continuative(II)}) > AndativeP > AspP_{celerative(II)} > AspP_{inceptive(II)} > AspP_{repetitive(II)} > \\ AspP_{frequentative(II)} \ (Cinque \ 2006: \ 12, \ 76, \ 82, \ 93)$

Cinque (2006) extends the empirical coverage from higher adverbials to inflectional morphemes,⁵ and identifies a number of similarly sturdy cross-linguistic ordering generalisations. He accounts for the ordering patterns of the morphemes by suggesting that each one checks, on F° heads within the exploded IP above VP, a member of the same set of functional features as the adverbials. Thus, the ordering patterns of the morphemes are accounted for, for free, on the back of the analysis of the ordering patterns of the adverbials, namely, the hierarchy in (4).

The relevance for the spec-head relationship of Cinque's exploded IP as described above relates to the notion that the grammatical purpose of each IP-internal F° and SpecFP is to check a functional feature borne by the lexical verb. They differ in respect of whether checking is based on a head-to-head or a spec-head configuration. Cross-linguistic variation relates to whether responsibility for checking a given functional feature on V is borne exclusively by a head, borne exclusively by a specifier, or shared between the two. And diachronic variation within languages relates to how the locus of this responsibility shifts over time. The idea behind the notion of a cyclic spec-head relationship is that these shifts are not random; rather, they are directional, the superficial manifestation of two contrasting underlying processes:

(a) morpho-syntactic strengthening, whereby the value of a pragmatically unmarked functional head morpheme comes to be reinforced by co-occurrence, initially optionally but later increasingly systematically, with an additional emphatic phrasal element; and

^{5.} Cinque (2006) also includes 'restructuring' verbs in his analysis of the exploded IP. See Rowlett (2007b) for implementation of Cinque's model of restructuring verbs in French.

(b) (initially) semantic weakening, whereby the once emphatic phrasal element loses its marked pragmatics, and later weakens phono-morpho-syntactically by grammaticalisation as a head, and eventual loss altogether.

Interaction between these two contrasting processes is driven by a desire to communicate effectively, and leads to a diachronic pattern of development which might be described as a directional spiral chain. The following two subsections illustrate the phenomenon with two examples, and couch the empirical details within the theoretical framework set out above.

3.1. Sentential negation

Probably the best known example of a cyclic diachronic phenomenon which lends itself to a spec-head analysis is the pattern of sentential negation noted in Jespersen (1924: 335–6), illustrated in the history of English and French in (5) and (6):

(5) English

('Classical' Old English)	еþ	ne secge	. he n	a.
(Middle English)	not	ne seiþ	. he n	b.
(Late Middle English → late seventeenth century)	not	says	. he	C.
(Early fifteenth centry → second half of eighteenth century)	not says		. he	d.
(Fifteenth century → present)	not say	does	. he	e.
(±1600 → present)	n't say	does	he	f.

^{6.} The notion that the diachrony of the spec-head relationship is directional is relevant to suggestions, such as the one reported in section 3.1 of Lucas (2007, this volume), that languages might move backwards within the cycle.

```
(6) French
```

```
a. jeo ne di (- 1600)
b. je ne dis (pas) (1600 - 1700)
c. je ne dis pas (Standard written French)
d. je (ne) dis pas (Standard spoken French)
e. je dis pas (Colloquial French)

/ NEG say NEG
```

The diachronic pattern illustrated in (5) and (6) is known as Jespersen's Cycle.⁷ In fact, Jespersen's Cycle in French can be traced back further still within Latin:

(7) a. *neb. ne ... unum (NEG ... not-even-one)c. non

Using the French example for illustration, negation is marked using a negative head alone in (6a); in (6b, c) the negative head is first optionally and later increasingly systematically reinforced with a phrasal negator; by (6d, e) the phrasal negator has inherited the mantel of the primary negator and the head negator is optionally but increasingly systematically omitted. The next step in the cycle — grammaticalisation of the phrasal negator as head negator in the same way as the Latin adverbial negator NON was reanalysed as the head ne — does not yet appear to have happened in French (contra the suggestion in Moritz and Valois 1994: 679 fn 12), but may well have occurred in some French-lexifier creoles (DeGraff 1993). In contrast, the phonological weakening of English not to n't, and its compatibility with subject—auxiliary inversion, can readily be accounted for in terms of grammaticalisation as a head (Zwicky and Pullum 1983).

^{7.} For detailed discussion of the specifics of the developments illustrated in (5) and (6), as well as references to other treatments, see Rowlett (1998: ch. 3). Jespersen's Cycle in Arabic and Berber is the topic of Lucas (2007, this volume).

Willis (2004) (looking at the history of negation in Welsh) and Roberts (2007: ch. 1) (looking at French) analyse Jespersen's Cycle in the following theoretical terms:

- (a) in (6a) the head negator, *ne*, bears an interpretable negative-polarity feature which suffices to negate the clause; no specifier is needed or realised;
- (b) unsurprisingly, (6b) represents a period of transition/variability across speakers as the innovated phrasal negator, minimiser *pas* 'step', shifts from being an optional and pragmatically marked reinforcement (of still fully negative *ne*), with no negative feature (but possibly some weak NPI/operator feature, thereby accounting for its need to be licensed) to being integrated within the negation system as a strong NPI (and therefore still needing to be licensed) with an uninterpretable negative-polarity feature;⁸
- (c) stage (6c) represents the stable end point of this transition;
- (d) once again, (6d) represents a transitional stage as the phrasal negator *pas* splits into two items, the innovative one having an interpretable negative-polarity feature (indicating that it is now *pas* that licenses *ne* rather than vice versa), whereby innovative *pas* is used increasingly frequently, and the erstwhile primary negator *ne* consequently comes to bear an uninterpretable negative-polarity feature, appears optionally and increasingly rarely;
- (e) stage (6e) represents the logical end of the weakening of ne as it is lost altogether.

In the next stage in the development the adverbial negative marker *pas* is predicted to grammaticalise as a head, as it has in creoles and as *non* previously did before it weakened to *ne* in French.

3.2. French personal proforms

The syntax of pre- and postverbal personal proforms in modern French presents another set of phenomena suitable for analysis in terms of steps within a cyclic spec-head relationship. In unmarked

^{8.} This stage in the development arguably reflects a shift from contrary to contradictory negation (Schapansky 2002).

French the set of non-clitic independent personal proforms in (8a) contrasts with the (partially isomorphic) set of subject proforms in (8b), which are phonologically, morphologically and syntactically dependent on a host:

The non-clitics in (8a) can appear in canonical subject position, where they often mark contrastive focus, as in the examples in (9), taken from the Internet:

(9) a. Elle aime toujours son ex mais lui veut épouser une fille vierge pour faire bonne figure devant sa famille.

'She still loves her ex but he wants to marry a virgin in order to save face with his family.'

b. Au fait Charles est de retour alors que moi vais repartir mardi matin.

'By the way C. is back but I'm leaving Tuesday morning.'

c. Je ne le sais pas, mais eux doivent le savoir.

'I don't know, but they should know.'

d. Si tes proches refusent de comprendre alors c'est dommage pour eux mais **toi** vas vivre ta vie et j'espère que tu trouveras l'amour que j'ai trouvé.

'If your friends and family refuse to understand, it's too bad for them, but *you* are going to live your life, and I hope you find the love that I have found.'

In each of the examples in (9), the highlighted non-clitic can be replaced by the corresponding (non-focal) subject proform in (8b), as in (10):

(10) a. ... mais il veut ...

b. ... alors que je vais ...

c. ... mais ils doivent ...

```
d. ... mais tu vas ...a-d: = (9a-d), modulo the contrastive focus
```

However, in addition to the pragmatic difference, the non-clitics and the subject proforms are not syntactically equivalent either. Like regular nominal subjects, the non-clitics in canonical subject position in (9) can be separated from the finite verb by parenthetical material, as in (11):

```
a. ... mais lui, pour être honnête, veut ... '... but he, to be honest, wants ... '
b. ... alors que moi, pour te dire, vais ... '... but l, let me tell you, am going to ... '
c. ... mais eux, nom de dieu, doivent ... '... but they, for Christ's sake, should ... '
d. ... mais toi, j'imagine, vas ... '... but you, I imagine, are going to ... '
```

In contrast, the subject proforms in (10) cannot, as shown in (12):

```
a. *... mais iI, pour être honnête, veut ...
b. *... alors que je, pour te dire, vais ...
c. *... mais iIs, nom de dieu, doivent ...
d. *... mais tu, j'imagine, vas ...
```

The ungrammaticality of the examples in (12), and the contrast with (11), illustrates the lack of independence referred to above on the part of subject proforms in French. This lack of independence is standardly analysed as follows:

- (a) like strong (pro)nominal subjects, subject proforms merge in the thematic VP-internal subject position;
- (b) again like strong (pro)nominal subjects, subject proforms raise to the canonical subject position to check the nominal feature of the finiteness head and to allow subject-verb agreement;
- (c) finally, and crucially unlike strong (pro)nominal subjects, subject proforms cliticise

post-syntactically (i.e., within the phonology) onto the finite verb which has raised to INFL.

It is because of stage (c) of the derivation that the judgements in (11) differ from those in (12); since non-clitics, by definition, do not cliticise, intervention of a parenthetical between the canonical subject position and the finite verb is unproblematic (see footnote 9).

The reason why cliticisation of the subject proforms is deemed to be *post*-syntactic is that these proforms can be ellipsed in co-ordinate structures, as in (13):

(13) Je t'aime et (je) veux t'épouser.

I you-love and I want you-marry

'I love you and (I) want to marry you.'

The possibility of ellipsis with subject proforms contrasts with the *im*possibility of ellipsis with non-subject clitics, as shown in (14), which are deemed to be syntactic clitics:

(14) a. Marie le voit et *(l')entend.

M. him sees and him-hears

'M. can see him and hear him.'

b. Marc lui téléphone et *(lui) écrit souvent.

M. to-her phones and to-her writes often

'M. phones her and writes to her often.'

Thus, while the non-clitics in (8a) sit in the canonical subject position in (11),⁹ the subject proforms in (8b) phonologically cliticise from this position onto the finite verb, a weakening which represents

^{9.} The text discussion of (11) ignores the issue raised by the idea of a parenthetical intervening between a specifier and its head. It may be necessary to conclude that the focal subject raises to a higher specifier position within Rizzi's exploded CP (Rizzi 1997), in which case the parenthetical would not need to attach to an intermediate projection. Of course, on Hoekstra's analysis of specifiers (see (2) above), no problem arises.

movement to the following step around the spec-head cycle.

While it is not morphologically plausible to suggest that, in every case, the subject proforms in (8b) develop diachronically from the non-clitics in (8a), the extensive isomorphy between (8a) and (8b) suggests that the notion does make sense in a number of cases, and even where it does not, the two sets of proforms can be thought of as sitting at two adjacent positions within a spec-head cycle. Such a suggestion implies that the subject proforms in (8b) once had the phono-morpho-syntactic independence enjoyed by the non-clitics in (8a) and illustrated in (11). Evidence that this is the case comes, for example, from fossilised uses such as (15), where the subject proform *je* is separated from the finite verb by an appositive phrase:¹⁰

(15) Je, soussigné, certifie par la présente renoncer au remboursement.
 I undersigned certify by the present renounce to-the reimbursement
 'I, the undersigned, do hereby declare that I forego reimbursement.'

So much for the situation in unmarked French with respect to non-clitic and subject proforms, and their analysis in terms of a spec-head cycle. There is empirical evidence that, in some marked varieties of French, subject proforms have moved a step further around the cycle of the spec-head relationship. The data come from the phenomenon of subject doubling, illustrated in (16a):¹¹

a. Mon chat il dort tout le temps.
 b. Mon chat, il dort tout le temps.
 my cat he sleeps all the time
 'My cat sleeps all the time.'
 'My cat, he sleeps all the time.'

In (16a), an example of subject doubling, a nominal subject (here, *mon chat* 'my cat') co-occurs with a subject proform (here, *il* 'he'). The example in (16a) is superficially very similar to the example of subject (clitic) left dislocation (LD) in (16b). However, subject doubling is crucially different from

^{10.} I am grateful to Adam Ledgeway for drawing my attention to such examples.

^{11.} The discussion of subject doubling is drawn from Rowlett (2007a: 137-8).

subject LD, and the following differences are identified in Ontario French by Nadasdi (1995):12

- (a) doubled subjects do not have the characteristic prosody of LDed subjects (perceptual prominence, with rising intonation and final syllable lengthening within the LDed phrase and falling intonation on the rest of the clause see Rowlett 2007a: 174 fn 38);
- (b) unlike their LDed counterparts doubled, subjects are incompatible with contrastive/emphatic stress;
- (c) doubled subjects allow liaison, while LDed subjects do not; and,
- (d) doubled subjects follow non-selected left-clause-peripheral material, while LDed subjects precede such material.

In Picard, Auger (2003b, 1994: 22) found additionally that indefinite subjects, which are incompatible with LD because LD involves topicalisation (see below), were nevertheless compatible with doubling, as in (17):

(17) a. Personne il m'aime. b. Tout le monde il se baignait là-bas. (Picard)

nobody he me-likes all the world he self bathed there

'Nobody likes me.' 'Everyone was bathing there.'

Taken together, these differences suggest strongly that subject doubling is not the same as subject LD.

Subject LD like (16b) is standardly analysed (see Rowlett 2007a: sec. 5.3.1) as involving: (a) clause-external merger of the LDed nominal; and (b) a binding relationship between the LDed nominal and the clause-internal subject. Nothing further needs to be said about the internal clause structure. Given the differences between subject doubling and subject LD, Roberge (1990) and Auger (1994) argue that, rather than merging clause-externally, the nominal subject in subject-doubling contexts like (16a) merges clause-internally. They suggest that it is the subject and that it behaves accordingly: it

^{12.} Subject doubling is also found in Picard (Coveney 2003, Auger 2003a) and Maghreb French (Queffélec 2000: 790).

merges in VP and raises to the canonical subject position. This means, of course, that the subject proform in subject doubling is not the 'real' subject and cannot therefore be analysed as such. Instead of merging VP internally, raising to the canonical subject position and phonologically cliticising onto the finite verb, it is suggested that, in subject doubling, the subject proform has been reanalysed, first as an affix, then as a mere agreement marker, realised directly on INFL, much as in the case of Northern Italian dialects (see Polletto 2000 and De Cat 2002: 38 for references). The nominal and pronominal 'subjects' in preverbal position in examples of subject doubling therefore occupy specifier and head positions, respectively. Thus, in subject-doubling varieties of French, we can think of the preverbal subject proforms as having moved one step further around the cycle of the spec-head relationship:

- (18) a. non-clitic proforms (examples (8a) and (9)): raise to the canonical subject position;
 - b. preverbal subject proforms in unmarked French (examples (8b) and (10)): raise to the canonical subject position and phonologically cliticise onto the finite verb in INFL;
 - c. preverbal subject 'proforms' in subject-doubling varieties (examples (16a) and (17)):

 merged as affixes or agreement markers directly on INFL, that is, part of verbal morphology.

I turn now to what are traditionally described as inverted personal proforms, and see that, here too, there is evidence of a shift around the spec-head cycle.¹³ 'Inverted' subject proforms in French occur in pronominal inversion (PI; also known as subject-clitic inversion) and complex inversion (CI), illustrated in (19a) and (19b), respectively:

Given that uninverted finite verbs in French raise to INFL (Emonds 1978, Pollock 1989), it is tempting to approach the inversion illustrated in (19a) in terms of further raising of the finite verb to COMP, along the lines of subject—auxiliary inversion in English. The attraction of the movement-to-COMP approach to

^{13.} The discussion of inversion is drawn from Rowlett (2007a: 201-9).

inversion is that it relates inversion to operator movement: both target the low COMP area since this is the minimal domain in which an operator (for example, a (non-subject) wh phrase, possibly non-overt) and a finite verb can achieve the spec-head configuration needed for feature checking. Analyses along these lines have been proposed for French inversion by Rizzi & Roberts (1989), Cardinaletti & Roberts (2002) and Cardinaletti (2004) (see also Jones 1999). Such approaches immediately account for the postverbal position of -il in (19a). On the assumption that il raises to the canonical subject position but is too weak to remain there (see above), rather than phonologically cliticising rightwards, it instead incorporates onto the inverted verb on the left.

However, things are not so straightforward, and we see below that perhaps a more satisfactory analysis of the postverbal element -il in (19a) is as an affix which merges directly on INFL, along the lines of what we saw above for subject doubling. There are a number of problems with the simple movement-to-comp analysis of PI. First, it fails to account for CI, illustrated in (19b), in which an 'inverted' pronominal subject co-occurs with a preverbal nominal subject. (If postverbal -il is the subject, what is the preverbal nominal?) This is unfortunate since PI and CI have near identical distributions and a parallel approach is attractive.

Second, movement to COMP fails to account for the ungrammaticality of (20):

(20) *Est-Jean/lui parti?

is-J/him left

If inversion is movement to COMP, why should it not be possible around a strong (pro)nominal subject?

Third, a movement-to-comp analysis fails to explain why preverbal subject proforms do not systematically have phonologically predictable postverbal counterparts. For example, *ce* and *je*— pronounced [sə] and [ʒə] before consonant-initial verbs, [s] and [ʒ] before vowel-initial ones due to elision— are either impossible in postverbal position, as in (21b) and (22b), or else are pronounced [s]

and [ʒ], as in (23), possibly involving a phonological modification to the verb, as in (24c) and (25c): ¹⁴										
(21)	a.	ce furent this was	b.	*furent-ce was-this						
(22)	a.	je prends I take	b.	*prends-je take-I						
(23)	a.	était-ce [etεs] was-this	b.	sais-je [sɛʒ] know-l						
(24)	a.	je peux [ʒəpø] I can	b.	*peux-je can-l	c.	puis-je [pwiʒ] ¹⁵ can-l				
(25)	a.	je trouve [tʁuv]	b.	*trouve-je find-l	C.	†trouvé-je [tʁuvɛʒ]	(† = archaic)			
The postverbal counterparts of the vowel-initial subject proforms appear with epenthetic [t] when the verb is phonologically vowel final, as in (26):										
(26)	a.	il trouva [iltʁuva] he found	b.	*trouva-il [tʁuvail] found-he	C.	trouva- t -il [tʁuvatil] found-he				
14. Cf. some northern Italian dialects, where pre- and postverbal subject proforms are distinguished										

14. Cf. some northern Italian dialects, where pre- and postverbal subject proforms are distinguished formally:

(i) a. El vien. b. Vien-lo? (Paduan, Zanuttini 2001: 525 (25))

he comes
'He's coming.' 'Is he coming?'

15. The 'uninverted' form, je puis, is an archaic/literary alternative to je peux.

In one case, the subject proform *ça* 'that', clearly a clitic given its availability as a resumptive proform in dislocation structures like (27), is categorically excluded from postverbal position, as shown in (28):

(27) Les voisins, ça boit.

the neighbours that drinks

'The neighbours like their alcohol.'

(28) *Quand (les voisins) va-ça arrêter de boire?

when the neighbours goes-that stop of drink

'When are the neighbours/they going to stop drinking?'

The inverted equivalent of ça is il 'he/it':

(29) a. Cela, ça te gêne.

b. Cela te gêne-t-il?

that that you disturbs

that you disturbs-it

'That disturbs you.'

'Does that disturb you?'

Similarly, I'on, the high-register alternative to on 'one, we', is excluded from PI:

(30) a. Voit-on loin?

b. *Voit-l'on loin?

see-one far

see-one far

'Can you see far?'

In short, the irregularity of PI sits ill with a simple movement-to-COMP analysis.

Finally, the movement-to-comp analysis of PI suggests an unfortunate account of the *-ti/-tu* elements which mark yes–no interrogatives in some varieties of French, as illustrated in (31) and (32):

- (31) a. Le déjeuner est-**tu** prêt? b. Tu l'as-**tu** battu? (Québécois)

 the dinner is-tu ready you him-have-tu beaten

 'Is dinner ready?' 'Did you beat him?'
- (32) Vous en avez-**ti** des moins chers? (Goosse 2000: 116)¹⁶

 you of-that have-ti of.the less expensive

 'Do you have any that are less expensive?'

The form of (31) and (32) — together with the fact that these are examples of interrogatives — suggests that -tii-tu should be analysed like the postverbal subject proforms found in PI/CI. Under the movement-to-comp analysis, this would mean that -tii-tu merge in VP, raise to the canonical subject position and then, instead of phonologically procliticising rightward onto INFL, incorporate leftward into the finite verb which has raised from INFL to COMP. However, this derivation is implausible for two reasons: first, -tii-tu are morphologically invariant; second, they never occur in preverbal position. Let us therefore consider an alternative, namely, that -tii-tu are (yes-no interrogative) affixes which merge directly in INFL, that this is where they attach to the finite verb, and that the finite verb does not raise from INFL to COMP. On such an analysis, nothing of note needs to be said about the clauses in (31) and (32); in particular, the preverbal (pro)nominal subjects can be derived in the usual way (merger within VP followed by raising to the canonical subject position and, in the case of the pronominal in (31b) and (32), phonological cliticisation onto the finite verb in INFL).

In order to maintain the parallel between *-til-tu* and 'inverted' subject proforms, let us further follow Barbosa (2001) and assume that the postposed proforms are similarly affixes (although not specifically yes—no interrogative affixes) which merge directly in INFL, that this is where they attach to the finite verb, and that the finite verb raises no further. There are two features of this analysis which warrant discussion. The first is the idea that the verb does not raise from INFL. This is relevant since movement to COMP allows a spec—head checking configuration to be achieved between the finite verb and a fronted operator, as set out above. If the verb remains in INFL, how does it check the operator? Cyrille-Thomas (2002) suggests that a long-distance checking configuration is formed involving, first, a

^{16.} Goosse suggests that the structure with -ti is restricted to popular French, and in decline.

spec-head configuration between the operator and (the empty) COMP and, second, a head-head chain between COMP and (the finite verb in) INFL:

This long-distance checking relationship between the finite verb and the operator has a direct consequence for the local checking relationship between the finite verb and the canonical subject position. According to the biuniqueness condition on checking, a given head cannot check two separate specifiers from a single position. Where, as in English non-subject wh interrogatives, the finite verb raises from INFL to COMP, this is unproblematic: it checks the subject from INFL and the whoperator from COMP. In French, where, in 'inverted' contexts, the finite verb remains in INFL, it is predicted not to be able simultaneously to check both the subject and the whoperator:

(34)
$$[_{CP} \text{ operator}_i [_{C'} e_i [_{IP} \text{ subject } [_{I'} \text{ verb}_i \dots [_{VP} \dots t_i \dots]]]]]]$$

Thus, if nothing else is said, CI as in (19b) and the examples in (31) and (32) are predicted — wrongly — to be ungrammatical. I return to this below.

The prediction that the finite verb in INFL cannot simultaneously check the subject and the operator takes us neatly to the second issue which emerges from the revised analysis of PI, namely, that, like the *-tul-ti* markers discussed above, 'inverted' postverbal proforms are actually affixes, that is, syntactic objects merged directly in INFL and therefore derivationally quite distinct from their preverbal 'equivalents'. This analysis has a number of merits. First, the formal differences between the preverbal subject proforms and their postverbal equivalents, illustrated in (24) to (30), are unproblematic.

Second, CI, illustrated in (19b), where the 'inverted subject proform' co-occurs with a regular preverbal nominal subject, can be explained. On the traditional view that the postverbal element is a regular subject, around which the finite verb has inverted, CI is something of a puzzle; on the revised view that the postverbal element is an affix, with no inversion, the puzzle disappears, and the preverbal subject can be analysed in the regular way.

Third, while preverbal subject proforms co-distribute with preverbal nominal subjects, the postverbal element in PI/CI does not:

(35) a. Jean/il est parti.

b. Est-il/*Jean parti?

J./he is left

is-he/J. left

'J./he left.'

'Did he/J. leave?'

Fourth, the affix analysis explains why, in unmarked French not characterised by subject doubling (see above), there is no 'uninverted' equivalent of CI, as shown in (36b) (cf. (36a)):

(36) a. Jean est-il parti?

b. *Jean il est parti.

J. is-he left

J. he is left

'Did J. leave?'

In other words, while the postverbal element in PI/CI co-occurs with a preverbal nominal subject (in CI), the preverbal subject proform does not.

Fifth, while preverbal subject proforms can be omitted in a second conjunct, as in (37a), the postverbal element can not, as shown in (37b):

(37) a. Il va au bar et (il) commande une bière.

he goes to the bar and he orders a beer

'He goes to the bar and orders a beer.'

b. Va-t-il au bar et commande*(-t-il) une bière?
 goes-he to.the bar and orders-he a beer
 'Is he going to the bar and ordering a beer?'

In distributional terms, then, there are clear reasons for analysing the 'postverbal subject proform' in PI/CI as an affixal agreement marker. As for its function, a clue is provided by the prediction, illustrated in (34), based on the biuniqueness condition on checking: their function is precisely to solve the 'problem' of the finite verb's inability, from INFL, to check the subject while simultaneously checking the operator; they are agreement markers licensed by the [Q] feature (on INFL) which (re-)endow INFL with the ability to check the subject:

(38)
$$[_{CP} \text{ operator}_i [_{C'} e_i [_{IP} \text{ subject } [_{I'} \text{ verb}_i \text{ AFFIX } \dots [_{VP} \dots t_i \dots]]]]]]$$

Consider the ungrammaticality of (39a, b):

The status of (39b) is expected since a nominal like *Jean* is an unlikely candidate for an agreement affix. As for (39a), the situation is more subtle: if postverbal *-il* is an agreement affix which (re-)endows INFL with the ability to license a regular preverbal subject, why can it not license one which is pronominal? The ungrammaticality of (39a) is particularly surprising when compared with the grammaticality of (31b), and the picture is made even more intriguing by the contrast between (40a) and (40b):

(40) a. pro est-il parti? (Unmarked French) b. *pro est-tu prêt? (Picard, Québécois)
 is-he left is-tu ready
 'Did he leave?'
 'Is it ready?'

While -tu/-ti and the affixal agreement marker both co-occur with preverbal nominal subjects, as shown in (31a) and (36a), they contrast when it comes to pronominal subjects: -tu/-ti co-occurs with an overt subject proform (31b) and (32), but not with a non-overt subject proform (40b); the affixal agreement marker co-occurs with a non-overt subject proform (40a), but not with an overt subject proform (39a). Why? French is a non-pro-drop language, and in the absence of a nominal subject, a preverbal subject clitic is necessarily present because of the inability of INFL to identify the ϕ features of the subject. In PI, however, INFL bears an affixal agreement marker, which is able to identify the ϕ features of the subject. Thus, where the affixal agreement marker is licensed, we expect pro-drop-like behaviour, that is, the absence of an overt (non-LDed) preverbal subject and the presence of pro instead.

The different behaviour of *-til-tu* with respect to licensing (non-)overt pronominal subjects can now be related to how it differs morphologically from the postverbal agreement marker (Taraldsen 2001: 172): while the postverbal elements found in PI/CI agree with the φ features of the subject, *-til-tu* is invariant, suggesting that it is not endowed with φ features. The relevance of this is as follows: If what allows an affixal agreement marker to license a non-overt pronominal subject is its morphological richness, then the impoverished morphology of *-til-tu* is expected not to be a licenser, and to require an overt subject proform, instead. I propose, therefore, that *-til-tu* is like the affixal agreement marker found in PI/CI in that it: (a) is an affix; (b) is licensed by the presence of [α] on INFL ¹⁷; and (c) endows INFL with the ability to license the subject in canonical subject position. It differs from the affixal agreement marker in that it: (a) is devoid of φ features and morphologically invariant; and (b) is therefore unable to license a non-overt pronominal subject. While *-til-tu* appears in certain varieties of French only, and is in decline, its syntax is important because the analysis proposed provides support for the analysis of the affixal agreement marker found in PI/CI.

^{17.} Indeed, given that *-til-tu* is restricted to yes—no interrogatives, and is not found in wh interrogatives, the feature which licenses them must be more specific than [Q].

How might we now couch the syntax of 'inverted pronominal subjects' within a cyclic spechead relationship? In Old French, interrogatives were marked by marked verb-subject word order: (wh) + VS. Given that this inversion was possible with pronominal and nominal subjects alike, it was presumably the result of movement of the finite verb to COMP. Inversion competed with clause-initial est-ce que 'is it that', from the twelfth century onwards in wh interrogatives (wh + est-ce que + SV), and in yes-no interrogatives around the fifteenth and sixteenth centuries (est-ce que + SV). Arguably as a direct consequence of the availability of est-ce que, and of its unmarked pragmatics from the fourteenth century onwards, inversion around a nominal subject was lost in the sixteenth century. The above analysis of PI suggests that the retention of inversion around a pronominal subject was only apparent, and that inversion (understood as movement of the finite verb to COMP) had at this point been lost altogether (Rowlett 2007a: 6-7). From the perspective of a cyclic spec-head relationship, the loss of pronominal inversion means that the 'inverted' subject proform in PI shifted from being a regular subject which raises to the canonical subject position, to being an affixal agreement marker, merged directly on INFL. This shift represents movement around the spec-head cycle. As for CI, finally, the loss of inversion around a nominal subject coincided with the rise (from the fifteenth to seventh centuries) of the phenomenon, illustrated in (41a), of LDed subjects co-occurring with PI:

- (41) a. Jean, est-il parti? b. Jean est-il parti?

 - J. is-he left

J is-AFF left

a, b: 'Did J. leave?'

Reanalysis of the inverted subject proform as an affix opened the door to the reanalysis of the LDed subject as a core-clause-internal phenomenon, with the concomitant loss of the 'comma' intonation, as in (41b) (cf. the relationship between (16a) and (16b)).

4. CONTRIBUTIONS IN THIS COLLECTION

I conclude with a brief introduction to the three other contributions to the collections. Richard Ingham's 'NegP and negated constituent movement in the history of English' approaches the notion of

spec-head reanalysis from the perspective of the movement of three types of negated constituent in the history of English, with each one related to the presence and function of a negative phrase (NegP) within English clause syntax up to the early modern period. The three kinds of movement Ingham is interested in are (a) NegV1 in Old English (OE) and Early Middle English (EMidE), (b) Negative Inversion, and (c) Neg Movement in Late Middle English (LMidE). NegV1 is the appearance in clause-initial, pre-subject position of a negated finite verb, illustrated in (42a); Negative Inversion, which died out and later returned in the history of English, is subject-verb inversion in the presence of a fronted negative phrase, illustrated in (42b); Neg Movement is the movement of, for example, a negative direct object to a position intermediate between an auxiliary verb and a lexical verb, illustrated in (42c):

- (42) a. [Ne gesomniu] ic gesomnunge heara. (NegV1)

 NEG assemble I meetings them.GEN

 'I shall not assemble their meetings.'
 - b. [No prophet] will I trust. (Negative Inversion)
 - c. I may [no leysour] haue. (Neg Movement)

 I may no leisure have

'I may have no leisure.'

Drawing on Zeijlstra's (2004) suggestion that NegP is projected in clause structure in negative-concord (NC) languages, only, Ingham explores the idea that some negative-constituent movement operations are related to the presence of NegP and, therefore, are only found in English during those periods when English was an NC language. OE was a non-NC language, EMidE was an obligatorily NC language, while in LMidE NC weakened and was eventually lost. Significantly, the move towards NC in the late ninth century corresponds to the increasing regularity of NegV1, while the loss of NC in the early sixteenth century corresponds to the loss of Neg Movement.

In 'Jespersen's Cycle in Arabic and Berber' Christopher Lucas addresses the processes of syntactic change underlying what look very much like Jespersen's Cycle in Arabic and Berber, as illustrated in (43) and (44) (* = reconstructed):

(43) a. *mā fīh muškila (Early spoken Arabic)

NEG there.is problem

b. *mā-fī-ši muškila (North African medieval Arabic dialects)

NEG-there.is-NEG problem

c. fī-š(i) muškila (Palestinian Arabic)

there.is-NEG problem

a-c: 'There is no problem.'

(44) a. **ur** igle (Tuareg Berber)

NEG leave.PAST.3M.SG

'He didn't leave.'

b. **ur** iffiy **ša** (Tamazight Berber)

NEG exit.PAST.3M.SG NEG

'He didn't go out.'

Lucas suggests that the innovation of a phrasal negator to reinforce the head negator in (43b) and (44b) began in Arabic and only later spread to (the relevant varieties of) Berber via contact, rather than vice versa. Two kinds of evidence are offered. First, the pattern in (44b) is characteristic of the north (primarily, but not exclusively, Morocco and Algeria), where Arabic–Berber bilingualism is widespread. The pattern in (44a) is found further south, in Mali, Niger and Burkina Faso, where Arabic–Berber bilingualism is not widespread, or else in southern Morocco, where bilingualism is with the Ḥassaniyya Arabic dialect which has not innovated a postverbal negator. Second, fragments of Old Berber in medieval documents suggest that Berber had not yet innovated a postverbal negator at a time when Arabic most likely had.

David Willis's 'Specifier-to-head reanalyses in the complementizer domain: evidence from Welsh' looks at the diachrony of a spec-head relationship at the CP level. Willis argues that the particles *mi* and *fe*, which introduce affirmative (but not negative or interrogative) main (but not subordinate) clauses in Welsh (a VSO language), illustrated in (45), are the result of reanalysing a preverbal phrasal subject proform in SpecCP as a head C° element:

(45) Mi/Fe welodd Dafydd y gêm.

PRT see.PAST.3SG D. the game

'D. saw the game.'

Mi derives from a 1sg and fe from a 3sg.M subject proform, and after reanalysis as a complementiser they were initially restricted to introducing clauses with the expected kind of subject. However, in Modern Welsh the agreement requirement has been lost and either particle can introduce any subject (with variation determined by dialectal and stylistic factors).

Centre for Research in Linguistics

School of Languages

University of Salford

Salford M5 4WT

Greater Manchester

United Kingdom

Email: P.A.Rowlett@salford.ac.uk

REFERENCES

ADGER, DAVID, PINTZUK, SUSAN, PLUNKETT, BERNADETTE & TSOULAS, GEORGE, 1999a. 'Specifiers in generative grammar', in David Adger et al. (eds.), 1–18.

Adger, David, Pintzuk, Susan, Plunkett, Bernadette & Tsoulas, George (eds.), 1999b. Specifiers:

Minimalist Approaches, Oxford University Press.

Anderson, Stephen R. & Jonas, Dianne, To appear. Syntactic Variation and Change, Oxford University Press.

Antoine, Gérald & Cerquiglini, Bernard (eds.), 2000. *Histoire de la langue française 1945–2000*, Paris: CNRS.

AUGER, JULIE, 1994. Pronominal Clitics in Québec Colloquial French: A Morphological Analysis.

Doctoral dissertation, University of Pennsylvania.

- AUGER, JULIE, 2003a. 'Les pronoms clitiques sujets en picard: une analyse au confluent de la phonologie, de la morphologie et de la syntaxe', *Journal of French Language Studies* 13, 1–22.
- AUGER, JULIE, 2003b. 'Le redoublement des sujets en picard', *Journal of French Language Studies* 13, 381–404.
- Baltin, Mark & Collins, Chris (eds.), 2001. The Handbook of Contemporary Syntactic Theory,

 Oxford: Blackwell.
- BARBOSA, PILAR, 2001. 'On inversion in wh questions in Romance', in Aafke Hulk & Jean-Yves Pollock (eds.), 20–59.
- BENINCÀ, PAOLA & SALVI, GIAMPAOLOI (eds.), 1998. Romance Syntax: A Reader, Budapest: L. Eötvös University.
- CANN, RONNIE, 1999. 'Specifiers as secondary heads', in David Adger et al. (eds), 21-45.
- CARDINALETTI, ANNA, 2004. 'Towards a cartography of subject positions', in Luigi Rizzi (ed.), 115–165.
- CARDINALETTI, ANNA & ROBERTS, IAN, 2002. 'Clause structure and X-second', in Guglielmo Cinque (ed.), 123–166.
- CHOMSKY, NOAM, 1970. 'Remarks on nominalizations' in Roderick Jacobs & Peter Rosenbaum (eds.).
- CHOMKSY, NOAM, 2000. 'Minimalist inquiries: the framework', in Robert Martin et al. (eds.), 89-155.
- CINQUE, GUGLIELMO, 1999. Adverbs and Functional Heads, Oxford University Press.
- CINQUE, GUGLIELMO (ed.), 2002. Functional Structure in DP and IP: The Cartography of Syntactic Structures, vol. 1, Oxford University Press.
- CINQUE, GUGLIELMO, 2006. Restructuring and Functional Heads, Oxford University Press.
- CORMACK, ANNABEL, 1999. 'Without specifiers', in David Adger et al. (eds), 46-68.
- COVENEY, AIDAN, 2003. 'Le redoublement du sujet en français parlé: une approche variationniste', in Anita Berit Hansen and Maj-Brit Mosegaard Hansen (eds.), 111–143.
- CYRILLE-THOMAS, ODILE, 2002. The Syntax of Fronting in French and Guadeloupe Creole. Doctoral dissertation, University of Salford.
- DE CAT, CÉCILE, 2002. French Dislocation. Doctoral dissertation, University of York.
- DEGRAFF, MICHEL, 1993. 'A riddle on negation in Haitian', Probus 5, 63-93.
- DUFFIELD, NIGEL, 1999. 'Adjectival modifiers and the specifier-adjunct distinction', in David Adger et al. (eds), 126–145.

- EMONDS, JOSEPH, 1978. 'The verbal complex V'-V in French', Linguistic Inquiry 9, 151-175.
- HAEGEMAN, LILIANE, 1995. The Syntax of Negation, Cambridge University Press.
- HAEGEMAN, LILIANE (ed.), 1997. *Elements of Grammar: A Handbook of Generative Syntax*, Dordrecht: Kluwer.
- HAEGEMAN, LILIANE & ZANUTTINI, RAFFAELLA, 1991. 'Negative heads and the Neg Criterion', *Linguistic Review* 8, 233–251.
- HANSEN, ANITA BERIT & MOSEGAARD HANSEN, MAJ BRIT (eds.), 2003. Structures linguistiques et interactionnelles dans le français parlé. Actes du Colloque international, Université de Copenhague du 22 au 23 juin 2001. Copenhagen: Museum Tusculanum Press.
- HOEKSTRA, ERIC, 1991. *Licensing Conditions on Phrase Structure*. Doctoral dissertation, University of Groningen. Distributed as *Groningen Dissertations in Linguistics*, 2.
- HULK, AAFKE & POLLOCK, JEAN-YVES (eds.), 2001. Subject Inversion in Romance and the Theory of Universal Grammar, Oxford University Press.
- GOOSSE ANDRÉ, 2000. 'Evolution de la syntaxe', in Gérald Antoine & Bernard Cerquiglini (eds.), 107–

 145
- Jackendoff, Ray, 1977. X-bar Syntax: A Study of Phrase Structure. Cambridge, Mass.: MIT Press.
- Jacobs, Roderick & Rosenbaum, Peter (eds.), 1970. Readings in English Transformational Grammar, Waltham, MA: Ginn.
- JESPERSEN, OTTO, 1924. The Philosophy of Grammar, London: Allen and Unwin.
- Jones, Michael Allan, 1999. 'Subject-clitic inversion and inflectional hierarchies', *Journal of French Language Studies* 9, 181–209.
- KOOPMAN, HILDA J., 2000a. The Syntax of Specifiers and Heads: The Collected Essays of Hilda J. Koopman, London: Routledge.
- KOOPMAN, HILDA J., 2000b. 'The spec-head configuration', in Hilda Koopman (2000a), 331–365.
- LUCAS, CHRISTOPHER, 2007. 'Jespersen's Cycle in Arabic and Berber', this volume.
- MARTIN, ROBERT, MICHAELS, DAVID & URIAGEREKA, JUAN (eds.), 2000. Step by Step: Essays in

 Minimalist Syntax in Honor of Howard Lasnik, Cambridge, MA: MIT Press.
- MORITZ, Luc & VALOIS, DANIEL, 1994. 'Pied-piping and specifier-head agreement', *Linguistic Inquiry* 25, 667–707.

- NADASDI, TERRY, 1995. 'Subject NP doubling, matching and minority French', *Language Variation and Change* 7, 1–14.
- POLLETTO, CECILIA, 2000. The Higher Functional Field, Oxford University Press.
- Pollock, Jean-Yves, 1989. 'Verb movement, universal grammar and the structure of IP', *Linguistic Inquiry* 20, 365–424.
- QUEFFÉLEC, AMBROISE, 2000. 'Le français au Maghreb', in Gérald Antoine & Bernard Cerquiglini (eds.), 765–796.
- Rizzi, Luigi, 1997. 'The fine structure of the left periphery', in Liliane Haegeman (ed), 281–337.

 Reprinted 1998 in Paola Benincà & Giampaolo Salvi (eds.), 112–158.
- RIZZI, LUIGI (ed.), 2004. The Structure of CP and IP: The Cartography of Syntactic Structures, vol. 2, Oxford University Press.
- RIZZI, LUIGI & ROBERTS, IAN, 1989. 'Complex inversion in French', Probus 1, 1-30.
- ROBERGE, YVES, 1990. The Syntactic Recoverability of Null Arguments, Montreal: McGill-Queen's University Press.
- ROBERTS, IAN, 2007. Diachronic Syntax, Oxford University Press.
- ROWLETT, PAUL, 1998. Sentential Negation in French, Oxford University Press.
- ROWLETT, PAUL, 2002. 'On non-overt specifiers', Working Papers in Language & Linguistics, European Studies Research Institute, University of Salford.
- ROWLETT, PAUL, 2007a. The Syntax of French, Cambridge University Press.
- ROWLETT, PAUL, 2007b. 'Cinque's functional verbs in French', Language Sciences 29.
- SCHAPANSKY, NATHALIE, 2002. 'The syntax of negation in French: contrariety versus contradiction', Lingua 112, 793–826.
- TARALDSEN, KNUT TARALD, 2001. 'Subject extraction, the distribution of expletives and stylistic inversion', in Aafke Hulk & Jean-Yves Pollock (eds.), 163–182.
- WILLIS, DAVID, 2004. 'A minimalist approach to Jespersen's Cycle in Welsh'. Ms., University of Cambridge. To appear in Anderson and Jonas (eds.).
- ZANUTTINI, RAFFAELLA, 2001. 'Sentential negation', in Mark Baltin & Chris Collins (eds.), 511–535.
- ZEIJLSTRA, HEDDA, 2004. Sentential Negation and Negative Concord. Doctoral dissertation, University of Amsterdam.

ZWICKY, ARNOLD M. & PULLUM, GEOFFREY K., 1983. 'Cliticization vs. inflection: English n't Language 59, 502–513.

2007-08 TPhS spec-head article.wpd

1.

2.

4. 5.

6.

7.

8.

9.

10.

11.

12. 13.

14.

15.

16. 17.

18.

19. 20.

21.

22. 23.

24. 25.

26. 27.

28. 29.

30.

31. 32.

33. 34.

35.

36. 37.

38.

39. 40.

41.

42. 43.

44. 45.