

Agreement, Shells and Focus

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This paper reconsiders the development and licensing of agreement as a syntactic projection and argues for a productive developmental relation between agreement and the category of focus. It is suggested that that focus projections are initially selected by a variety of functional heads with real semantic content. Over time however such selected focus frequently decays into a simple concord shell. When this occurs, the lower half of the shell is suggested to become a simple agreement projection parasitically licensed by the higher functional head which does have a genuine semantic value.

1. Introduction

In current Chomskian approaches to syntax, the status of agreement as a functional type projected in syntax has come to be rather controversial. On the one hand Chomsky (1995) argues that agreement has no particular semantic content and therefore should not project as a functional head. On the other hand, there is much morphological and syntactic evidence in favor of agreement projections, and their existence is still widely assumed in much ongoing work (e.g. Brody (1998), Kayne (1994), Cinque (1999)). Attempting to confront this general problem, the paper sets out to establish the suggestions in (1), arguing for a productive developmental relation between agreement and the category of focus:

- (1) a. Focus may actually occur in more than one syntactic position, contra assumptions implicit in much recent work such as Rizzi (1997).
- b. Focus may in fact be selected by a variety of functional heads with real semantic content.
- c. Over time the focus interpretation of a selected focus projection may decay and become lost. The decay of a focus projection then gives rise to a shell structure in which the lower half of the shell becomes simple agreement or concord and is parasitically licensed by the upper half of the shell, which does have a genuine semantic value.

The simple intuition which the paper attempts to establish and make use of is the observation that the repetition effect found in the doubling of morphological material frequently results in natural emphasis, and may be directly triggered by the need to encode focus. Such focus effects may however later undergo weakening and eventually result in just simple agreement with two elements relating to a single semantic value. In such an instance it is suggested that agreement as a functional projection then comes to be licensed in a shell structure parasitically in virtue of the genuine semantic content of the higher shell head. The view of agreement developed here argues that agreement projections do not occur as extended projections of lexical categories as commonly assumed, but are instead induced and legitimised in syntactic structure by higher functional heads. The paper also deals with issues of discontinuous dependencies and the relation of focus to the Universal Base Hypothesis.

2. French negative concord

The first of the patterns we present as support for the suggestions in (1) is the occurrence of negative concord in French, where two discrete morphemes *ne* and *pas* signal a single instance of negation as in (2):

- (2) Jean *ne* veut *pas* aller à l'école.
 Jean NEG want NEG go to the school
 'Jean doesn't want to go to school.'

When two elements are associated with a single semantic value in this kind of way, the question arises as to how this is actually realised in syntactic structure. Pollock (1989) analyses this instance of negative concord as in (3), with the element *pas* occurring in the Specifier of a NegP headed by *ne*, hence a single projection of negation with two discrete overt parts:

- (3)
- ```

 NegP
 / \
 Spec NegU
 | / \
 pas Neg0 VP
 |
 ne

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Such an analysis however faces the potentially serious criticism that the linear ordering of *pas* before *ne* is never attested anywhere in the overt syntax. Pollock suggests that the surface order of *ne* preceding *pas* is due to the fact that the Neg-head *ne* is a clitic and raises higher than *pas* when attached to a finite verb raising up to T<sup>0</sup>. However, even in non-finite clauses where there is no cliticisation of *ne* to the verb one still finds *ne* preceding *pas* as in (4). This may be taken to suggest that there should in fact be some other analysis relating *ne* to *pas* in the underlying syntax.

- (4) Ne pas y aller, c'est b...te.  
 NEG NEG there go it-is stupid  
 'Its stupid not to go there.'

With this aim in mind, we would now like to turn to a consideration of the historical development of negative concord in French and show how the well-documented diachronic patterns offer potentially valuable and insightful clues to the underlying synchronic syntax. The historical outline we now provide follows the observations of a wide range of researchers such as Gamillscheg (1957), Price (1971), Rickard (1983) and Schwegler (1988, 1990), all of whom agree on the basic pattern of development.

Originally in Old French prior to the occurrence of any negative concord forms, sentential negation was signalled simply with the element *ne* in isolation as in (5):

- (5) Il *ne* vout estre ses amis  
 he NEG want be his friends  
 'He does not want to be friends.'

Subsequent to this, a number of secondary elements came to be used together with *ne*, for example *mie* ‘crumb’, *gote* ‘drop’ and *point* ‘dot, point’. These all originated as nouns with clear descriptive content and are assumed to have been used as negative objects with different sets of semantically appropriate verbs. The element *pas* meaning ‘a pace’ or ‘a step’ was also among this object group and occurred naturally with verbs such as ‘walk’, ‘run’ as in (4):

- (4) N’irai un pas avant. (Chanson de Roland)  
 NEG-will.go a step forward  
 ‘I will not proceed.’

From a large number of such objects occurring with *ne*, Gamillscheg (1957) and others note that a small number of these generalised their use and began occurring with a wider range of verbs as non-literal objects, so that by the 16<sup>th</sup> century only the four elements *pas*, *point*, *mie* and *gote* continued to occur. Later on still in modern French only *pas* and *point* are now found. Essentially then modern French *pas* over time lost its original purely literal meaning of ‘step’ and came to be used as a fully general reinforcement of negation with verbs which have no connection with walking or running or actions involving ‘steps’ as potentially genuine objects.

In this development, we would like to highlight three important facts. The first of these is listed as property one. Originally transitive verbs which occurred with *ne* and *pas/mie/point* etc did not permit any additional direct object. However, during the course of the development, it became possible and normal for *pas/mie/point* to occur together with discrete overt direct objects in transitive sentences as in (5) where the verb *creindre* ‘to fear’ embeds the object *sa menace* ‘his threat’:

**PROPERTY ONE**

Sub V *pas/point/mie* (\*Object) → ✓Sub V *pas/point/mie* Object

- (5) Belin ne crient point sa menace. (Brut)  
 Belin NEG fears POINT his threat  
 ‘Belin does not fear his threat.’

The second development was that *pas*, *point* and *mie* underwent a significant re-positioning and began to occur in a non-canonical object position *preceding* the lexical verb in infinitive forms (6b), past participle forms (7) and where the lexical verb follows a modal (8), as indeed in modern French. Previously, *pas*, *point* and *mie* occurred in a regular object position following the lexical verb in infinitive and past participle forms.

**PROPERTY TWO**

*pas/point/mie* etc change position from canonical object position following non-finite lexical verbs to a position preceding such forms:

Sub *ne* (Aux) V<sub>-Fin</sub> *pas/point/mie* → Sub *ne* (Aux) *pas/point/mie* V<sub>-Fin</sub>

- (6) a. pour ne perdre **pas** → b. pour ne **pas** perdre  
 to NEG lose PAS to NEG PAS lose  
 ‘in order not to lose..’

(7) Je n'ai **pas** mangé  
I NEG have PAS eaten  
'I haven't eaten.'

(8) Je ne veux **pas** manger  
I NEG want PAS eat  
'I don't want to eat.'

Thirdly it is widely reported that the use of the second member of the negation pair was originally both optional, and specifically used for adding emphasis to the negation, focusing the negation in a way similar to English examples such as (9) where an object depicting a small amount is used to increase the emphatic value of the negation:

(9) I didn't drink a DROP!

### PROPERTY THREE

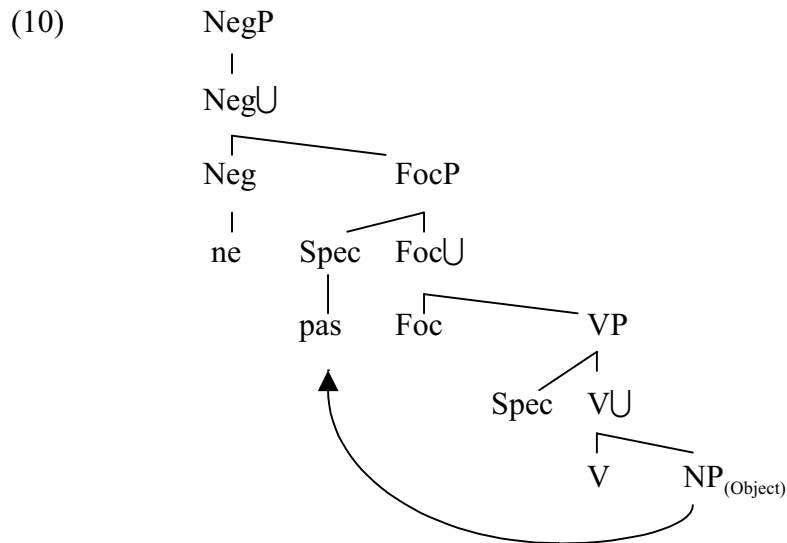
Use of *pas/point/mie* etc was originally optional and specifically used to add strong emphasis on the negation.

We suggest that these characteristics all point towards a single analysis. Property one notes that while *pas* and the other secondary elements were originally genuine syntactic objects of the verbs they occurred with, later on other NPs occurred as objects together with *pas*, *point* and *mie*, suggesting that the latter must have undergone some kind of reanalysis as purely functional morphemes base-generated in a position distinct from that of the object. Furthermore, whereas *pas*, *point* and *mie* etc originally used to inflect for number and/or case and occur with articles as in (4), these properties were lost during the course of their development, again suggesting a reanalysis from the status of nominal object to that of purely functional morpheme. Property two notes that there was also an important positional change, supporting the assumption that *pas* etc became base-generated in a functional position different from that of the object. Finally property three suggests that this functional position was associated with clear emphasis and focus on the negation in *ne*.

We would therefore like to suggest the following two steps in the initial development of two-part negation structures in French. We suggest that *ne* in Neg<sup>0</sup> in Old French began to select for an optional focus projection dominating its VP complement, and that elements such as *pas* were originally base-generated in object position and then raised to the specifier of the focus projection as in (10), possibly in order to identify the functional projection in the sense of Koopman (1996) via associating it with some overt material:<sup>1</sup>

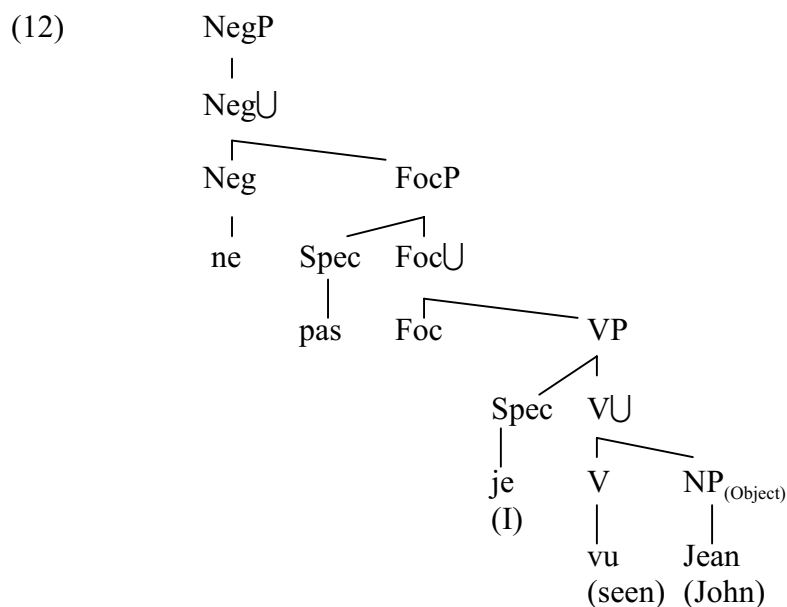
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<sup>1</sup> Concerning the selection of a secondary morpheme to encode focus here, we believe that there are probably three mechanisms that languages commonly make use of to signal focus – (i) the addition of stress to an element, (ii) positional change and the movement of an element to a certain focus position, and (iii) the addition of morphological material either in the form of a simple focus-marker being added to an element or the addition of a discrete secondary morpheme as here in French negation (and other constructions discussed later in the paper). Languages might also make use of a combination of these mechanisms. With French negation, we suggest that the third option and the addition of a secondary morpheme to signal focus may have been selected possibly because the first option of indicating focus via stress might have been unavailable due to *ne* being phonetically reduced and unable to carry stress. As the second option of movement to a focus position is also frequently linked with the stressing of a focused element, it is possible that *ne* could also not undergo movement to any higher focus position to



With the continued association of *pas*, *point* and *mie* with focus and negation we suggest that these elements were later reanalysed as occurring base-generated *directly* in the Spec of the focus-projection. Such reanalysis would have then allowed for the object position to be occupied by a genuine non-emphatic NP and resulted in forms with overt objects in addition to *pas/point/mie*, as in (12) corresponding to the NegP in (11):

(11) Je n'ai pas vu Jean  
 I NEG have PAS seen Jean  
 'I haven't seen Jean.'



Such an analysis models the observation that elements such as *pas* were originally just regular verbal objects and then later came to function ambiguously both as verbal

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signal emphatic negation. Consequently the third option of adding new material may well have been the most natural way for this focus to be encoded with *ne*.

objects and as emphatic reinforcers of negation, re-positioning themselves to the left of the non-finite lexical verbs as in (10). Later still, *pas* is argued to have undergone full reanalysis and grammaticalized in the higher position allowing for the object-of-verb position to be filled with new discrete objects.<sup>2 3</sup>

Concerning the later development of the *ne-pas* negation structure, while *pas* clearly originated as a marker of emphatic negation, it is well noted that over time the focus and emphatic force resulting from its use with *ne* underwent gradual weakening and eventually became lost so that in modern French there no longer is any emphatic interpretation resulting from the occurrence of *pas*. The use of *pas* also regularized to the extent that it became obligatory in simple negative sentences such as (11). This further stage of development where a focus structure decays into an instance of simple concord and agreement we will return to a little later. First however we would like to consider three other patterns.

### 3. Chinese Relative Clauses

The first of these is a related pattern and problem in the analysis of relative clauses in Chinese such as (13), where one finds the linear sequence of relative clause followed by the relativizing element *de* and then the relativized NP:

- (13) [wo mai]-de shu                      RC de N  
       I buy DE book  
       ‘the book I bought’

Historically it is commonly assumed that the relativizing element *de* here is derived from an earlier element *zhi*, which had a parallel distribution with *de*. This element *zhi* is itself known to have also functioned as a clear demonstrative as seen in (14):

- (14) zhi er chong you he zhi  
       these two worm again what know  
       ‘And what do these two worms know?’ (Zhuangzi 1.10)

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<sup>2</sup> Note that the fact that *pas* undergoes re-positioning and movement to a position distinct from the regular object position in the stage represented in (10) indicates that *pas* is involved in a genuine focus-movement strategy to a distinct focus position and *pas* does not just encode simple emphasis via stress as is apparently the case in English (9).

<sup>3</sup> Note that while the pattern in French has been observed in many Romance languages, and varieties of north Italian, Catalan and other varieties have all made use of emphatic reinforcers of negation which originated as clear verbal objects, an interesting variation of this same basic pattern has been noted by Schwegler (1990) in Brazilian Portuguese and Choco Spanish. In these varieties of Romance the morpheme used to signal emphatic negation is not an object of the verb but a simple repetition of the original negative morpheme itself in a second lower position as seen in (i) and (ii). Such patterns therefore show that morphemes other than objects may arguably be used to identify and activate the hypothesized negative-focus projection selected and induced by the Neg<sup>0</sup> head:

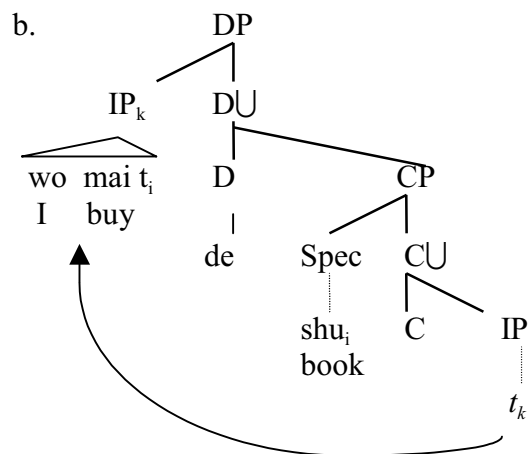
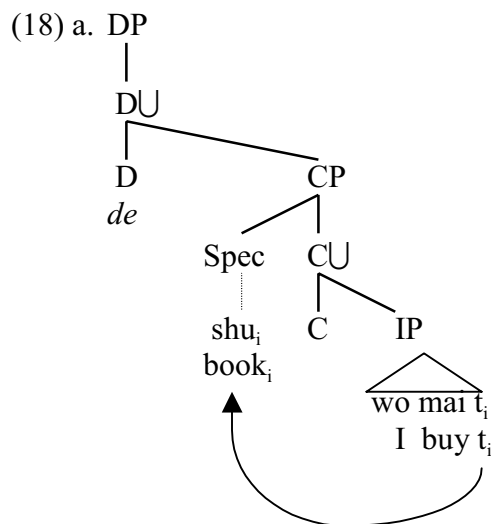
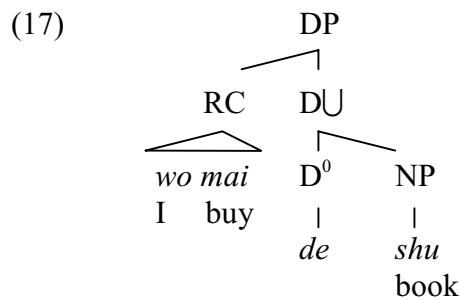
- (i) N̄FO vou N̄FO                      Brazilian Portuguese  
       NEG go NEG  
       ‘I’m NOT going!’
- (ii) Yo NO s̄ NO                      Choc Spanish  
       I NEG know NEG  
       ‘I DON’T know!’ (Montes Giraldo (1974))

Simpson (1998) and Wu (in preparation) therefore suggest that *de* is a determiner-type element in  $D^0$  derived from the earlier demonstrative source and now largely bleached of its original definiteness value. Typologically this also fits well with the observation that it is common for determiners or demonstratives to be involved in the formation of relative clauses, as noted in various examples such as (15) and (16) in Keenan (1985) and Williamson (1987):

(15) Mary owiza wa kage ki he ophewathu Lakhota  
 Mary quilt a make the that I-buy  
 ‘Mary bought that quilt I made.’ (Williamson 1987)

(16) tanay awa: awu:w-pu-l ciyawx Diegueno  
 yesterday house I-saw-the-in I-will-sing  
 ‘I will sing in the house I saw yesterday.’ (Keenan 1985)

Taking *de* to be in  $D^0$ , this might perhaps suggest an analysis of Chinese relative clauses such as (17), an adaptation of structures proposed in both Murasugi (1997) and Ouhalla (1999) for similar relative clause patterns in Japanese and Afro-asiatic languages. Simpson (1998) and Wu (in preparation) in fact both argue for the alternative analysis in (18), following ideas in Vergnaud (1985) and Kayne (1994):



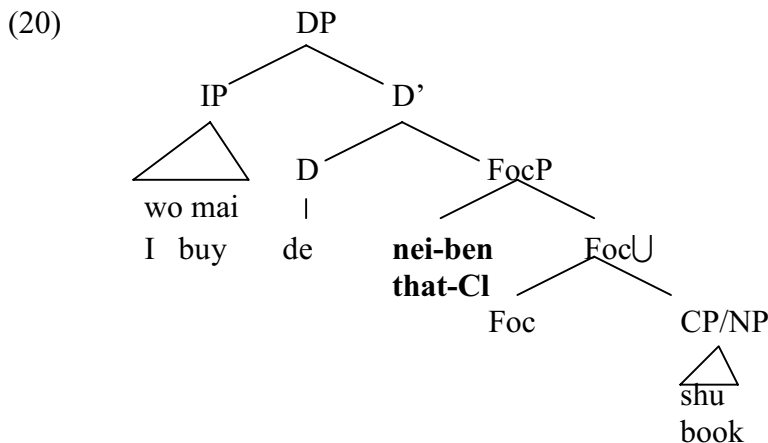
Either analysis however then encounters the problem that demonstratives may co-occur with *de* as in (19):

- (19) [wo mai]-de **nei-ben** shu  
 I buy DE that-CL book  
 ‘that book I bought’

RC de Dem NP

Taking *de* to be in  $D^0$ , one is forced to assume that the demonstrative in such cases is therefore base-generated in some lower position. In Simpson (1998) the precise identity of this position is largely ignored and consequently remains a problem as there clearly should be some explanation of how it is that a demonstrative can come to be base-generated in a lower DP-internal position.

The solution we believe is essentially the same as with French negation, and importantly it can be argued that there are both agreement and focus properties associated with such structures as in French. First of all, if *de* is indeed derived from a demonstrative and occurs in  $D^0$ , when it co-occurs with a lower demonstrative as in (19) it can be suggested that a form of *definiteness agreement* exists between the demonstrative and the determiner *de* in  $D^0$  (as indeed argued in Simpson (1998)). Secondly, the addition of the demonstrative also adds a clear emphatic value functioning to reinforce the definiteness of the construction in a way that can be compared with the use of negative reinforcers in Old French. We would therefore like to suggest that the use of demonstratives to reinforce a second element in  $D^0$  syntactically results from the  $D^0$  optionally selecting for a focus projection where the demonstrative is base-generated, as in (20) below:<sup>4</sup>



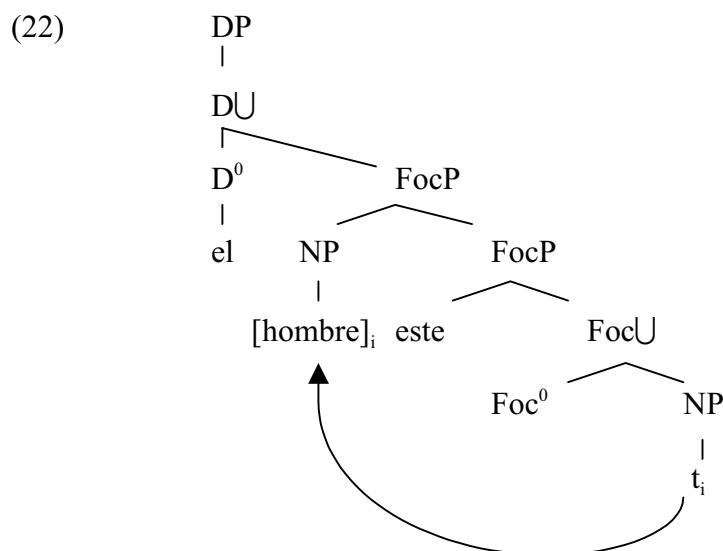
Very similar phenomena are in fact also present in a number of other languages, and definiteness agreement and the parallel co-occurrence of determiners and demonstratives are found in Spanish, Hebrew, Greek, and Romanian among other languages. As seen in (21) from Spanish, a demonstrative tolerates co-occurrence with a definite determiner, but not an indefinite determiner and hence there is a requirement of definiteness agreement between the  $D^0$  and a lower demonstrative:

- (21) el/\*un hombre este  
 the/a man this  
 ‘this man’

<sup>4</sup> The structure in (20) is essentially neutral with regard to whether the underlying structure is (17) or (18), hence the labelling of the constituent dominating *shu* ‘book’ as either CP or NP. Note that we also follow Giusti (1997) here and assume that certain demonstrative units may be base-generated in specifier positions.

The optional occurrence of a demonstrative is also well-noted to add a clear emphasis and focus in the DP, as pointed out in Silva Villar & Rexach (forthcoming) and other works. Consequently, assuming the determiner to be in D<sup>0</sup>, such structures raise the same problem as in Chinese concerning where it might be assumed that the demonstrative is base-generated.

In the Chinese cases it is found that the D<sup>0</sup> element *de* is regularly adjacent to the demonstrative and that when the demonstrative occurs following the relative clause nothing may intervene between *de* and the demonstrative. It is consequently fairly straightforward to argue that the demonstrative occurs in a projection immediately selected by the D<sup>0</sup>, the hypothesized focus projection. In Spanish there is much more freedom in placement of elements around a lower demonstrative and so underlying adjacency of the demonstrative and the determiner in D<sup>0</sup> is harder to argue for. Nevertheless we would like to suggest that the D<sup>0</sup> in Spanish also selects for a focus phrase as in Chinese and that the underlying adjacency of D<sup>0</sup> and the focus phrase is later distorted by other applications of movement, for example raising of the NP containing the head-noun to left-adjoin to the FocP as perhaps in (22).



Alternative suggestions that the demonstrative may be base-generated lower down in the DP offer no explanation of what could possibly cause a demonstrative to begin to occur in such a position. In the present account the focus phrase is however directly selected and induced by the D<sup>0</sup> and there is also necessary definiteness agreement between the focused demonstrative and the determiner in D<sup>0</sup>. Similar to the case of negative concord in French, in Spanish and in Chinese one furthermore finds the significant pattern that a higher and historically older head selects for a new lower focus as a reinforcement of the semantic value of the higher head, as noted in (23):

(23)

|                   |         |                  |                                                     |
|-------------------|---------|------------------|-----------------------------------------------------|
| <b>older head</b> | selects | <b>new focus</b> | as reinforcement and emphasis of its semantic value |
| <i>ne</i>         |         | <i>pas</i>       |                                                     |
| <i>de</i>         |         | <i>nei</i>       |                                                     |
| <i>el</i>         |         | <i>este</i>      |                                                     |

Historically it is well-known that determiners develop from demonstratives (see e.g. Vincent (1997)) and so this is the pattern one would expect, with older determiner elements selecting for newer demonstratives in lower positions to the right of  $D^0$ . As anticipated, what one does not seem to find is the reverse patterning and a *neutral* order of demonstrative – determiner:

- (24) \*este hombre el  
 Dem man Det

#### 4. Chinese Aspect

The next pattern we consider here relates to Aspect. In Mandarin Chinese progressive aspect is commonly expressed with the element *zai* as in (25):

- (25) ta zai kan-shu  
 he ASP look book  
 ‘He is reading.’

However, in addition to *zai* one also optionally finds a second element which is commonly taken to be part of the expression of progressive aspect in sentence-final position - the morpheme *ne*.<sup>5</sup> This use of *ne* with *zai* consequently results in linear sequences with the VP occurring between *zai* and *ne* as seen in (26):

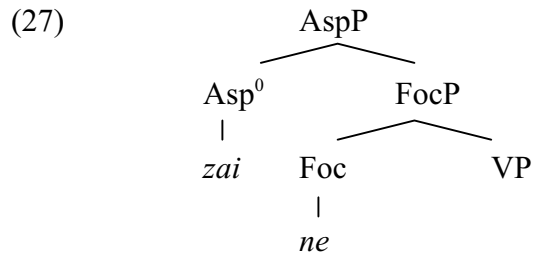
- (26) ta zai kan-shu ne  
 he ASP look book ASP  
 ‘He is reading.’

Such structures again clearly present the problem of discontinuous dependencies, and here it appears that the single category of progressive aspect is encoded in two different locations in the clause.

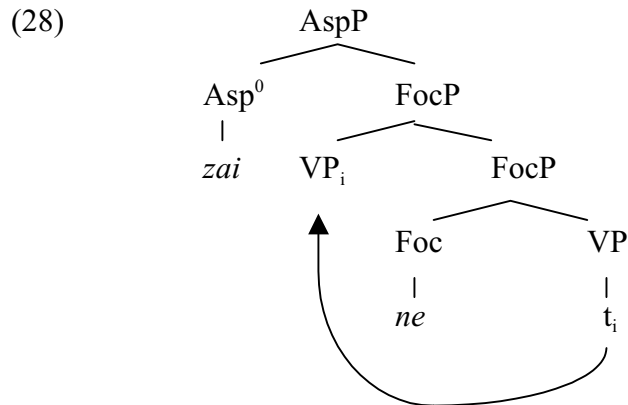
Importantly now it can be noted that similar to *pas* in earlier forms of French and the use of demonstratives with determiners, the second element *ne* in progressive aspect sentences in Chinese is used to specifically introduce a clear emphasis and focus into the construction it occurs in, with *ne* this resulting in focus on the aspectual interpretation of the construction. Consequently once again one finds that a doubling of morphological information and the co-occurrence of two morphemes associated with a single basic semantic value - progressive aspect – results in and is used to encode a particularly emphatic interpretation of that semantic value. Therefore as with French *ne..pas* and the doubling of determiners with demonstratives we would like to suggest a similar conclusion. We suggest that the higher morpheme *zai* occurs in an aspectual head and selects for a focus phrase headed by the emphatic head *ne*, this transparently dominating the VP complement of Aspect as in the underlying structure in (27):

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<sup>5</sup> Note that there is another sentence-final particle pronounced *ne* in Chinese, occurring optionally in *wh*-questions. As this element is in complementary distribution with the yes/no question particle *ma*, we assume that it is a  $C^0$  head specified as *+wh* interrogative and therefore a different element from aspectual *ne*.



Concerning the attested surface order, we speculate here that this may result from movement of the VP complement of *ne* to adjoin to the focus phrase as in (28):



As some support here, we would like to note that in the Taiwanese variety of Chinese there is strong evidence from tone sandhi patterns that heavy clausal/predicate complements do indeed raise to the left of particle-type functional heads which select them as schematized in (29):

$$(29) \text{Prt } [_{\text{IP}} ] \rightarrow [_{\text{IP}} ]_i \text{Prt } t_i$$

This movement is discussed in detail in Simpson & Wu (1999) and may have a number of explanations. One possibility is that it is triggered by the encliticisation needs of grammaticalized and phonologically reduced elements (hence the particle attracts its complement to the left to encliticize to). A second potential explanation is that certain particles are interpreted as instantiating the focus of a sentence; this may in turn cause a following complement to undergo a defocusing movement to the left of the particle, similar to cases of p-movement discussed in Zubizarreta (1998). Both such explanations are available with aspectual *ne* which is grammaticalized and phonologically reduced and also the clear focus of sentences it occurs in. We would therefore like to assume that the VP in sentences with *ne* is indeed raised and defocused as in (28), and that the interpretation of focused progressive aspect results from the combination of two projections in an instance of aspectual concord very similar to the cases of definiteness agreement and negative concord already considered.

## 5. Modals and focus – the case of Thai *dai*

A final relevant example we would like to refer to here is the case of a modal pattern in Thai and certain other southeast Asian languages discussed in depth in Simpson

(1999). There it is noted that Thai, Cambodian, and Vietnamese are all highly regular S-Aux-V-O languages with one striking exception. In all these languages one finds that a modal with the interpretation of ‘can/be able to’ occurs in predicate final position, frequently as in (31) schematized in (30a), or alternatively following the verb and preceding the object as in (32) schematized in (30b):

- (30) a. Subject V Object Aux<sub>[CAN]</sub>  
 b. Subject V Aux<sub>[CAN]</sub> Object

(31) khaw phuut phasaa Thai dai Thai  
 he speak language Thai can  
 ‘He can speak Thai.’

(32) khaw phuut dai laai phasaa Thai  
 he speak can many language  
 ‘He can speak many languages.’

Significantly the S-V-Aux-O (b) pattern occurs only when the object is strongly focused. It is therefore argued that this modal introduces a focus projection into the structure and the derivation of examples such as (32) involves two movements – focus movement of the object to the focus projection selected by the modal to its right, and VP defocusing, raising the VP remnant to a position preceding the modal as schematized linearly in (33):

- (33) (a) S Aux [<sub>VP</sub> V Ob ] underlying structure  
 object-focusing →  
 (b) S Aux [<sub>FocP</sub> Ob<sub>i</sub> [<sub>VP</sub> V t<sub>i</sub> ]]  
 VP remnant movement →  
 (c) S [<sub>VP</sub> V t<sub>i</sub> ]<sub>k</sub> Aux [<sub>FocP</sub> Ob<sub>i</sub> t<sub>k</sub> ]

The VP-raising defocusing movement accounts for the very odd and exceptional position of this one auxiliary verb in predicate and sometimes sentence-final position, and the focus-movement accounts for the positioning of a heavily focused object following the modal. As there is otherwise no object-shift available in Thai and the other languages with this pattern, it is basically only possible to account for the object positioning in (32) if one does assume movement to a specific focus position selected and induced by the modal. Many other empirical and diachronic arguments also support such an analysis, as noted in Simpson (1997).

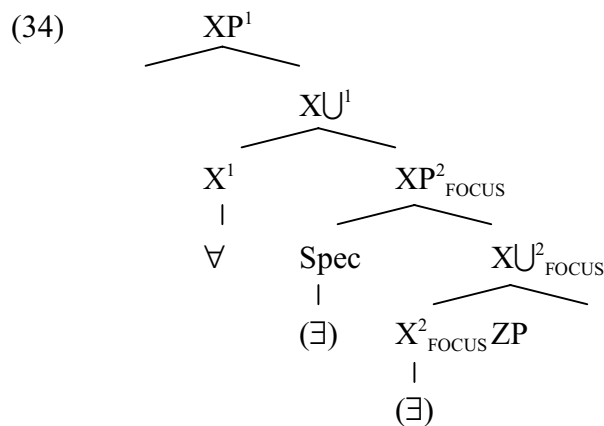
## 6. Focus and Agreement

Considering all the patterns observed here, what one consistently finds is that a range of functional categories can all be argued to induce a focus projection into the structure selecting the focus projection as their complement. This has been suggested to be possible with at least the heads  $D^0$ ,  $Neg^0$ ,  $Asp^0$  and also  $Mood^0$ . When the morpheme which overtly identifies the focus projection is semi-invariant as with French *pas*, Chinese and Spanish demonstratives, and Chinese aspectual *ne*, this also results in an instance of concord where two morphemes such as *ne* and *pas*, or *zai* and *ne* are associated with the instantiation of a single basic semantic value – negation,

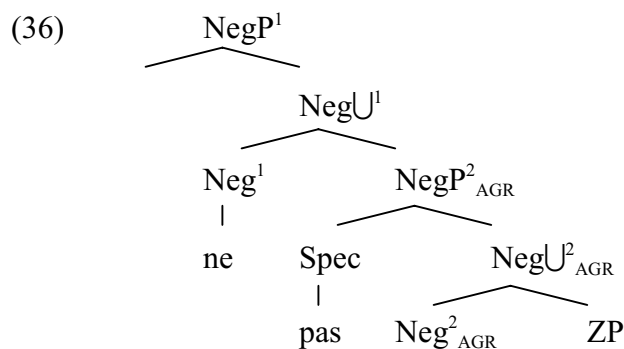
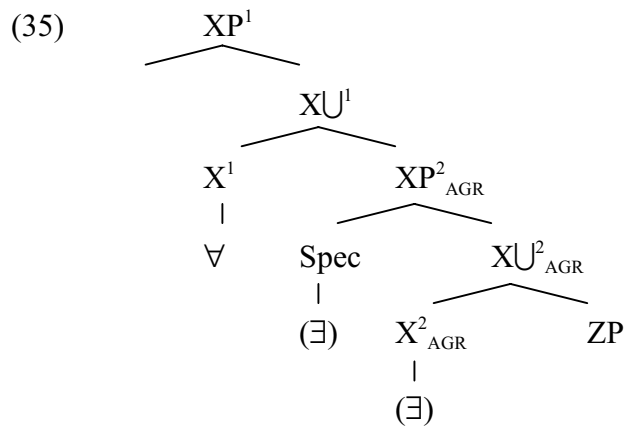
aspect etc. It should furthermore be noted that the morphemes used as emphatic re-inforcements of negation, aspect and definiteness considered here are not used as markers of focus in other constructions and that these elements are therefore each understood as signalling the focus of a particular semantic value - negation, progressive aspect etc. In this sense then they result in what can be called “focus-concord”, an interpretation of focus associated with a particular head, and the association of two overt morphemes with a single semantic value when a focus is induced.

What is now significant to note is the fact that this focus-concord may over time develop into *simple concord* and lose all its original association with focus. This is particularly clear in the case of French negation where the original focus interpretation resulting from the optional use of the emphatic re-inforcer *pas* has now been lost, giving rise to simple negative concord between *ne* and *pas*. Such a change may indeed be quite natural, and it has often been noted that special syntactic forms originally used for a particular stylistic effect may over time lose their stylistic force and simply become regularized in the syntax with frequent use. In the case of the focus-concord types highlighted here, we therefore suggest that this over time may commonly reduce into simple concord and the occurrence of simple agreement in syntax, with a doubling of morphemes associated with a single semantic value.

Quite generally we suggest the following stages of development. In step one of the process a higher functional head X selects for a new focus projection (transparently) dominating its regular complement ZP, and the specifier or the head of the new projection is instantiated by some overt morpheme  $\hat{\quad}$  identifying this focus, as in (34) below:



Later on in step two, continued use of the focus construction results in a loss of the emphatic interpretation and the morphological doubling becomes regularized as an instance of simple concord/agreement. This then evolves into a *shell* structure consisting in two functional morphemes associated with the single semantic value of X and no additional focus, and the element which instantiates the lower part of the shell XP<sup>2</sup> comes to simply ‘agree’ with the value of X as an instance of concord, as in (35). Here X might correspond to Neg in formal modern French,  $\forall$  to *ne* and  $\exists$  to *pas* in SpecNeg<sub>AGR</sub> as shown in (36):



In this second stage when the focus interpretation has been lost giving rise to a simple agreement projection and the occurrence of Neg-, Aspect- and D-shells, we suggest that the agreement projection lower half of the shell is licensed in the shell *parasitically* in virtue of instantiating the same value as its selecting head X, which does have a genuine semantic interpretation.<sup>6</sup>

Following this, the process may continue on in two further steps. When the focus-concord morpheme loses its focus value and develops into a marker of simple concord, because of the semantic redundancy of the doubling, the original instantiation of the higher head X may semantically weaken further and develop into an expletive element. The result of this is that the historically newer instantiation of the lower part of the shell then comes to be interpreted as the primary encoding of the original semantic value of X. This is clearly seen in French negation structures where *pas* is commonly taken to be the element signalling negation and *ne* has been referred to as an expletive element, for example in works such as Cornillon (1998). It is also true in Chinese relative clauses where the new demonstrative is a far stronger marker of definiteness than the older bleached demonstrative-determiner *de* which no longer seems to signal any definiteness and therefore can be considered expletive-like. Vergnaud & Zubizarreta (1992) also refer to determiners in Romance as having potential expletive functions and one can suggest that the determiner in the Spanish cases where a demonstrative and a determiner co-occur is indeed expletive-like and a place-filler for the D-position, with the primary definiteness-value being encoded in the demonstrative. Certainly if the D-position is not filled by the determiner, the

<sup>6</sup> The structure in (36) suggested for formal modern French straightforwardly captures the general ordering property of *ne* and *pas* that *ne* always precedes *pas*, not only in tensed clauses but also in non-finite clauses where *ne* clearly does not cliticize to the verb. This was noted to be a problem for Pollock's single projection analysis of *ne-pas* forms in (3) but is quite naturally accounted for in a dual Neg-shell approach to double negation.

demonstrative is forced to occupy this position rather than any lower position, in a way which resembles other expletive-associate pairs, as in (37):<sup>7</sup>

- (37) a. el hombre este  
the man this  
'this man'  
b. \*hombre este  
c. este hombre

Finally in step four of the developmental process, the higher expletive head may actually disappear and the overt morpheme in XP<sup>2</sup> comes to be the sole instantiation of the functional type associated with the XP shell. This is now occurring in modern colloquial French where *ne* is disappearing from negation structures and it is common for the only indication of negation to be the presence of *pas* as seen in (38) below:

- (38) Je veux pas aller  
I want NEG go  
'I don't want to go.'

The disappearance of the higher head is also attested in the Chinese aspectual structures considered. Whereas progressive aspect is frequently signalled by the pair *zai...ne*, for many speakers it is now also possible for the use of the simple second element *ne* to indicate progressive aspect, as in (39):

- (39) ta kan shu ne  
he look book ASP  
'He is reading.'

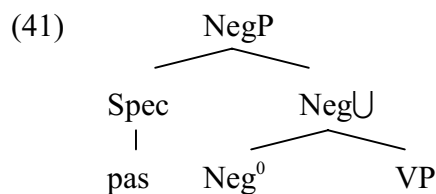
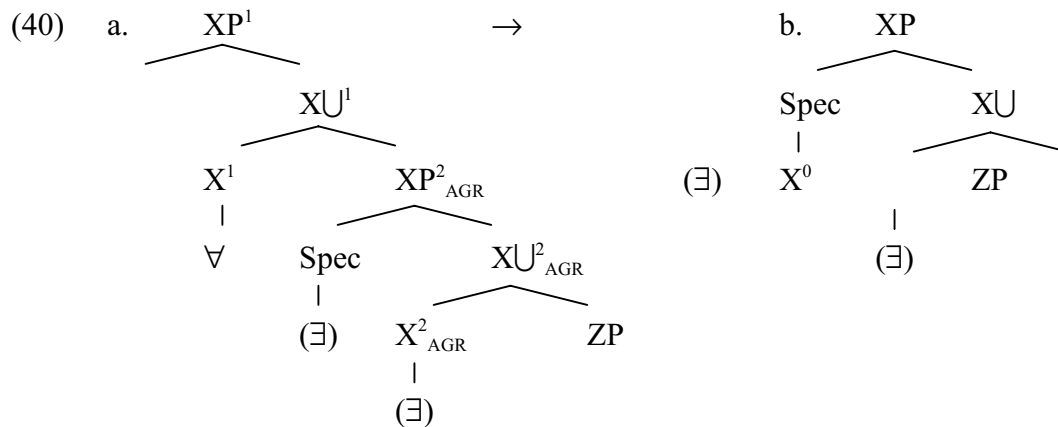
And in Spanish if an overt definite determiner does not occur in D<sup>0</sup> it is also clearly possible for a demonstrative to occur in this position as in (37c) above.

We would now like to suggest that without this overt morphological evidence for the higher head, the shell structure significantly becomes re-analysed as a single collapsed functional projection, and the XP shell reduces to a new simplex functional projection XP, phonologically identified by the newer element  $\exists$  from the lower half of the shell encoding the original semantic value of X. (40a) consequently simplifies to (40b), and (41) represents modern colloquial French where *pas* is commonly the only overt instantiation of negation:

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<sup>7</sup> The essential process of decay into expletive elements described here is also observed in Greenberg (1978) where it is noted that demonstratives commonly decay into determiners and that in a wide range of African languages such determiners further decay into markers of simple agreement. Greenberg also points out that the decay of demonstratives into determiners and then into expletive-like agreement elements is commonly accompanied by the renewal of clear indicators of definiteness in the creation of new demonstratives. Consequently expletive determiner – demonstrative pairings might seem to be rather widespread in language development.

(i) demonstratives → determiners → expletive determiners/agreement morphemes



Step four in the process therefore brings the cycle full circle and results in a return to the state in which a single overt morpheme instantiates a single functional projection. Critically however a change has occurred in the physical instantiation of the projection as a newer element has come to be sequentially re-interpreted as representing the original semantic value of the projection, and the process of change has involved intermediate stages in which first focus-concord and then semantically redundant simple concord are developed.<sup>8</sup>

Viewed as a whole, we suggest that the entire cyclic process of change allows one to make natural sense of how it is that certain agreement phenomena may actually arise and be syntactically licensed, with focus structures selected by functional heads reducing into dependent concord projections, and the doubling of morphology naturally used to signal focus later becoming simple agreement. Importantly it should be noted that the proposals here do not attempt to *eliminate* agreement as being potentially present in syntactic structure. Instead we have tried to suggest a slightly different perception of agreement projections in two basic ways. First of all it has been argued that such projections are not located randomly in the clause but are instead induced by specific functional heads with genuine semantic content. Secondly it has been suggested that the necessary dependency of an agreement-type projection on a higher selecting head effectively licenses this in the structure as part of a single complex shell projection having a single semantic value.

<sup>8</sup> The reduction of the shell structure into a single XP may arguably also result where both the overt elements collapse into a single new form. In Latin, for example (see Schwegler 1990), the negative head *ne* was originally frequently reinforced by emphatic doubling with the secondary element *oenum* (lit. ‘one (thing)’) as in (i) below. Later *ne* and *oenum* collapsed into the newer simplex form *non*:

(i) *ne oenum dico*  
 NEG one say.1SG  
 ‘I didn’t say one [thing]!’

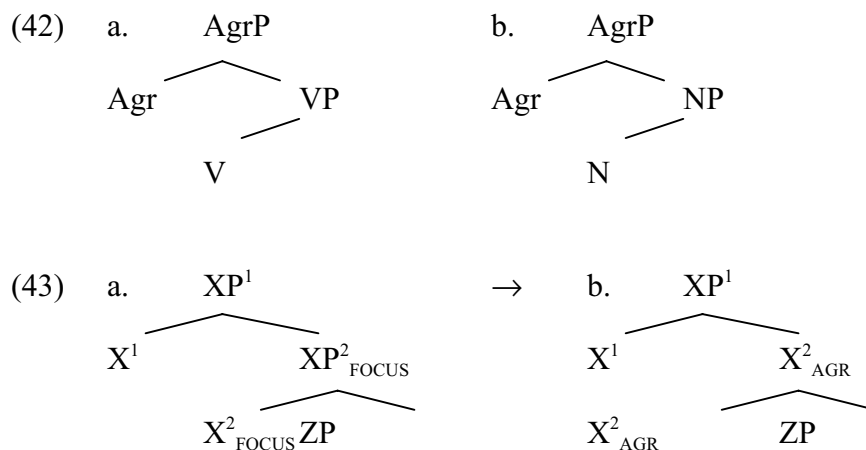
(ii) *ne oenum*  $\rightarrow$  *non*

Following this, Schwegler (1990:153) reports that *non* also came to select for its own new emphatic reinforcers of negation and so the cycle continued on through a second parallel sequence.

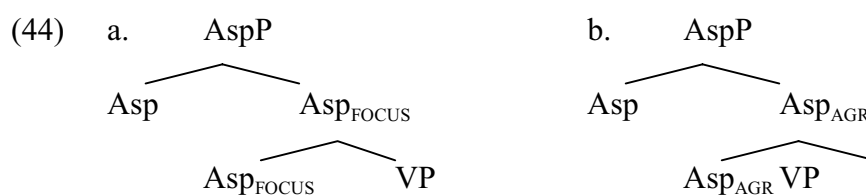
Such suggestions now raise a number of further important questions about the process argued for. In section 7 we therefore now turn to consider certain of the consequences of the view of agreement which has been developed.

## 7. Consequences and further issues

A first point we would like to highlight here is that the structural view of agreement suggested here is rather different from more standard characterisations of agreement and in fact opposite from common assumptions in a rather clear way. It is regularly assumed that agreement projections are parts of structure projected by other lower lexical projections. Lexical projections are therefore taken to structurally induce higher agreement projections from below, as for example in (42). In the proposals made here however, it is suggested that agreement projections are essentially induced from above due to the original *selection* of a focus projection by a higher *functional* head as in (43a). When the original focus interpretation undergoes decay, an agreement projection is then effectively licensed and induced by the higher functional head in the shell, as in (43b):



The present approach to agreement consequently differs rather significantly from more standard views in assuming that agreement projections may be induced in syntactic structure by higher functional heads rather than lower lexical projections. In such a view the apparent occurrence of an agreement projection above a lexical projection is essentially just a by-product of the way that the original focus projection is selected. For example, if the selecting functional head is an aspectual head which otherwise directly selects a lexical VP complement, when a focus projection is induced between the Asp<sup>0</sup> and the VP as in (44a) and decays into simple agreement, the result will be that an agreement-type projection will appear to occur induced above the VP. In fact, if the proposals here are correct it is the higher functional head which is responsible for the location and occurrence of the agreement-type projection and not the lower lexical projection:



We would like to suggest that this may actually be a more natural way to think about how new projections may be induced into structure and that whereas selection by a head is a clear and well-established syntactic relation, it may be more difficult to characterise and understand the syntactic relation which would permit a VP to induce and project an agreement projection in a position dominating it, i.e. the VP cannot be suggested to select for the AgrP in any syntactic or regularly structural way. In standard approaches, one either has to admit the occurrence of agreement projections as simple theoretical primitives in syntactic structure, being automatically projected above lexical projections, or assume the converse, that it is agreement heads which select for lexical projections. The latter view faces the criticism that a head with no real semantic content is licensed to occur in structure and select a lexical complement (in contrast with the present proposal where a lower lexical complement is essentially selected by the whole complex shell which the agreement projection is part of and which does have a genuine semantic value). Such a view is also not able to account for how agreement systems seem to regularly develop and then later disappear; if an agreement projection comes into existence in a structure where agreement previously did not occur, it is not easy to understand how this could happen if the critical syntactic relation is that the agreement head itself selects the lower lexical projection. The alternative view that agreement projections are simple primitives associated with every lexical projection is also open to certain criticism and the objection that it is not so empirically obvious that all lexical projections necessarily do project agreement phrases. Quite possibly if there is no overt material ever present to identify such hypothetical projections they may arguably not in fact be present in the syntactic structure.

A second important general question is whether and how the account developed here might be extended to capture other common agreement phenomena, such as that between subject DPs and verbs, and adjectival agreement within DPs. Related to this is also the issue of whether all apparent agreement phenomena are in fact uniform or not, and whether Spec-head agreement between the components of a single projection really is of the same type as the agreement which is found between elements located in two different adjacent projections such as the case agreement which may obtain between a determiner and a following adjective in Germanic-type languages. Thirdly there is the issue of whether *affixal* agreement really is the same as the concord found with free-standing independent morphemes. Here in this paper we have concentrated on agreement between relatively free morphemes rather than affixes as the former are generally historically younger and it is therefore easier to uncover how and why they may have come into existence as agreement morphemes. Consequently there are many important questions still to be answered. Nevertheless, we confidently believe that a consideration of the developmental cycle argued for here may provide a useful new way of thinking about these old problems and may also possibly lead to rather different and potentially interesting answers. Presently we will show that this is indeed the case with subject-verb agreement, and that a re-consideration of subject-verb agreement from the viewpoint suggested here results in an analysis which interestingly converges on recent ideas about the syntax of clitics proposed in Sportiche (1992). The brief re-consideration of verbal agreement will also show in a positive way that it does seem possible to extend the basic approach to other more common agreement phenomena and also to the occurrence of affixal agreement, two of the questions raised immediately above.

Before we do this, we would first briefly like to point out that there are indeed other simple cases where focus has been noted to be involved in the development of an agreement system, further suggesting that the focus-agreement connection argued for is indeed a valid one.

The first of two additional cases we can mention here is the development of possessor agreement in Mongolian as described in Comrie (1980). In modern Mongolian one finds forms such as (45) where the possessed noun agrees with the possessor:

- (45) a.   min\_ m`re-m  
          my horse-1sg/my  
          ‘my horse’
- b.   min\_ m`re-min\_  
              my horse-my  
              ‘my horse’

In all dialects of Mongolian the element following the head noun is derived from a form of the possessive pronoun which precedes the head noun. In some dialects this now occurs reduced as a suffix or enclitic element as in (45a), whereas in other dialects it retains the same form as the pre-noun possessive pronoun as in (45b). What is significant here is that the sequence [horse my] is known to have been associated with a clear emphasis and focus in contrast to forms such as [my horse] and it is the former emphatic/focus form which has developed into the simple agreement form following the possessive pronoun. It can also be pointed out that forms such as (45) above can be argued to bear a close and interesting resemblance to the cases of negative concord in Brazilian Portugese and Choc<sup>□</sup> Spanish mentioned in footnote 3, where in place of an NP object reinforcer of negation, a doubling and copying of the higher negative morpheme has occurred in the lower XP focus projection. If we speculate that the agreement forms in (45) developed from a focus structure with the second possessive pronoun in the focus head and the NP de-focused and raised leftwards, such forms would be very close to those in Brazilian Portugese and Choc<sup>□</sup> Spanish where the marker of negation in Neg<sup>0</sup> is simply copied into the lower focus head in order to identify it.

The second case which can be mentioned here is the occurrence of new agreement forms with adjectives in Thai. In Thai, classifiers normally occur with numerals and with demonstratives as in many other Asian languages. However, in addition to these environments, in spoken Thai it is also possible to optionally use classifiers with adjectives as in (46). Note that the classifier *khon* here signals a human referent:

- (46)   phuuying (khon)-suay khon-nii  
          woman (CL)-pretty CL-this  
          ‘this pretty woman’

The +human properties of the head-noun are therefore represented on the adjective in the ongoing development of a system which clearly resembles adjectival agreement systems found in Romance and Germanic languages. What is important to point out here is that the optional use of the classifier on the adjective brings with it a clear emphatic/focus value and is only licensed when the speaker wishes to add particular heavy emphasis on the adjective. The development of a fairly clear agreement system then again seems to be closely linked to the property of focus.

We now turn to the modelling of subject-verb agreement. It is widely assumed that subject agreement morphology develops from the reanalysis of subject pronouns

(see e.g. Bresnan & Mchombo (1987), Givon (1976), Hopper & Traugott (1993)), and we also make this fairly basic assumption here. The more important question is exactly how this reanalysis takes place and what the reanalysis might indicate about the underlying synchronic structure of subject agreement. A commonly referred to view on the reanalysis process is proposed in Givon (1976). Givon suggests that subject agreement results from the reanalysis of “topic-shift” structures (left dislocation). As schematised in (47) from Givon (1976:154), it is suggested that frequent use of left dislocation topic-shift forms results in an original subject pronoun being re-analysed as a subject agreement prefix and a topic NP being reanalysed as a new subject ((47) is an abstract representation for any language where this reanalysis takes place):

|      |                                 |   |                                |
|------|---------------------------------|---|--------------------------------|
| (47) | Topic-Shift (“Marked”)          |   | Neutral (Re-analysed)          |
|      | <u>The man</u> , <u>he</u> came | → | <u>The man</u> <u>he</u> -came |
|      | Topic Pronoun Verb              |   | Subject Agr-Verb               |

Although initially quite plausible, such a hypothesis of the development of subject agreement leaves one with two simple problems. The first of these is the original theory-internal problem that if the agreement morphology on the verb has to be licensed by a higher agreement projection, the analysis here brings us no closer to understanding exactly how such hypothetical agreement projections might be able to occur and be licensed in syntactic structure. The second problem is the more general theory-neutral difficulty that the reanalysis process in (47) will clearly not account for the rather common occurrence of subject agreement as *suffixes* rather than prefixes, and languages where subjects neutrally precede verbs are predicted to uniformly develop prefixal agreement rather than suffixal forms. As there are in fact a large number of S>V languages with suffixal agreement, this obviously is a non-trivial problem, as indeed conceded by Givon himself. For these reasons we would therefore like to explore how the approach to agreement suggested in earlier sections might possibly lead to different potential insights into the reanalysis of subject pronouns as agreement markers.

If the development of subject agreement were indeed to follow the same pattern argued for in the other cases of agreement examined here, one would expect that the process would involve some older functional head coming to select for a new focus projection instantiated by an element in concord with it. Assuming that subject agreement does in fact result from the reanalysis of subject pronouns, one can conclude that the two elements critically involved in the developing concord relation are indeed the subject pronoun and some new NP introduced into the structure. Given furthermore that it is the subject pronoun which is undergoing grammaticalization and eventual reanalysis as an agreement affix in such situations, it is fairly natural to suggest that it is the pronoun member of the pronoun/NP pair which is essentially the older element in the concord situation; the pronoun is also the element which may phonologically change its shape over time as it attaches to the verb and may possibly decay and disappear with time. Consequently if some kind of selection relation were to obtain in the development of subject agreement as elsewhere, there are reasons to think that it should be the pronoun as older member of the pair which should be taken to select for a new reinforcement of itself in the form of a second full NP with matching phi-features.

Exploring such a scenario further, in the other cases considered it has been argued that it is a higher functional head which selects for and introduces the newer and

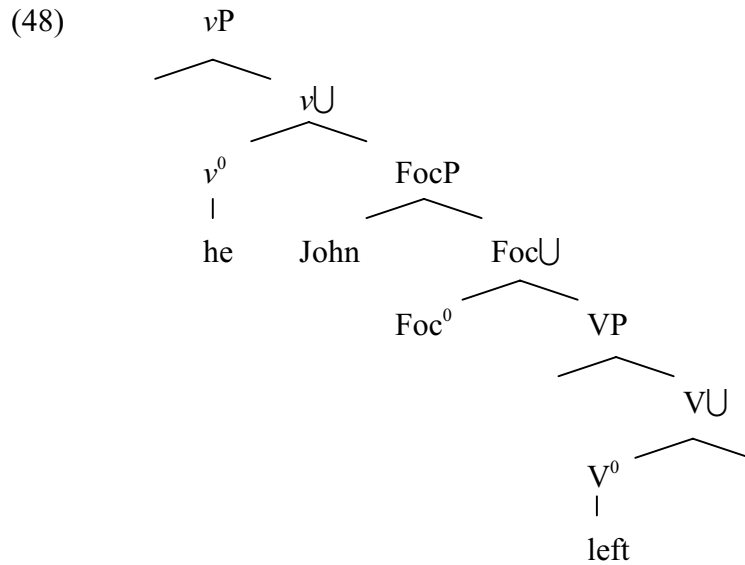
lower focus-concord projection. We would now like to suggest that two not unnatural assumptions might now allow one to see the development of subject agreement as being potentially very similar to the general pattern of development which has been proposed. First of all we would like to suggest that the higher head  $v^0$  in a VP shell may be considered to be semi-functional in nature due to the constant functional role it is assumed to have in encoding causation/causativity and assigning an agent/cause theta-role to the subject base-generated in SpecvP (as suggested in Chomsky (1993)). The second proposal we would like to make is that when subject pronouns come to grammaticalize as agreement-like morphemes, we suggest these elements may become reanalysed as being base-generated not as full maximal projections in SpecvP, but as  $X^0$  elements in  $v^0$  itself. Such a reanalysis might reflect two changes. First of all, phonologically reduced monosyllabic elements which grammaticalize may quite naturally be re-interpreted as instantiating  $X^0$  head positions as words rather than  $X^{\text{MAX}}$  specifier-like positions as full phrases.<sup>9</sup> Secondly, if the  $v^0$  head essentially represents agentivity/causation, it can be suggested that this is indeed quite naturally encoded by a pronominal element which otherwise would be interpreted as an agent/cause.<sup>10</sup>

Such assumptions now allow us to suggest that the development of subject agreement begins with the reanalysis of subject pronouns as instantiations of  $v^0$  rather than SpecvP, and that such elements grammaticalized in the semi-functional head  $v^0$  then select for emphatic reinforcement of their own particular value as in the other cases of focus concord examined earlier. Here the morphological doubling will require a second element interpreted as the agent/cause of the event with a phi-feature specification matching the ‘pronoun’ in  $v^0$ , hence in concord with the head  $v^0$ . Such a new element introduced to reinforce the weakened pronoun can now be suggested to be inserted in the specifier of a new emphatic/focus projection selected by  $v^0$  as in (48).

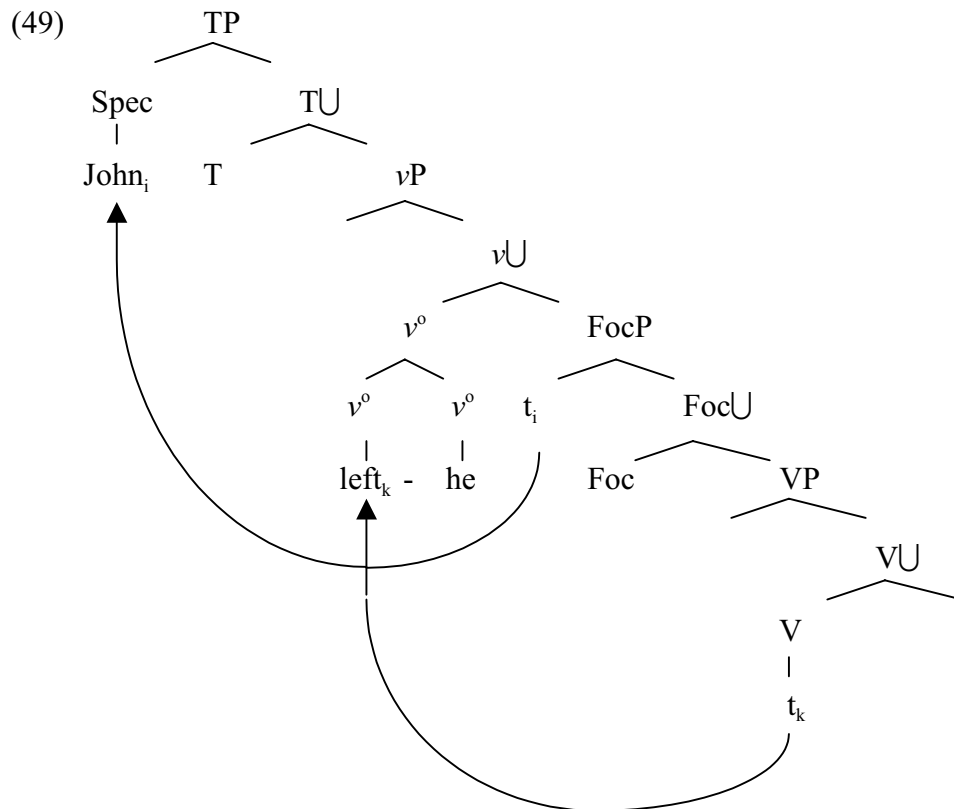
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<sup>9</sup> See here for example, the case of the Spanish NP *que* ‘what’ which has grammaticalized as an  $X^0$  word-level complementizer in  $C^0$  ‘that’.

<sup>10</sup> See here also the very relevant case of dialects of Arabic where pronouns sometimes function as copulas and hence are inserted into and instantiate verb-like semi-functional heads. In Egyptian Arabic it is also possible for pronouns to function as question particles in  $C^0$ . It is consequently not particularly strange to suggest that pronouns might also be re-analyzed in the semi-functional head  $v^0$  with which they would otherwise have a relation anyway as the element receiving the theta-role in SpecvP.



Following this we suggest that the new full NP inserted in the specifier of the focus projection raises up to the surface subject position, SpecTP, and the old grammaticalized pronoun as a weakened and phonologically dependent element attracts the verb in  $V^0$ . The verb will then naturally left-adjoin to the element in  $v^0$  as in (49) with the result that a new agreement suffix element appears on the verb in the (abstract) surface sequence [ John left-he ].



Consequently, it would seem that the basic approach to the development of agreement argued for earlier may indeed be hypothetically extended to other common cases of agreement after certain careful reflection, and allow for an account of the

development of subject-verb agreement here which is not implausible and clearly accounts for the fact that this frequently develops as suffixal agreement. In an interesting way the general proposals developed earlier necessarily lead one to assume a somewhat different view of the way that agreement arises and suggest that rather than a topic-shift left dislocation strategy it may actually be a focus-related construction which results in the occurrence of verb-agreement. Such focus can be understood here to effectively correspond to the optional emphasis of pronominal elements which are undergoing gradual weakening and grammaticalization.<sup>11</sup> Later on, following the general developmental cycle proposed for other cases of agreement, one can suggest that the initial optionality of the secondary element commonly disappears along with the extra emphasis it adds into the construction and that the focus/emphatic structure develops into simple obligatory concord. Further on still one would anticipate that the semantic redundancy of the simple agreement might cause a loss and disappearance of the higher, older element as in other cases, and that this would therefore result in a loss of the pronominal agreement markers, a situation which in fact is not uncommon cross-linguistically.<sup>12</sup> The cyclic pattern of development posited earlier can then ultimately be argued to allow rather naturally for a modelling of subject-verb agreement with the same basic properties assumed for other instances of concord.

It is also interesting to note that the analysis of subject-verb agreement which the basic approach most naturally leads one to turns out to show strong similarities with certain ideas about clitic pronouns proposed in Sportiche (1992). Sportiche in his influential paper suggests that clitic pronouns are elements base-generated in verb-related functional heads, hence as  $X^0$  word-level functional elements. Given that clitic pronouns commonly develop into verbal agreement morphemes, such a proposal is then clearly close to the present speculation that subject agreement results from the re-analysis of pronouns in the semi-functional head  $v^0$ . To the extent that the present account therefore forces one to conclusions which converge with ideas already motivated on other grounds, this may be positive indication that the general approach does indeed have an underlying plausibility.

Finally here, on the topic of focus, an important ingredient and secondary claim of the paper has been that focus as a functional projection is not fixed to a unique clausal location in the left periphery, as may be implied in recent work in Rizzi (1994) and the Universal Base Hypothesis (UBH) defended in Cinque (1999), but may in fact occur in a variety of positions, potentially selected by both clausal and nominal functional heads. The question arises now as to whether the UBH should be considered to be weakened by the proposals and findings presented in the paper. Here we believe that the answer is in fact “no” and suggest that focus may be considered in a way similar to negation. Following interesting work on negation in dialects of Italian carried out in Zanuttini (1997), Cinque (1999) suggests that negation may actually be located in four discrete positions in the clause, though two of these locations are more common cross-linguistically than the other two. We believe that the same may be true of focus, and that whereas it may be cross-linguistically very common for languages to have a left-periphery type focus position, further investigation such as that presented here may reveal that there are other potential

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<sup>11</sup> Significantly it can be noted that the ongoing development of verbal agreement in certain Bantu languages has indeed frequently been described as being associated with the clear addition of emphasis, adding support for such a view (Cole (1955), Segopolou (2000)).

<sup>12</sup> Though if the agreement morphology functionally licenses and identifies a null pro subject, it clearly will not be redundant and therefore should not be under pressure to disappear.

positions that focus may occur in, in a way similar to negation. Just as Zanuttini's work on negation can consequently be interpreted as not necessarily weakening the UBH, we also believe that the same may be true of the proposals concerning the occurrence of focus made here.

## 7. Summary

This paper set out to consider how agreement projections may arise and be licensed in syntactic structure, and has attempted to suggest a productive developmental relation between agreement and the category of focus. Considering a variety of data it was suggested that focus projections are selected by a range of functional heads as emphatic reinforcements of their basic functional value and that the introduction of an associated focus projection results in the occurrence of focus-concord between the higher selecting head and the element identifying the lower focus projection. Later on in the cycle of development it was noted that the emphatic focus interpretation may become lost and result in just simple concord. Here we suggested that this gives rise to shell structures where the lower agreement projection part of the shell is licensed parasitically by its association with the functional head in the upper half of the shell which does have genuine semantic content. Frequently a further step in the process was suggested to be that the complex shell simplifies to a simplex non-shell projection when the redundancy of the morphological doubling is eliminated. Generally the account has attempted to make use of the simple observation that the repetition of morphological material frequently results in natural emphasis, and therefore may be directly triggered by the need to encode focus. The paper has also argued that the discontinuous dependencies often involved in such emphatic doubling should best be analysed as relating to an underlying local relation of selection where a higher functional head induces a new focus projection instantiated and identified by the secondary element. Finally, we also attempted to show how the general account developed here may be suggested to extend further to other common patterns of agreement such as subject-verb agreement. Though such further extensions possibly remain somewhat speculative and sketchy at present, we believe that a consideration of the focus-related cyclic account of agreement outlined here may nevertheless prove useful in leading one to think of rather different potential solutions to the general puzzle of agreement.

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