THE FUNCTIONAL CATEGORY REVOLUTION:
SOME ESSENTIAL OBSERVATIONS[1]

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1. INTRODUCTION

Grammatical theories may differ along many lines and the way in which they contemplate categories, parts of speech or words classes is one of the fundamental diverging paths. It is well-known that classic grammars largely revolved around this issue, especially in their attempts to define each part of speech. An often criticised aspect of these attempts is the fact that the notional criteria they used to establish classes of words were not homogeneous, not sufficiently accurate. Despite these criticisms, traditional definitions are still used as there were, obviously, essential insights in them. Nevertheless, since the 1980's, Chomskyan Generative Grammar has taken up the issue and present day proposals rely crucially on category types. Generative Grammar reconsidered an old intuition in modern terms, the intuition that there are essentially two sorts of categories, one which has more predicative power and another one which contains inflectional or grammatical properties. We are referring to the division into functional vs. substantive or lexical categories[2] that is at the heart of the Government and Binding Framework, also known as Principles and Parameters (Chomsky (1981), Chomsky (1986)a.).

This distinction, though, has also brought with it a danger: the proliferation of functional categories. The list of functional categories is still under debate and new FCs are postulated as accounts of a multiplicity of phenomena in many different languages. The individual claims of authors seem to get by unconstrained, but there are some voices which have called out for a restrictive theory of functional categories (Ouhalla (1991), Hoekstra (1995)). This phenomenon (explosion) has a parallel in the history of Generative Grammar: the proliferation of transformational rules. It took some time before a set of constraints on the format and the power of transformations was proposed, but it must be noted that the work of researchers using transformational rules was essential for the improvement of the theory: the emergence of the GB model was precisely the result of the unification of transformations into one rule, move-alpha, and a set of principles constraining this one rule.[3]

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[2] In section 2 these two terms are explained and exemplified. The set of lexical categories contains at least N, V, A and P. The set of functional categories is not fixed, but it includes C, AGR(eement), T(ense), D(eterminer), NEG . Note that the categorial nodes do not necessarily correspond to the lexical items from which they take their name so we cannot accurately say that the complementizer 'that' is the functional category C. The complementizer 'that' is generated as the head of CP, but even if there is no overt 'that', there may still be a CP.

[3] See Van Riemsdijk, H. & Williams (1986) for an account of the change from a pre-GB to a GB framework. Introductory textbooks to GB are Haegeman (19946), Cook & Newson (1996), Webelhuth (1995).

As the title implies, the aim of this article is to consider and explain the status of functional categories (FCs) in the theoretical framework of P&P. My objective is not to assess individual claims thoroughly nor to provide a detailed list or explanation of all the different proposals found in the literature. The bibliography provided at the end of the article may be used as a reference for different proposals, especially Hoekstra (1995). Section 2 looks at the properties of FCs, offering both a general and a more technical view of these properties. Section 3 refers to the two syntactic domains, clauses and nominal phrases, which the FC revolution has radically transformed. Section 4 looks at how a theory of FCs may offer ways of explaining linguistic variation. In section 5 some comments are made with respect to the most recent revision of the P&P theory, the Minimalist Program (Chomsky 1992, 1995).

2. ANOTHER TYPE OF CATEGORY: THE FUNCTIONAL CATEGORY

2.1 General properties

Languages contain elements which cannot be classified as nouns, verbs, adjectives, prepositions or adverbs. Many grammarians have noted that there exist subgroups of elements such as auxiliaries, determiners or conjunctions that do not have 'content'. These other elements have often been left to occupy marginal positions in phrase structure trees indicating syntactic 'inferiority' with respect to the most prominent Ns and Vs. The framework that we are considering has altered this view drastically and made FCs the «flesh and bone» of language. The first step was to measure minor categories with the same scale as all the other pre-established syntactic categories. Technically, what this implied was that one same theory of phrase structure (X-bar theory) was applied and used for all syntactically relevant elements. This issue is considered in the next section and we now turn to some more general characteristics of FCs.

FCs do not express descriptive content whereas nouns, verbs or adjectives do. This notional statement is inaccurate and theoretically undesirable, but it can be made theoretically relevant if it is expressed in other terms. Ouhalla (1991) is an important contribution to the theory of FCs, it establishes their basic properties which later he uses to demonstrate that linguistic variation may be explained almost exclusively via FCs.[4] Ouhalla (1991) notes that FCs have or express **grammatical features** (person, number, gender, case, interrogative features, etc.) and this may be a defining property if we interpret it as excluding other semantic notions ('descriptive' or 'contentful' notions), which are expressed by lexical or substantive categories. Nouns and verbs belong to the class of predicates and require arguments. FCs are not predicates, they are thematically empty. The predicative character of nouns and verbs is referred to in section 3, but this is a characteristic of all categories that do not belong to the FC set. As predicates, nouns and verbs assign thematic roles to their arguments, they select their complements semantically or, have **s(emantic)-selectional properties**. FCs do not impose semantic restrictions on their complements, they rather select the syntactic *category* of their complements, that is, they have **c(ategorial)-selectional properties**.

FCs often correspond to affixes. They usually are not independent words, and if they are, they are unstressed (take for instance, complementizers, determiners, clitics and in-

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[4]   We refer to Ouhalla (1991) because it offers a clear, simple and all-inclusive view of FCs. Borer (1983) was first in hypothesizing parametric variation affecting lexical items (See section 4).

flectional affixes on verbs). The feature which specifies if a specific functional element may be free or bound is the **m(orphological)-selectional property** also included in the lexical entry of each FC.

Ouhalla (1991) posits that the properties mentioned in the preceding paragraphs are part of the information listed in the lexical entry of each functional category. Moreover, the set of FCs is itself listed in a separate mental lexicon which UG provides us with. This lexicon is independent from the one where the the other vocabulary items of a language are listed (namely, substantive categories). The properties of each of these two lexicons are different, and the fact that all functional categories belong to closed classes and not to open classes - another general characteristic of these items - may follow from the fixed character of the functional lexicon. Variation is possible within the limits of the properties specified above. (See section 4).[5]

2.2 Functional categories, phrase structure and movement

Looking back at the origins of FCs, the Standard Theory phrase structure rules for sentences already included an AUX component. Chomsky (1957) posited a phrase structure in which AUX was a separate element from V, yet placed it within the V head. Then there were no X-bar theory constraints and heads could have more than one member. The lack of phrase structure restrictions explains the quantity of possible phrase structures which were actually proposals in the literature.[6] The inclusion of AUX as a separate entity in the tree, outside the VP component (or the PredP in Chomsky (1965)) implied allowing for trees with three branches, a fact which contributed to the modification of clausal structure in favour of phrases with two branches all the way. The AUX component contained elements of different nature (modals, tense, perfect and progressive). All of these items, which clearly were related to the verb, but could not be said to be part of the predicative nature of the verb have finally been considered as separate entities in the tree structure of clauses (See section 3).

As regards the other diverging element in the phrase structure, COMP, it was also introduced (Bresnan 1976) before X-bar theory constraints. Transformational rules adjoined wh-elements to COMP without submitting adjunction processes to any restrictions with respect to the head or phrase status of any of the elements participating in the adjunction representation. The bizarre status of an S' node, especially after X-bar theory became a powerful phrase structure pattern, was necessarily re-captured into X-bar theory terms and COMP was made the head of the complementizer phrase, above the inflection phrase.

Apart from these observations, it is necessary to make reference to the empirical motivation for these nodes. Certainly, phrase structure must account for the actual constructions of language and the linguistic evidence also led linguistis to provide clausal structure with more nodes. Of special importance to the postulation of COMP are the V2 phenomena. The complementary distribution seen for German between an overt complementizer (in embedded clauses) and the V2 phenomenon in main clauses came to be regarded as movement of the verb to the second position of the clause, namely, C (and of the subject to the specifier of CP, when CP was proposed).

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[5] See Cook & Newson (1996) for a list of characteristics of functional categories.

[6] Wass (1989) summarises these proposals and shows how AUX progressively became a separate entity, with its own projections.

As from Chomsky (1986b) INFL was granted a head status and the inflectional component of AUX was definitively made the center of the clause. (But see section 3.1) In a parallel fashion, CP was assumed to be the X-bar version of S'. The CP-IP clausal structure was assumed by the majority of GB linguists until empirical facts began to make these two nodes also insufficient to account for a variety of phenomena in language.

Before we turn to the arguments which led Pollock (1989) to split INFL into more functional heads, some comments on the Subject VP-Internal hypothesis are in order. Several proposals in the late 1980's early 1990's argued in favour of the base-generation of the subject of the clause in the VP (Koopman & Sportiche (1991), Kitagawa (1986)). The raising properties of INFL (such as imposing no selectional restrictions on the external argument), the independent existence of VP small clauses (with NP subjects but with no FCs mediating between the verb and the subject), the position of floating quantifiers, and other empirical facts, led tó the assumption that the original position of the external argument of V predicates is internal to the VP. In languages like English, this NP must move to the specifier of IP in order to receive case, but in other languages this NP may remain in the Spec-VP position, accounting for VSO order (in Irish and Welsh, for instance). There are languages which allow for both orders (Arabic) because their INFL, according to Koopman&Sportiche, may assign Case in two different ways.[7] This proposal makes the VP the thematic domain of the clause and leaves the structure above VP responsible for grammatical facts that are not (in principle) thematically relevant. There is an obvious problem for the theory though: once the specifier of IP is no longer the position where the subject of the clause is generated, it cannot be claimed to be an A-position straightforwardly.

We will now consider the syntactic implications and the processes triggered by FCs. FCs may be the triggers of movement of maximal projections, and of heads. If maximal projections move, they follow usual constraints on movement (ECP, Subjacency), if heads move, they must follow the Head Movement Constraint (Travis 1984). This constraint is a consequence of the ECP on traces of heads, which forces the movement of a head to its nearest head position.[8]

An example of head-movement is V-to-I-to-C:

(1)   Is Juliet happy?

(2) $[_C$ Is $[_{IP}$ Juliet $[_{I'}$ [t' $_I$] $[_{VP}$ $[_{V'}$ [t $_v$] [happy]]]

In this structure the verb, moves to I, adjoining to it and amalgamating with it. Then the whole unit moves to C. The trace of V is properly governed by the trace of I and the trace of I is properly governed by V in C because there are no barriers intervening.

The trigger of verb movement in example (1) is captured in this theory by postulating abstract features in FCs, in this case a +Q feature in C makes elements move in questions. Notably wh-elements must move to specifier of CP in questions to satisfy the Wh -Criterion, which requires all +wh complementizers to contain a +wh element, or to be in a specifier-head relation with a +wh-element.

FCs may be triggers in a different way: they may have the m-selectional property [+ bound] and, therefore, must force a host to move and attach to them. This crucially relates

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[7]   The exact position of the subject with respect to the VP is different for different authors. Koopman & Sportiche (1991) place it adjoined to the V^{max}, and Kitagawa (1986) as sister to V', in the specifier of VP position.

[8]   See Baker (1988) for a long explanation and exemplification of head movement.

morphology and syntax in the sense that affixes are generated in an FC node, separate from the root which ends up bearing them. The Stray Affix Principle (Baker (1988)) also states that stray affixes require the movement of the root (or alternatively lower on to the root).[9]

It must be noted that the relation between syntax and morphology is essential for authors who claim that morphological structure is a mirror of syntactic operations, the essence of the Mirror Principle (Baker 1988). This implies that the order of affixes in a language will be directly related to the underlying syntactic structure and to the movement of head categories attaching to affixes on their way up. Many authors have questioned the validity of this direct relationship, but Ouhalla (1991) provides a large amount of evidence from very different typological languages. Quoting Ouhalla (1991: 50): «Basically, what the M(irror)P(rinciple) claims is that a given complex of the form [Aff_1+Aff_2+V], the process which attaches Aff_2 to the verb is prior to the process which attaches Aff_1 to the same category». In Romance languages and in English, inflectional affixes come after the root, not before the root as they do in Arabic. An equivalent symmetrical example to the complex referred to in Ouhalla's quote is the order of tense and agreement affixes in verbs in Catalan:

(3)   ball (root) - ar(TNS) - em(AGR)

       (= we will dance).

If we should allow for a separate head for each of these elements (namely TNS and AGR), then the Mirror Principle implies that the V will move up to TNS before it moves up to AGR, as in the following structure:

(4)

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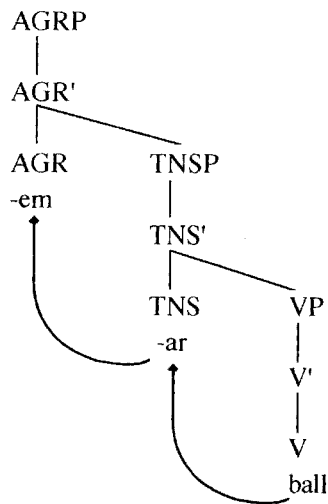
[9]   The claim that there are morphological constraints of this sort (either stated as direct properties of FCs as in Ouhalla (1991) or as a Principle relating morphology and syntax (as in Baker (1988)) is rephrased in the Minimalist program. See section 4. Note also that I-lowering is a process that is still necessary in a theory in which verbs move but only if there are empirical reasons to postulate movement (See Section 3.1). English is an example of an I-lowering language; French, Italian, Catalan, Spanish are examples of V-raising languages.

This is directly related to the categorial selectional properties claimed to be part of the lexical entry of each FC (Ouhalla 1991, Section 2.1). In structure (4) AGR c-selects TNSP and TNS c-selects VP, which structurally implies the mapping of TNSP as complement of AGRP, and of VP as complement of TNSP. If the FCs in question have different selectional properties, the underlying structure will be different, the Head Movement Constraint will force the head V to move through each head and the resulting structure will be a different order of affixes. Ouhalla's examples of Berber are an example of this:

(5)   ad - y - segh Mohand ijn teddart
       will(TNS)-3ms(AGR)-buy Mohand one house

These morphological differences are precisely at the basis of Ouhalla's explanation of word order variation among languages. (See Section 4).

3. FUNCTIONAL CATEGORY SUPERSTRUCTURE IN THE VERBAL AND THE NOMINAL DOMAINS

In section 2.1 we already noted how the IP and CP levels beyond VP are not thematic, that the VP is the locus of theta-role assignment. We will see below how this same argument applies to nouns (Section 3.2) . In the next section we will show how a more complete inventory of FCs was necessary both on theoretical and on empirical grounds. It must be noted that the exact list of FCs is still under current debate, and that the amount of questions that the rise of FCs raises is very large. The following are only some of the questions in relation to functional categories noted by G. Webelhuth (1995: 83), which may be indicative of the general state of the theory with respect to FCs:

- Is there a universally closed list of functional heads?
- Do all functional heads exist in all languages?
- If not, what are the necessary and sufficient conditions for the postulations of functional heads ?
- Must all functional heads be spelled out overtly?
- Does it matter whether a head is realized as a free form or an affix?
- Can functional projections be recursive? All of them or just particular ones?
- Is the order of embedding of functional projections fixed universally? If not, are there constraints on parameterization?
- Is parameterization restricted to functional heads or can it affect lexical heads as well?
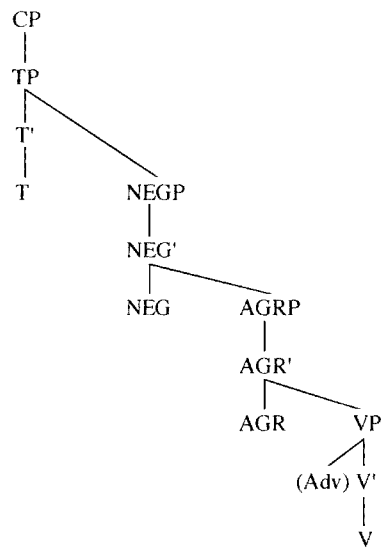
3.1 The clause: a phrase

As noted in preceding sections, the postulation of INFL as the head of the clause, with its usual specifier and complement relations, makes the tree binary all the way down, which is theoretically desirable. Nevertheless, apart from this another desirable consequences, there are a number of drawbacks which result from having just one inflectional head above VP. Some of these drawbacks are theoretical and others are empirical in the sense that facts are not accounted for if one unique node is posited. There are two important theoretically undesirable consequences of having just an I-node: firstly, if only one such functional node exists in clausal structure, all other non-substantive notions are poured into it making it house a number of heterogeneous elements (negation particles, modals, tense affixes and agreement affixes). If this is done, ordering restrictions among these elements cannot be captured by syntactic principles, which, in principle, are blind to phenomena affecting elements below the head. Secondly, these elements have a different nature: agreement affixes have a nominal nature, while tense and modals a verbal one. Thus, the feature characterisation of I becomes problematic.

Considering now the facts, if only one FC is posited for clausal structure, the V-head has only this one position to move to, but there are many linguistic constructions which indicate that the verb may move to more than one such node, as Pollock (1989) extensively demonstrates.[10] The diagnostic test for verb-movement is the occurrence after the verb of elements that are base-generated before the verb . Generally, the elements used for the diagnostic are negative particles, VP-adverbs and quantifiers:[11]

(7)a. *Peter loves not his wife
   b.   Pierre (n)'aime pas sa femme[12]
(8)a. * Peter loves completely his wife
   b.   Pierre aime completement sa femme
(9)a. * They love all their wives
   b.   Ils aiment tous la ses femmes

These elements are taken to have a different status, whereas adverbs and quantifiers are phrases which do not directly interfere with movement (the verb does not cross their projections when it moves), negative particles have a special status: they are heads themselves, functional heads. This is the structure Pollock (1989) argues for:

(10)

```
CP
|
TP
|⟍
T'  ⟍
|    ⟍
T     NEGP
      |
      NEG'
      |⟍
      NEG   AGRP
            |
            AGR'
            |⟍
            AGR    VP
                  ╱|
              (Adv) V'
                    |
                    V
```

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[10] Pollock (1989) is the key reference for the so-called Split -INFL hypothesis. See Haegeman (1995), Webelhuth (1995), Ouhalla (1994) for summaries of Pollock's proposal.

[11] Note that these tests rest on the assumption that adverbs are unmovable elements. Iatridou (1990) argues against this assumption, which obviously decreases the number of necessary movements of the verb.

[12] Negation in French is expressed by both ne/pas, but Pollock (1989) takes pas as the proper negative indicator, and one of the reasons is that in colloquial French, the ne may be omitted. The debate is open as to the exact status of the negative particle ne, pas and English not. The head status of the negative particles blocks movement, but if negative particles are not heads, but rather specifiers, then they need not block movement.

Pollock claims that there are two types of movement of the verb, two positions which the verb may occupy: one closer to the VP (AGR), one further from the VP, beyond the projection of negative particle(TNS). The first, so called Short-movement is exemplified by sentences where the negative particle appears preceding the verb, but where a VP-adverb follows the verb. This is the case of infinitival clauses in French (11) or English infinitival clauses with have / be (12). That the verb has moved out of the VP is seen by the presence of the VP-adverb after the verb. This movement is V-movement to AGR in (10):

(11) a.   Ne *pas sembler* jamais heureux est une condition pour écrire

b.*   Ne *sembler pas* jamais heureux est une condition pour écrire.

(12) a.   Sean is believed to *not be* competely happy.

b. *   Sean is believed to *not like* completely the film.

If the verb precedes negation, as in (7)b., it must have moved beyond AGR, and NEG to TNS. In English, as (7)a. shows, the lexical verb may not precede the negative particle. The negative particle is directly responsible for the blocking of the movement of a head element, and thus, is argued to have the status of a head, with its usual projections.[13] Negation in English requires the language-particular do-support construction. The explanation being that the stranded affixes in TNS need a host, the dummy auxiliary available in the language.

Having summarised Pollock (1989), note that the Mirror Principle mentioned above implies that the order of affixes, if the structure is (10), must be V-AGR-TNS, contrary to what is found. This criticism is one of the reasons why Pollock's initial structure has been somewhat modified. Belletti (1990) argues for the reverse order of projections, AGRP above TNSP. Chomsky (1988) further expands clause structure into an AGRsP node above TNSP which stands for the agreement with the subject, and AGRoP node below TNSP which is responsible for agreement with the object.[14]

An important idea in Pollock's proposal is the fact that the difference between French and English follows from different features of French and English FCs. What triggers verb-movement in French is the fact that AGR is strong, as opposed to English AGR, which is weak . A strong AGR attracts the verb, a weak AGR does not. Hence, in Pollock (1989) parametric variation is seen as a result of differences in the properties of FCs. (See Section 4).

3.2 The nominal phrase

In the previous sections we saw how the VP is considered the thematic domain of the clause, ' covered' by a super structure of functional categories. The notion that the V is predicatively strong, in the sense that it has arguments which depend on it and are determined by it, is not problematic; the verb has always been considered the predicate by excellence. Nouns and adjectives and prepositions in the framework we are conside-

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[13] Zanuttini (1991) is also an important contribution to the analysis of Neg as a functional head.

[14] Instances of other functional categories in the clausal domain are Focus Phrase (Ouhalla 1992) posited to account for alternative constructions in contrastive focus structures in classical Arabic. ASPP in Ouhalla (1991) is used to account for different syntactic behaviours of the two aspect auxiliaries in English. An a long list, references of which may be found in Hoekstra (1995), or Webelhuth (1995).

ring are also predicative elements. They are also responsible for the presence of argu-
ments and are thus thematically relevant. In this section we consider the thematic status
of nouns in particular, because the parallel with the VP is one of the directions in the
theory: in the nominal domain, the noun head is also dominated by a functional supers-
tructure. Again, determining the nature, number and order of each of these FCs is still a
live debate.

Syntactic arguments in favour of the predicate status of the head noun in a noun phra-
se are many: the existence of small clauses with noun predicate heads (14) ; the existence
of deverbal nouns (15) - which can be granted the same thematic grid as the original verb
; and the fact that nouns may take a possessor argument (16):

(13)   I consider (Bill (a good president))

(14)   Mr Smith's translation of the book

(15)   Paul's friends

In (13) the source of the thematic role borne by the proper noun 'Bill' must be the noun
phrase (a good president) since the verb 'consider' requires a small clause complement,
but does not interfere directly with the thematic role of the subject of the small clause; in
(14) the thematic role of both the genitive NP and the of-phrase NP are both directly lin-
ked to the deverbal noun translation; in (15) the head 'book' also assigns thematic role to
the genitive NP.

Abney (1987) established a functional superstructure in the nominal domain, nouns
being the thematic nucleus of the nominal phrase. Abney coined the D functional ca-
tegory which selected a NP complement, on a par with the unique inflectional head
then assumed for the clause. The Determiner Phrase was then seen as the functional su-
perstructure of the nominal domain. Many syntactic facts followed from this assump-
tion, to name a few: the complementary distribution between genitive phrases and de-
terminers in English, prononun-noun constructions such as 'we women', gerund cons-
tructions, etc. The structure in (16) is an example of a DP headed by the definite arti-
cle determiner:

(16)

DP
|
D'
/\
D   NP
the |
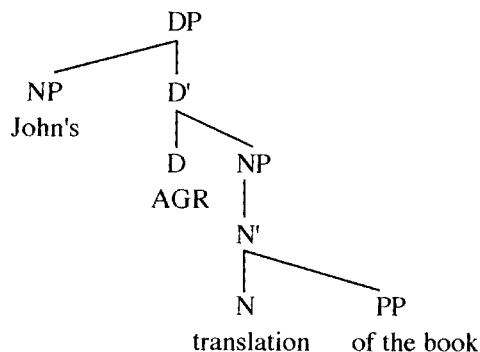   N'
     /\
    N   PP
 translation   of the book
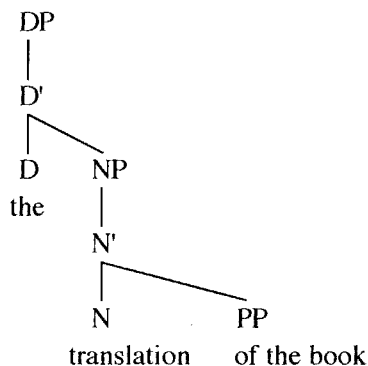
The complementary distribution between determiners and genitive noun phrases is ac-
counted for by assuming that a different element may head the DP in genitive construc-

tions, an element which, unlike determiners, is a case assigner. This element is an abstract agreement marker, responsible for the case of its specifier.[15]

(17)

```
                    DP
          ┌─────────┐
        NP          D'
       John's      ┌──────┐
                   D      NP
                  AGR      │
                          N'
                         ┌──────────┐
                         N          PP
                    translation   of the book
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Pronouns in this new light must be assigned a D status - note that distributional facts directly cancel their NP substitute status - and constructions such as ' we women' are directly accounted for by allowing pronouns an NP-complement selection in certain constructions:

(18)

```
        DP
        │
        D'
       ┌──────┐
       D      NP
      we     women
```
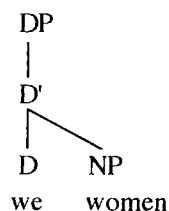
D may also occur above other predicative phrases, such as VP. Gerunds in English are explained by this possibility: an agreement element in D assigns case to the element bearing genitive, and a verbal head in the complement position of D assigns accusative case to the object.

To conclude the functional considerations within the nominal domain, an important aspect of the introduction of DP was that word order differences within the nominal phrase may also be seen as the result of movement of the substantive N to functional nodes above N - on a par with V-movement in clauses (See section 3.1) . To give an example, the

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[15] As with I in clauses, the possibility of a Split-D analysis was there, and several researchers have posited more functional heads in the nominal domain. Ouhalla (1991) directly criticises the one-funtional head only hypothesis by referring to many different languages and showing how an AGR node must be postulated, heading an AGRP in noun phrases. Several other proposals which explore the possibilities of functional heads above the noun may be found in the literature, e.g. Longobardi (1994), Picallo (1994). See also other references in Hoekstra (1995).

order possibilities of adjectives and nouns may be explained by N-movement to a functional head in French, as opposed to the fixed position of the N in English in the two equivalent noun phrases:

    (19) la destruction fréquente de Rome
    (20) the frequent destruction of Rome

4. A NOTE ON FUNCTIONAL CATEGORIES AND LINGUISTIC VARIATION

Linguistic variation within the grammatical framework that we are considering is explained by the notion of 'parameter'. The first conception of this idea (Chomsky (1986a)) conceived parameters as linked to principles: Universal Grammar (UG) contained principles which were open to parametric choices. A commonly noted example is the head-parameter: UG contains the principles determining phrase structure - X-bar theory, which are open as to the order of elements contained in phrases. Head-initial languages were assumed to have chosen the head-first option and head-final languages viceversa. The assumption that once chosen, the option followed across the language faced problems with the existence of postpositions in VO languages- the parameter had to be seen as allowing for two different settings in the same language (head final PPs and head-initial VPs).

At present, this view of parameters is outdated and has been replaced by the idea that principles are not open to variation but parameters are related to individual lexical items (Borer 1983). A further move has been to place the responsibility of linguistic variation in functional categories. Quoting Chomsky: «There are universal principles and a finite array of options as to how they apply (parameters). Furthermore, it may be that Jespersen's intuition about syntax-morphology can be captured, with parameters limited to the lexicon, indeed to a narrow part of it: functional categories.» (1995: 388)

There are still several possibilities of conceiving parameters within this new perspective, and all of them have had proponents. There is the option of allowing for the existence of languages without any functional categories (Kuroda (1986) for Japanese), or just some.[16] A more promising option seems to be the one which captures language variation by postulating different properties of FCs. This option is widely assumed, and much of the FC literature is directed to this aim and even old accounts of parameters may be seen as precursors to this idea (e.g. Rizzi's (1982) account of the pro-drop parameter). As noted in section 3.1, Pollock (1989) claimed that differing properties of AGR in French and English make the verb move (French strong AGR) or make the verb unmovable (English weak AGR).[17] Obviously, formulations of parameters will vary depending on how the features of FCs are captured. Ouhalla (1991) is an important reference: he formulates different parameters for many different functional categories (AGR, NEG, TNS, ASP, D) which, he claims, give rise to word order variation across many languages. Parameters in this proposal are all formulated as involving the features of c-selection and m-selection (See section 2.1). As an example, if an FC is bound, it will trigger movement of a host, as exemplified by the Turkish negative particle, as opposed to the English negative particle, which is not bound: (Exs. Ouhalla (1991); (48), (54)):

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[16] See Hoekstra (1995) for an explanation of how linguistic variation cannot plausibly be seen as allowing for the non-existence of functional categories.

[17] Note that Pollock (1989) used the terms opaque / transparent for what has later been called generally a strong vs. a weak AGR.

(21) John does not like apples
(22) John elmayi ser - me - di - O
      John apples like-NEG-past(TNS)-3s(AGR)
      'John does not like apples'

The property of c-selection may also result in parametric differences: an FC which c-selects ZP in language A may c-select YP in language B, thus giving rise to a different underlying structure in the two languages. An example of this type of parameter is the order of AGRP and TNSP. Depending on the underlying order of these two phrases, the languages will instantiate two basic structural differences: a)In languages where AGR c- selects TNS, the order of the corresponding affixes will be that AGR is outside TNS (recall the Mirror Principle alluded to in section 2.2). Moreover, the subject moves to Spec-AGR to get case in this position and, thus, occurs preverbally, giving rise to the characteristic surface word order of these languages, namely SVO. Romance languages are examples of this, as is exemplified in section 2.2 for Catalan (See example (3)). b) In languages where TNS selects AGR, the order of the corresponding affixes will be the opposite. The subject in these languages does not need to move to the specifier position of an FC to get case and will not surface preceding the verbal complex. These languages have a characteristic VSO word order, as exemplified by Berber (Ouhalla (1991) (1)):

(23) ad - y - segh Moha ijn teddart
      fut(TNS)-3ms(AGR)-buy Moha one house
      ' Moha will buy a house'

5. A GLIMPSE OF THE MINIMALIST PROGRAM

In the late 1980's, early 1990's a revision of the framework was proposed by Chomsky, which has come to be known as the Minimalist Program (MP) (Chomsky (1988), (1991), (1995), etc.). In this last section we want only to consider briefly the status of functional categories within this light. The quote cited above from Chosmky (1995), a recent Minimalist work, reflects the status of functional categories: these are still seen as the 'flesh and blood'. They are present in syntactic trees, and they perform a crucial role in the functioning of the human computational system: they trigger elements to move, not for affixation processes to take place (vs. the views explained in sections 4, and 2.2), but rather to allow for derivations to converge. Lexical items are selected already inflected from the lexicon and at some point in the derivation, before the point of Spell-Out (where the syntactic derivation splits to enter the interface levels of LF and PF) they must check the inflectional features they carry in the appropriate configuration with an FC. Feature-checking is the essential mechanism FCs are involved in. Thus, nouns have case and agreement features, verbs have tense and agreement features that must be eliminated before Spell-Out, otherwise, the derivation crashes. The elimination of these features is made possible only if there is mediation by an FC. There are different configurations for Feature-checking: head adjunction, as in verb movement to TNS and AGR, and specifier-head configurations, as in DP movement to specifier of AGR. In this perspective, all Case is seen as being checked off in a specifier position, end objects must enter this configuration at some point in the derivation, possibly LF. LF movement is unseen and, thus, doesn't surface. Weak features that have not been checked before Spell-Out may go onto PF unchecked precisely because they are weak and will not cause the derivation to crash.[18]

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[18] Find introductions to the Minimalist Program in Haegeman (1994), and Cook & Newson (1996).

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