JAMAI. OUHALLA, Functional Categories and Parametric Variation. London: Routledge. 1991. 240 pages.

One of the most interesting developments in generative syntactic theory is represented by the study of the role played by functional elements in syntactic derivations. Since Chomsky (1986), categories like C(omplementiser) and I(nflection) had been regularised in terms of X'-theory as full syntactic projections<sup>2</sup>. A step further has been taken in a number of recent studies (Fukui and Speas (1986), Baker (1988), Chomsky (1988) and Pollock (1989), among others), where differ ent inflectional affixes previously seen as features of I are taken to constitute syntactic categories in their own right with a crucial contribution to syntactic processes. Ouhalla's book falls into this line of research and explores its implications to its limits. Although the work is conceived within the Principles and Parameters framework (see Chomsky (1981) and subsequent works), it should be accessible to any linguist acquainted with syntactic theory in general. Moreover, the main concepts of the theory relevant to the discussion are clearly explained in the introduction (§ 1.4).

The main hypothesis of the book is that functional categories are responsible for most grammatical processes and relations and for crosslinguistic or parametric variation. While substantive categories (or, simply, substantives) like N(oun),

- 1. Functional elements include the whole set of grammatical categories that are normally spelled out as bound morphemes expressing agreement, tense, aspect and so on. The complementiset is considered to be a functional category as well.
- 2. It means that, like the rest of syntactic categories, they head a maximal projection (X" o X Phrase) which takes another maximal projection as its complement (the sister of  $X_0$ ) and may have a Specifier (The sister of X'). X'- theory is the module of grammar which constrains the expension of lexical categories to in phrase markers.

A(diective) or V(erb) are assumed to be an open class and to have uniform properties across languages, functional elements constitute a limited and well-defined group associated with a closed set of lexical properties and are the ones that, in interaction with the general principles of U(niversal) G(rammar), account for language variation —they display varying properties in different languages or groups of languages. Parameters, then, can be seen as instantiations of the properties that functional categories have in the lexicon. In this sense, the theory of parametrisation put forward by the author departs radically from more traditional approaches like the typological studies of the Greenbergian tradition, where the emphasis is put on substantives: what was formerly considered a difference in the behaviour of a given substantive element must be viewed now as a surface phenomenon derived from the properties of functional categories. At the same time it departs from the view that parameters are associated with the principles of UG<sup>2</sup>. Following Borer's (1983) proposals, Ouhalla will pursue the idea that parametric variation affects only the "inflectional system" of languages. Since in his framework parameters rely on the lexical properties of individual items, a language can instantiate more than one value of a certain parameter if for a given functional category we have more than one lexical entry with different lexical specifications. According to him, this approach provides a new and highly constrained theory of Lexical Parametrisation which allows for a restricted range of possible variation.

The lexical information encoded in functional elements can be of three kinds: (i) c(ategorial)-selectional properties (those referring to selection in terms of

3. Remember, for instance, the Head - parameter of X'- theory which determines the directionality of the relations between a head and its complement giving rise to to values: Head-first or Headlast.

syntactic categories, that is, to the syntactic category required as the complement of the functional category in question); m(orphological)-selectional properties (those which specify whether a given category is free or bound and, in the latter case, the categorial nature of the item it has to attach or adjoin to), and (iii) grammatical features/properties (person, number and gender features, tense features, wh-features, Case features, and categorial features of the type [+N], [+V]). Language variation is explained through the fact that functional categories vary with respect to these three types of properties, while interacting with the general principles of UG.

Chapter 1 is devoted to the general issues concerning the overall proposal outlined above. It also includes a comprehensive introduction to the theoretical framework within which the research enterprise is undertaken.

In Chapter 2 Ouhalla proceeds to justify the full categorial status of a number of affixes that normally appear attached to the V(erb). In standard analyses, elements like negation (NEG), tense (TNS), agreement (AGR), aspect (ASP) and passive morpheme (PASS), as well as modals (MOD), were supposed to belong to the I node. It is argued on theoretical and empirical grounds that they constitute independent syntactic categor-ies which head a full projection in the sense of X'-theory. The argumentation concerning the empirical evidence, as in the rest of the book, is illustrated with data from a wide range of languages which are discussed in more detail in other pieces of work by the autor (see references therein).

Among the appealing aspects of the chapter is the derivation of the distinction between periphrastic and morphological expressions of aspect and passive, which is convincingly shown to stem from the categorial features of the two functional elements ASP and PASS (that is, from their [+N] or [+V] character) in combination with the m-selectional properties of the TNS category. The analysis of passive constructions as such receives special

attention, as well<sup>4</sup>.

The core of Chapter 3 is devoted to the demostration of how this approach can provide an account of the surface ordering variation of substantive elements, more specifically, of the linearisation of subject and verb that has given rise to a supposedly typological distinction between SVO and VSO languages. Ouhalia concludes that the parameter involved amounts to the c-selectional properties of AGR/TNS: in a given language either TNS c-selects AGR (TNSinitial language) or AGR c-selects TNS (AGR-initial language), which in the general case results in a VSO or in a SVO surface ordering, respectively. This is claimed to be the basic property from which a cluster of other properties follows.

To support the validity of the proposals made, Ouhalla shows that Celtic languages, traditionally classified as VSO languages, display the properties of AGR-initial languages, that is those displaying a surface SVO ordering in the unmarked case. Thus he reinforces the hypothesis that the overt ordering of substantive elements depends on the deeper and more basic hierarchical arrangement of functional categories.

Another important part of Chapter 3 deals with the parametric differences involving the c-selectional and m-selectional properties of the NEG elements. The position of NEG in the clause structure will vary according to whether this category c-selects V(erbal) P(hrase) or rather AGR/TNS. On the other hand, its (non) affixal character (m-selectional properties) will determine the movement possibilities of the verbal complex.

In Chapter 4 the author extends the general approach to noun phrases and

4. Periphrastic constructions consist of an auxiliary inflected for tense and agreement and a main W inflected for aspect or passive. On the other hand, the morphological expression as aspect or passive involves a single verbal complex inflected for those categories as well as for tense and agreement, without the need for an auxiliary.

demonstrates that they can be argued to display a number of functional categories which partially parallel those of sentences. In English, for example, noun phrases can be analysed as D(eterminer)Ps when they contain a Det element acting as the head of the whole constituent or as AGRPs when they contain an AGR element that normally surfaces as genitive subject. Taking into account the role played by these elements, many idiosyncratic behaviours of substan-tives (mainly, of the head noun and its subject) receive a principled explanation.

The final part of this last chapter is devoted to motivate the idea that Comp elements are nominalisers in the sense that their projection on the top of sentential clauses allows for the latter to function

as arguments.

As has been noted in the previous paragraphs, Ouhalla's work draws on mainstream research in current syntactic studies and makes a very important contribution to the development of some of the ideas put forward in the literature. The theory of parameters and language variation is one of the central issues at stake in the present stage of linguistic theory and as such Ouhalla's book should become a point of reference in the debate.

## References

BAKER, M. C. (1988). Incorporation: A Theory of Grammatical Function Changing. Chicago: Chicago University Press.

BORER, H. (1983). Parametric Syntax: Case Studies in Semitic and Romance Languages. Dordercht: Foris.

FUKUI, N. and M. SPEAS. (1986). Specifiers and Projections. MIT Working Papers in Linguistics 8, 128-172.

CHOMSKY, N. (1981). Lectures on Government and Binding. Dordrecht: Fotis.

CHOMSKY, N. (1986). Barriers. Cambridge (Mass.): The MIT Press.

CHOMSKY, N. (1988). Some Notes on Economy of Derivation and Representation. MIT Working Papers in Linguistics 10, 43-74.

POLLOCK, J.-Y. (1989). Verb Movement, UG, and the Structure of IP. Linguistic Inquiry 20.3. 365-424.

Josep Quer Ilologia Catalana

Departament de Filologia Catalana Universitat Autònoma de Barcelona

MARGARET SPEAS, Phrase Structure in Natural Language. Dordrecht: Kluwer, 1990. 306 pages.

Transformational grammar (Chomsky 1965), the Government and Binding (GB) model in particular (Chomsky 1981), is a theory of Universal Grammar (UG), the set of principles and parameters that are claimed to be an innate part of the human language faculty. Central to GB theory is phrase structure (PS), the hierarchical representation of the structure of the sentence; it is to elements in this structure that the transformation move alpha is claimed to apply deriving from one PS representation a new PS representation constrained by universal structural and licensing requirements. A central question, intuitively stated, is how does PS start, or where does it come from? A second question regards the universality of the hierarchical representations which have been successful in describing configurational (Con) languages like English: do nonconfigurational (NCon) languages like e.g. Warlpiri, which have been argued not to have a hierarchical PS (Hale 1983), differ in some fundamental way in their syntax? NCon languages pose a serious challenge to GB theory since in general the evidence in favor of a hierarchical PS is weak and further, the evidence against such structure is strong. It is this challenge that Margaret Speas' (1990) Phrase Structure in Natural Language addresses. The claim Speas (S) defends is that PS is projected from lexical items