J. Linguistics **44** (2008), 743–796.
Printed in the United Kingdom

REVIEWS

J. Linguistics 44 (2008). doi:10.1017/S0022226708005380

Artemis Alexiadou, Liliane Haegeman & Melita Stavrou, *Noun phrase in the generative perspective* (Studies in Generative Grammar **71**). Berlin & New York: Mouton de Gruyter, 2007. Pp. xxii + 664.

Reviewed by ROBERTO ZAMPARELLI, Università di Bergamo

Noun phrase in the generative perspective aims to be a broad compendium of studies on 'everything nominal'. It is written by three well-known experts in the field who work in the tradition of generative grammar, in particular, the so-called cartographic approach developed in Rizzi (1997), Cinque (1999) and later work. The book is primarily devoted to the syntax of the internal structure of noun phrases, i.e. Determiner Phrases (DPs) in the analysis put forth by Abney (1987) (discussed and adopted throughout the book), but also addresses central issues in the study of the syntax-semantics interface.

The volume is divided into four parts. Part I, 'Introduction', gives an overview of some basic concepts in Government and Binding Theory and Minimalism, including the evidence for functional projections (FPs), XP-shells and parametric variation in linear order. This part is not centered on noun phrases, requires some previous knowledge of syntax (the reader should be reasonably familiar with constituent structure, movement and the technical notion of agreement) and provides the theoretical background for the rest of the book. The sentential phenomena discussed here are mostly those for which a parallel form has been claimed to exist inside DPs.

Part II, 'The functional make up of the Noun Phrase', focuses on articles and demonstratives, determinerless nominals across languages, proper names and DP-internal functional projections. Part III, 'Modification relations inside the DP', deals with attributive adjectives and their sequencing, pseudo-partitives (e.g. *a number of objections*), the N-*of*-N construction (e.g. *a jewel of a car*), and more generally, predication inside DP and DP-internal predicate raising. Finally, part IV, 'DP-internal arguments', discusses the types of arguments taken by deverbal nominals as contrasted with the corresponding verbal arguments, but also the realization of genitive arguments and non-arguments, with a brief appendix on inalienable possession constructions.

As mentioned above, the aim of the volume is not to present an original theory of DPs at large, but rather to collect, summarize and partly evaluate

the work done on this vast area. Indeed, the amount of literature covered in this book is immense, and any scholar interested in noun phrases will find in it an extremely valuable tool to get a global picture of many phenomena related to nouns, their articles and their modifiers. In terms of language typology, the volume deals primarily with English, Greek, French, Italian and Dutch (in decreasing order of coverage), though other languages are discussed (for example, Romanian and the Scandinavian languages with respect to N(P) raising, Chinese and the Gbe languages for adjective ordering and Spanish for DP-internal functional projections).

In terms of constructions, the coverage follows the often uneven pattern of syntactic research on DPs. For instance, pseudo-partitives receive a thirty-five-page discussion (as potential examples of predicate raising), but partitives (e.g. *three of the boys*) are not addressed at all, although surely not for a lack of literature (see, for example, Hoeksema 1996). The absence of the terms *quantifiers* and *quantification* in the subject index is significant, as is the absence in the references of foundational semantic work on noun phrases, such as Barwise & Cooper (1981), Link (1983) or Heim (1982). This is an opportunity lost in a volume that has the ambition to go beyond a discussion of strictly syntactic phenomena (as is clear from the treatment of determinerless nominals or the semantic categorization of adjectives), and becomes a drawback whenever genuine semantic issues, such as definiteness or (secondary) predication, come to the fore. Here, the discussion is at times rather naive, though this can probably be seen as a shortcoming of the literature which is being reviewed.

Still, at a general level, the book is clearly written and well-organized. However, there are some unnecessary repetitions in the discussion of a few topics (e.g. N-raising), which are likely to be due to the way the work was divided across authors and parts. The book also contains a not insignificant number of editorial errors, especially in examples from languages other than English, tree structures and references. This is particularly disappointing when one considers the high cost of books in this series. Following these general comments, I will now turn to more specific remarks on the contents of parts II–IV.

While the discussion of articles and the left periphery in chapter 1 of part II ('The emergence and the structure of DP: Articles and demonstratives') is interesting, it is curiously 'definite-centric': a large part of it (drawing from Lyons 1999) is devoted to the definite article, taken as the paradigmatic realization of the D position, and to its contrast with demonstrative expressions. Little is said on the indefinite article, not to mention expressions like *every*, *some* or *no*. To be fair, this omission is partly balanced by frequent references throughout part II to the definiteness/indefiniteness contrast, but it would have been interesting to see where other determiners should be placed with respect to the category of 'referentiality', which is very often used to model the meaning of *the* and *this*. Are specific indefinites like *a certain friend of*

mine referential? What about numbers, then, or quantifiers like *every*, which seem to presuppose the non-emptiness of a restrictor (since *every* N is incompatible with *no* N)?

In this domain, the authors seem to accept too readily the approach of Giusti (1992, 2002), who stresses the syntactic importance of the definite determiner as a grammatical formative (in particular, as an expression of Case), dismissing its semantic function. One of Giusti's arguments, presented in some detail in this book, rests on the polydefinite construction (as found in Greek), in which definite articles that occur before the noun are also repeated before all its attributive adjectives. Starting from the assumption that adjectives are not definite per se, Giusti concludes that the polydefinite construction shows that the definite determiner is devoid of semantic content. However, the polydefiniteness pattern is analogous to the distribution of number marking: in Romance, for instance, number is marked on determiners, nouns and adjectives. Yet, as far as I know, nobody has suggested that this distribution makes number semantically vacuous, only that number morphology (or its featural content) is interpretable in some positions but not in others. I fail to understand why for definiteness, we should conclude otherwise. Moreover, it is easy to see that definiteness has an intrinsically more 'distributed' origin than number. For example, in a context where there are several children and several Greeks, but only one child who is Greek, the DP *the Greek child* is definite due to the combination of noun and adjective. This corresponds to the obligatorily restrictive readings of definite-marked adjectives in Greek polydefinites.

In her effort to demonstrate the semantic vacuity of definite articles, Giusti (2002) discusses the data in (1), pointing out that there is no implication that an actual secretary exists.

(1) Scommetto che non troverai mai (Giusti 2002: 63, ex. (24))
bet.1SG that not will.find.2SG ever
[$_{FP}$ la/una segretaria di un onorevole che sia disposta a
[$_{FP}$ the/a secretary of a politician that is inclined to
testimoniare contro di lui]
testify against of him]
'I bet that you will never find the/a secretary of a politician that is inclined to testify against him.'

However, all (1) allows us to conclude is that the category of referentiality is too coarse to capture the meaning of definites in general. Note that replacing the definite with the indefinite in (1) DOES alter the meaning of the sentence, changing the presupposition on the number of secretaries a politician might have, a fact which an analysis in terms of possible worlds can easily accommodate.

Unlike definite articles, demonstratives are taken in this book to be genuine instances of referential elements. The discussion of their syntax is both

detailed and interesting, but I would have liked to see more space devoted to their 'indefinite' uses (see Prince 1988), as illustrated in (2).

(2) So I open the door and there is this guy …

Should one conclude from the example above that demonstratives, too, have no referential semantics or, alternatively, that indefinites can be referential?

In the same vein, it would have been interesting to see a discussion of complex demonstratives, cf. (3), which have been argued to behave more like definites/bound variables (King 2001).

(3) (a) **Those** students that need a grade must come see me in my office.
(b) Professor White hopes each professor will nominate **that** professor's best student.

Chapter 2 of part II discusses 'Determinerless noun phrases' and their role as arguments. (Less attention is devoted to the properties of DPs as predicate nominals, on which see, for example, Zamparelli 2005.) This is perhaps the book's most semantically focused chapter, and it successfully summarizes and compares the approach to bare DPs in Diesing (1992), Longobardi (1994, 2002), Chierchia (1998), Cheng & Sybesma (1999) and others. The central questions addressed are (i) whether languages that do not have articles still need a DP layer (albeit possibly one whose head is never lexicalized); (ii) whether determinerless noun phrases in languages that can have articles are DPs or simply Noun Phrases (NPs); (iii) what kind of parametric variation allows languages to have (or not have) determiners, and how the choice is constrained by the features of N (e.g. plural/singular); and (iv) how nominals without determiners are interpreted.

Question (i) revolves around the semantic and syntactic role of the D projection: some authors (e.g. Longobardi 1994, 2002) see D as a projection needed to turn a nominal into an argument (on the assumption that arguments are referential and that D is the locus of referentiality), while for others (e.g. Fukui 1986), determinerless languages like Japanese or Chinese have non-configurational noun phrases which do not project DPs. Finding evidence for empty Ds in languages without articles is notoriously difficult – particularly if one adopts the view that D does not host quantifiers – so various researchers have tried to tackle question (i) by first considering (ii), since at least some of the languages to which question (ii) applies provide good evidence for the existence of DPs in the absence of an overt determiner. While in the literature, the discussion of questions (i) and (ii) has largely focused on 'extreme' cases – such as French, which has strongly obligatory determiners and a strong count/mass distinction, vs. Chinese, a language characterized by classifiers, no determiners, and very free word order – there is growing interest in 'intermediate' cases, as represented by most Slavic languages.

Questions (iii) and (iv) are also inextricably linked. After presenting the outlines of Carlson's (1977) seminal theory of bare plurals as 'names of kinds of things' and its quantificational alternatives (Diesing 1992), the chapter discusses at length the neo-Carlsonian theory of Chierchia (1998). This work proposes a semantic parameter that links the possibility for languages to have bare NPs as arguments to the absence of a count/mass distinction. Chierchia's theory has been very influential among syntacticians, but it has also been the target of intense criticism (see, for example, Cheng & Sybesma 1999, who question the purported lack of a count/mass distinction in Chinese, or Longobardi 1994, who does not accept that Romance bare nouns can denote kinds), and the book gives a good account of this lively discussion. The chapter ends with a review of the syntactic evidence for the presence of empty D heads and N-to-D movement, as proposed in Longobardi (2004) for proper names.

The last chapter in part II, 'DP-internal functional projections', examines the evidence for the existence of functional projections above N, in particular those that correspond to (or, in Minimalist terms, 'check') number and gender, two of the three traditional phi-features. Evidence for a separate projection for person is not discussed, probably due to the fact that first and second person DPs are pronouns, although the existence of noun phrases such as *we linguists* or *you guys* could have been addressed. Evidence for Number (Num) and Gender (Gen) Phrases is of two kinds: these projections can be realized as inflectional categories (whether affixes or free morphemes) or they can trigger movement of N inside DP, parallel to verb movement to the functional categories of Agr/T.

While number interacts with the count/mass status of a noun (as discussed in chapter 2 of part II), it does not seem to be a lexical property of nouns, which suggests treating it as a [+ interpretable] functional head outside the NP proper. There is, however, considerable vagueness in the literature as to the exact role of NumP, and the authors would have done well to dissect more closely the different positions. Pretheoretically, NumP may simply be the position which hosts cardinal numerals in a noun phrase like *those three boys*, or it may be the place where a plural denotation can be formed from a singular one (corresponding to Heycock & Zamparelli's 2005 PlP) or, finally, it may host an operator more fundamentally related to 'atomization' or 'individuation' of the noun, itself a prerequisite for using the noun as an argument. The view that Num hosts numerals requires NumP to occupy a position close to the edge of DP, at which point the meaning of the nominal will presumably already be plural; in other words, a NumP containing a numeral would act as a filter, rather than as a trigger of a plurality which comes from NP or the FPs immediately above. The alternative view that Num is a pluralizer raises the question of whether when we talk of the semantic role of number, we are actually talking about the semantic role of PLURAL number, while a Num marked 'singular' simply leaves the original

meaning of N unaltered. Finally, the view that Num is an 'atomizer' is most directly linked to Bouchard's (2002) theory that assigns to number the role of identifying arguments (in other approaches, this role is assigned to D itself). In some versions of this view, nouns start out denoting kinds, and Num turns them into individuals over which quantifiers can range. One problem for this idea is that number and kindhood can be orthogonal – for example, we can have pluralities made of kinds (cf. *We produce three wines/every wine in the region*). Moreover, when saying that number can individuate nouns, one should be careful not to allow direct quantification of mass nouns (cf. **every oxygen*, **two regards*).

In contrast with number, gender is widely believed to be a lexical property of nouns, which is either not interpretable or interpretable only in conjunction with animacy. The book gives ample evidence against the need to postulate an independent Gender head and devotes a fair number of pages to criticizing the W(ord)M(aker)Phrase (essentially a Gender Projection), posited by Bernstein (1993) to explain some properties of null-nominal constructions, and its postulated role as trigger for DP-internal N-movement.

Part III, which is largely concerned with nominal modifiers (relative clauses are discussed only insofar as they can be the source of predicative adjectival modification), begins with a valiant attempt to distinguish three fundamental and partly overlapping notions: (i) attributive vs. predicative, (ii) intensional vs. extensional, and (iii) intersective vs. non-intersective (where a reference to Partee, in press, would have been appropriate). These notions are then used to contrast two possible analyses for pre- and post-nominal adjectival modification, viz. a 'reductionist' approach (which derives one from the other) and a 'separationist' approach, each with several distinct implementations.

The first chapter in part III, 'Adjectives in the DP: Problems of distribution and interpretation', contains a very interesting discussion of the possible ways in which multiple adjectives can be ordered. In the spirit of the cartographic approach, adjectives are claimed to follow a rigid order when stacked, but not when interpreted in parallel, via coordination. The studies considered in the volume converge on the existence of a robust, two-way 'correlation between an adjective being intensional or subsective and its appearance in prenominal [i.e. a more external] position' (337).

The rest of the chapter examines various approaches to the syntax of adjectival ordering, paying special attention to the N-movement approach of Cinque (1994) and its problems, such as how to account for mirror-image orders and unexpected scope facts. It then reviews a number of theories that try to capture the same data by means of phrasal movement (e.g. Aboh 1998) and/or reduced relatives (Kayne 1994). Once again, a general problem with these theories is their intrinsic expressive power (see Abels & Neeleman 2006), coupled with the lack of adequate triggers for movement. The problem is made more acute by the fact that no single analysis seems to be able to

accommodate the full range of adjectives and adjectival positions, so that the same language might require multiple (and by necessity interacting) derivations. Moreover, there is no robust methodology for establishing when adjectives are interpreted in parallel (adjectives can apparently be coordinated asyndetically), and a free mix of hierarchical and parallel modification can result in the justification of pretty much any order at all. My hunch is that only a corpus-based study of the relative frequency of adjective sequences in different contexts can ultimately provide the evidence needed to decide between the various approaches.

Chapter 2 of part III, 'Semi-functional categories: The *N-of-N* construction and the *pseudo-partitive* construction', analyzes both of these structures as instances of DP-internal predication (roughly, deriving an N-*of*-N construction like *that idiot of a driver* from *driver who is an idiot*, and a pseudo-partitive like *a bottle of water* from *water* [*a bottle*]) plus A-bar predicate inversion (in the sense of Moro 1997). The discussion draws heavily on den Dikken (1995, 1998) and Corver (1998). While I find the general line of analysis compelling, this is a domain where the issue lies in the details, which include, at least, the nature and position of the nominal copula *of*, the presence of *a*, the agreement patterns and the restrictions on the types of predicates allowed. Since settling these issues is bound up with a considerable number of theory-internal considerations, the particular analysis proposed here leaves the present reader somewhat unconvinced, given the quasi-collocational status of these constructions. In my opinion, a comparison with other constructions akin to the N-*of*-N construction (for example, the *kind*-construction discussed in Zamparelli 1996) would have boosted the credibility of the analysis.

Concerning pseudo-partitives, there is no serious discussion of the syntax-semantics interface that goes beyond the vague assertion that measures are hosted in 'predicative categories'. However, given that a phrase like **the water that was two liters* is clearly ungrammatical, it might be more apt to name these structures modifier rather than predicate raising.

Part IV of the book turns from nominal modifiers to arguments and considers the arguments of deverbal nouns as compared to those of the corresponding verbs, their position and realization as genitive noun phrases. This is the part of the book that deals the most with morphological issues. Much of the discussion is concerned with a classic topic in generative grammar, viz. the relation between nouns and verbs. In chapter 1 of part IV, 'Argument structure in nominals', the authors review in some detail Grimshaw's (1990) differentiation between complex event nominals, result nominals and simple event nominals, cast in terms of argument structure, and discuss ways in which this distinction can be implemented syntactically. One possibility which has been frequently suggested is to embed a VP inside a DP, possibly also adding a number of aspectual/temporal functional projections above the VP proper. Some of the syntactic representations discussed rest on the ability

of adverbs to modify event nominals, or capitalize on the fact that bare plural objects can trigger aspectual shifts both on verbs and on derived nominals (cf. {*the signature of*/*they signed*} {*agreements*/??*an agreement*}*for hours*). But as the authors correctly note, approaches in which a large portion of sentential structure is embedded within the DP predict that adverbs modifying nominals should be much more common than what is actually found. The chapter closes with a discussion of Alexiadou's (2001) theory of nominalization, which addresses this problem and tries to account for the classes of adverbs that can and cannot occur within Greek derived nominals.

The second chapter of part IV, 'Possessors and genitives', is concerned with the status of possessives, addressing questions such as (i) to what extent full DP prenominal possessives (e.g. [*John's*] *books*) are analogous to possessive pronouns; (ii) the relation between prenominal and postnominal possessives; (iii) the mapping between possessors and nominal arguments; and (iv) the distinction between alienable and inalienable possession. Apropos the last issue, I am skeptical that both *John's nose* and *the top of the mountain* should be tagged as inalienable: while it is possible to talk in absolute terms of body parts, this is not true of strongly relational nouns like *top* (cf. *noses*/??*tops are generally pointy*).

The final section of the chapter debates the question as to where possessors are base-generated, which is related to the (im)possibility of extracting out of possessors in Greek, West Flemish and other languages. While classifying genitives (e.g. *a green children's bicycle*) are briefly addressed in various footnotes, I would have liked to see a fuller discussion of them in the main text.

To conclude, despite shortcomings in the way that it deals with semantics, *Noun phrase in the generative perspective* is an extremely useful book and a very welcome attempt to collect, compare and integrate in a single work a number of analyses dispersed across the literature over the last forty years. Among its merits are its coverage, the clarity of its writing and the way in which the authors have managed the difficult task of creating connections between the various sections – no small feat by far for such a diverse and complex domain.

REFERENCES

Abels, Klaus & Ad Neeleman. 2006. Universal 20 without the LCA (version 1). Ms., University of Tromsø & University College London. http://ling.auf.net/lingbuzz/@NEZNvgQDnYgsHuYL/nroHLtvl?3 (15 July 2008).

Abney, Steven. 1987. *The English noun phrase in its sentential aspect*. Ph.D. dissertation, MIT.

Aboh, Enoch. 1998. *From the syntax of Gungbe to the grammar of Gbe*. Ph.D. dissertation, University of Geneva.

Alexiadou, Artemis. 2001. *Functional structure in nominals: Nominalization and ergativity* (Linguistics Today 42). Amsterdam & Philadelphia: John Benjamins.

Alexiadou, Artemis & Chris Wilder (eds.). 1998. *Possessors, predicates and movement in the Determiner Phrase* (Linguistics Today 22). Amsterdam & Philadelphia: John Benjamins.

Barwise, Jon & Robin Cooper. 1981. Generalized quantifiers and natural language. *Linguistics and Philosophy* 4.2, 159–219.
Bernstein, Judy B. 1993. *Topics in the syntax of nominal structure across Romance*. Ph.D. dissertation, City University of New York.
Bouchard, Denis. 2002. *Adjectives, number and interfaces: Why languages vary* (North-Holland Linguistic Series 61). Amsterdam: Elsevier.
Carlson, Gregory N. 1977. *Reference to kinds in English*. Ph.D. dissertation, University of Massachusetts, Amherst.
Cheng, Lisa Lai-Shen & Rint Sybesma. 1999. Bare and not-so-bare nouns and the structure of NP. *Linguistic Inquiry* 30.4, 509–542.
Chierchia, Gennaro. 1998. Reference to kinds across languages. *Natural Language Semantics* 6, 339–405.
Cinque, Guglielmo. 1994. On the evidence for partial N-movement in the Romance DP. In Guglielmo Cinque, Jan Koster, Jean-Yves Pollock, Luigi Rizzi & Raffaella Zanuttini (eds.), *Paths towards Universal Grammar: Studies in honor of Richard S. Kayne* (Georgetown Studies in Romance Linguistics), 85–110. Washington, DC: Georgetown University Press.
Cinque, Guglielmo. 1999. *Adverbs and functional heads: A cross-linguistic perspective* (Oxford Studies in Comparative Syntax). New York & Oxford: Oxford University Press.
Corver, Norbert. 1998. Predicative movement in pseudopartitive constructions. In Alexiadou & Wilder (eds.), 215–258.
Diesing, Molly. 1992. *Indefinites* (Linguistic Inquiry Monographs 20). Cambridge, MA: MIT Press.
Dikken, Marcel den. 1995. *Particles: On the syntax of verb particle, triadic, and causative constructions*. New York & Oxford: Oxford University Press.
Dikken, Marcel den. 1998. Predicate inversion in DP. In Alexiadou & Wilder (eds.), 177–214.
Fukui, Naoki. 1986. *A theory of category projection and its application*. Ph.D. dissertation, MIT.
Giusti, Giuliana. 1992. Heads and modifiers among determiners: Evidence from Romanian and German. *University of Venice Working Papers in Linguistics* 2, 1–19.
Giusti, Giuliana. 2002. The functional structure of noun phrases: A bare phrase structure approach. In Guglielmo Cinque (ed.), *Functional structure in DP and IP: The cartography of syntactic structures*, vol. 1 (Oxford Studies in Comparative Syntax), 54–90. Oxford: Oxford University Press.
Grimshaw, Jane B. 1990. *Argument structure* (Linguistic Inquiry Monographs 18). Cambridge, MA: MIT Press.
Heim, Irene. 1982. *The semantics of definite and indefinite noun phrases*. Ph.D. dissertation, University of Massachusetts, Amherst.
Heycock, Caroline & Roberto Zamparelli. 2005. Friends and colleagues: Plurality, coordination, and the structure of DP. *Natural Language Semantics* 13, 201–270.
Hoeksema, Jacob (ed.). 1996. *Partitives: Studies on the syntax and semantics of partitive and related constructions* (Groningen–Amsterdam Studies in Semantics 14). Berlin: Mouton de Gruyter.
Kayne, Richard S. 1994. *The antisymmetry of syntax* (Linguistic Inquiry Monographs 25). Cambridge, MA: MIT Press.
King, Jeffrey C. 2001. *Complex demonstratives: A quantificational account* (Contemporary Philosophical Monographs 2). Cambridge, MA: MIT Press.
Link, Godehard. 1983. The logical analysis of plurals and mass terms: A lattice-theoretical approach. In Rainer Bäuerle, Christoph Schwarze & Arnim von Stechow (eds.), *Meaning, use, and interpretation of language* (Foundation of Communication), 302–323. Berlin: Walter de Gruyter.
Longobardi, Giuseppe. 1994. Reference and proper names: A theory of N-movement in syntax and logical form. *Linguistic Inquiry* 25.4, 609–665.
Longobardi, Giuseppe. 2002. How comparative is semantics? A unified parametric theory of bare nouns and proper names. *Natural Language Semantics* 9, 335–369.
Lyons, Christopher. 1999. *Definiteness* (Cambridge Textbooks in Linguistics). Cambridge: Cambridge University Press.
Moro, Andrea. 1997. *The raising of predicates: Predicative noun phrases and the theory of clause structure* (Cambridge Studies in Linguistics 80). Cambridge: Cambridge University Press.

Partee, Barbara H. In press. Privative adjectives: Subsective plus coercion. In Rainer Bäuerle, Uwe Reyle & Thomas E. Zimmermann (eds.), *Presuppositions and discourse: Essays offered to Hans Kamp*. Amsterdam: Elsevier. http://people.umass.edu/partee/docs/ParteeInPressKampFest.pdf (15 July 2008).
Prince, Ellen F. 1988. The ZPG letter: Subjects, definiteness, and information-status. In William C. Mann & Sandra A. Thompson (eds.), *Discourse description: Diverse analyses of a fund-raising text* (Pragmatics & Beyond, New Series 16), 295–325. Amsterdam & Philadelphia: John Benjamins.
Rizzi, Luigi. 1997. The fine structure of the left periphery. In Liliane Haegeman (ed.), *Elements of grammar: Handbook in generative syntax* (Kluwer International Handbooks of Linguistics 1), 281–337. Dordrecht: Kluwer.
Zamparelli, Roberto. 1996. *Layers in the Determiner Phrase*. Ph.D. dissertation, University of Rochester.
Zamparelli, Roberto. 2005. Bare predicate nominals in Romance languages. Ms., Università di Bergamo.

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(Received 23 June 2008)

J. Linguistics 44 (2008). doi:10.1017/S0022226708005392

Andrew Carnie, *Constituent structure* (Oxford Surveys in Syntax and Morphology **5**). Oxford: Oxford University Press, 2008. Pp. xviii + 292.

Reviewed by DIRK BURY, Bangor University

Andrew Carnie's *Constituent structure* is a very timely addition to Oxford University Press's series of surveys, appearing, as it does, at a point when numerous themed international conferences demonstrate the heightened interest both in the formal properties of syntactic theories and in diverse approaches to capturing constituency.

The book is organised in three parts: part 1, 'Preliminaries' (chapters 1–4); part 2, 'Phrase structure grammars and X-bar theory' (chapters 5–7); and part 3, 'Controversies' (chapters 8–11). The brief first chapter, 'Introduction', demonstrates the hierarchical organisation of clauses and previews the book's content. Chapter 2, 'Constituent structure', reviews classic arguments against an account of constituency based on simple concatenation and shows that regular grammars (finite state automata) are similarly inadequate. The chapter then briefly discusses constituency tests and the role of compositionality. Chapter 3, 'Basic properties of trees: Dominance and precedence', introduces tree diagrams as representations of constituent structure, and the basic formal concepts used to describe them. The primitive relation of dominance is used to formulate different axioms that rule out structures which are usually assumed to have no linguistic relevance, such as, for example, multiply rooted trees. The relation of precedence is defined, in a top-to-bottom fashion, in terms of the primitive relation of sister precedence.