Mark Baltin and Chris Collins (eds.), The Handbook of Contemporary Syntactic Theory. Oxford: Blackwell Publishers. 2001, 860pp. ISBN 0-631-20507-1

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In an era of ever-increasing specialization in linguistic theory, researchers and students alike are in need of reference works presenting the latest developments accurately. The Handbook of Contemporary Syntactic Theory (henceforth: 'Handbook') fills this gap by offering its readers an impressive collection of twenty-three contributions on a wide variety of syntactic topics. Written primarily with a Minimalist/GB orientation, the Handbook is divided into an introduction and six sections, each focusing on a specific area of generative syntactic inquiry: 'Derivation versus Representation', 'Movement', 'Argument Structure and Phrase Structure', 'Functional Projections', 'Interface with Interpretation', and 'External Evaluation of Syntax'.

The Handbook begins with an introduction by Baltin and Collins whose aim is to provide an overview 'of what syntax looks like today' (5). They discuss how restrictions on the formation of constituent questions noted by Chomsky in the 1960s triggered a large body of research on constraints on various grammatical processes. Mention of syntactic restrictions brings the editors to compare the discovery procedures of pre-Chomksyan structuralist linguistics with those of syntactic research since the 1960s. In particular, they discuss the importance of introspective data and their incorporation into implicit discovery procedures to arrive at a theory of Universal Grammar. The role of Universal Grammar vis-à-vis the architecture of syntactic theory leads B & C to 'assume that grammatical rules operate in the simplest, least-specified manner possible' (2). Referring to Chomsky again, the editors point out that the advantage of 'the idea that a grammar is a formal theory, with mentalistic embodiment, we can ask precise, testable questions about the nature of some very interesting things, such as the human mind, in a way that would have been meaningless even in the late 1930s' (5).

Part I, titled 'Derivation versus Representation', begins with a chapter on 'Explaining Morphosyntactic Competition' by Joan Bresnan. Combining ideas from Optimality Theory and Lexical-Functional Grammar, B analyzes different patterns of negation in various English dialects. In the first half of the chapter, she reviews how blocking effects can be modeled in OT, and discusses the nature of sentential and constituent negation in various English dialects. In the second half, B develops an elegant OT account that explains the distribution of negation in inverted position in terms of a number of competing constraints, which lead to the blocking of a morphological construction by a syntactic construction.

In the chapter that follows, 'Economy Conditions in Syntax', Chris Collins discusses how different types of economy conditions proposed within the Minimalist Program (Chomsky 1995) are related to each other. Following a number of theory-internal assumptions regarding the nature of syntax, C looks in detail at a number of minimalist principles called Last Resort, Inertness, Minimality, Fewest Morphemes, Shortest Derivation Requirement, As Soon As Possible, and Procrastinate. While these economy conditions are of great relevance to the current state of Chomskyan linguistics, it is not entirely clear how they might be significant for non-minimalist theories of

syntax. Given that the title of the volume is 'The Handbook of Contemporary Syntactic Theory' one would have expected a short discussion pointing out how these minimalist economy principles are relevant for other syntactic theories. For non-minimalist syntacticians it might thus be comforting to learn that C himself acknowledges at the end of his chapter that '[w]hat can be said with certainty is that our understanding of economy at this point is minimal.' (61)

With his chapter on 'Derivation and Representation in Modern Transformational Syntax', Howard Lasnik takes up the task of determining whether or not well-formedness conditions are 'imposed "internal" to the derivation' leading to particular levels of representation (62). Focusing on the status of locality constraints on movement operations and the mechanism forcing (overt) movement within the Minimalist Program (Chomsky 1995), L first reviews in detail a set of movement data showing how subjacency violations posed problems for earlier works within the generative transformational paradigm. This assessment leads L to an important theory-internal discussion of traces, locality and reconstruction, motivations for movement operations, and the nature of strong features. The picture emerging from L's chapter is that the various phenomena call for a hybrid account that includes both derivational and representational components to explain the distribution of phenomena such as movement/ locality asymmetries within the Minimalist Program.

Rizzi's chapter on 'Relativized Minimality Effects' first summarizes a number of locality principles as laid out by Rizzi (1990). Based on this review, R presents a detailed treatment of A'-chains and discusses how different adverbial modifiers are relevant to Minimality effects. His findings are of particular relevance to minimalist theorizing because 'this system meets the desideratum expressed in Chomsky (1995b) of eliminating head government from the inventory of primitive structural relations, while at the same time preserving the option of a direct action of a head on the specifier of its complements, a possibility which receives strong empirical support from considerations of case licensing and trace licensing.' (108)

Part II of the Handbook is titled 'Movement'. The first contribution by Ian Roberts discusses 'Head Movement' from both an empirical and theoretical point of view. Reviewing a number of word order differences at the nominal and the clausal level in various languages, R points out how all properties of head movement can be deduced from Move-α where α is a head. In re-formulated minimalist terminology, R proposes that 'all movement is triggered by features of heads, and we might think XPs are attracted to the extent that they realize features that can be checked with attracting heads' (147). While R accounts for head movement in terms of a number of theory-internal syntactic constraints particular to the Minimalist Program (e.g., Head Movement Constraint, Minimal Configuration, and Asymmetric C-command), the conclusions of the chapter contain the following statement: 'Recently, however, Chomsky has proposed (in class lectures) that head movement may not truly be part of the syntax at all, but rather part of the phonology' (145). This remark has left me wondering about the real status of head movement, especially whether there are any empirically accessible data that would allow linguists to determine whether the phenomenon called head movement in Chomskyan linguistics belongs to syntax or phonology.

In the following chapter, 'Object Shift and Scrambling', Höskuldur Thráinsson gives a detailed description and minimalist analysis of Object Shift in Scandinavian

languages and Scrambling in German and Dutch. The main focus of this contribution is to examine how movement operations leading to Object Shift and Scrambling should be restricted. To determine this, T discusses a number of constraints that could be applied to what has been collectively subsumed under the Move-α rule. While incorporating a number of theory-internal assumptions about the nature of syntax that may be difficult to understand by non-minimalist syntacticians, T's chapter stands out from other contributions in the Handbook because it combines a larger than usual set of data from different languages with a discussion of relevant non-syntactic issues such as morphological case, semantic interpretation, focus, and stress.

Akira Watanabe's chapter on '*Wh*-in-situ Languages' demonstrates how *wh*-movement operations proposed for languages such as Japanese and Chinese take place in overt syntax. This analysis is in contrast to other accounts that argue for LF Movement to explain *wh*-movement in languages such as Japanese and Chinese. To support this view, W shows that there is also a morphological difference between English-type languages and *wh*-in-situ languages. Finally, W discusses typological differences between different types of *wh*-in-situ languages.

In the chapter on 'A-Movements', Mark Baltin examines the possibility of analyzing A-movement phenomena and lexical phenomena using the same mechanisms within the Chomskyan framework (Government Binding theory and Minimalism). Assessing relevant data on passives, unaccusatives, subject-to-subject, and subject-to-object raising, B shows that it is not possible 'to reduce all of the phenomena to a single treatment' (251). On this view, A-movement should be characterized as movement to a c-commanding position. This chapter is a refreshing contribution for transformational and non-transformational syntacticians alike because B mentions how the relevant syntactic phenomena are analyzed in other theoretical frameworks such as Lexical-Functional Grammar (Bresnan 1982), Head-Driven Phrase Structure Grammar (Pollard & Sag 1994), and Role and Reference Grammar (Foley and Van Valin 1984).

Part III, 'Argument Structure and Phrase Structure', begins with a chapter on 'Thematic Relations in Syntax' by Jeffrey Gruber. Discussing elemental thematic functions, cross-field generalization, and projection asymmetries, G sets the stage to determine possible solutions to 'the linking problem of argument projection' (257). G's analysis of complex thematic structures considers the distribution of resultatives and causatives before focusing on the role of aspect in argument projection. G argues that 'thematic roles must be represented in syntax discretely rather than prototypically' (275) which leads him to claim that 'argument projection would then be entirely by syntactic computation. In fact it shows characteristics of movement' (280). Based on this assumption, G reviews a number of Theta-role asymmetries among locational, motional, resultative, causative, and possessional predicates. While this chapter connects nicely to other contributions in the Handbook focusing on Chomskyan linguistics, I am disappointed that G does not compare his approach to thematic relations with other accounts dealing with similar issues. For example, there is only a brief mentioning of Fillmore (1968), Jackendoff (1990), Dowty (1991), and Tenny (1994), but no references to Frame Semantics (Fillmore 1985), Construction Grammar (Goldberg 1995), the Generative Lexicon (Pustejovsky 1995), or Natural Semantic Metalanguage (Wierzbicka 1996), all of which have contributed significant insights to the problems raised by G.

In the chapter on 'Predication', John Bowers deals with the syntactic representation of predication. A short review of how predication has been analyzed within the Chomskyan framework over the past three decades is followed by a discussion of the Specifier Hypothesis and the Functional Category Hypothesis in order to determine the status of the functional category 'Pr' (for predicate, or predication) vis-à-vis other functional categories. B adduces data on VP conjunction and adverb positions to 'provide further syntactic evidence in support of this approach to predication' (311) before he examines in great detail the internal structure of PrP by discussing raising-to-object, resultatives, and Small Clause adjuncts. The broad picture emerging from B's contribution is that 'a descriptively and explanatorily adequate theory of predication requires positing a grammatical and morphological category Pr, whose function is to relate subject to predicate' (328). Syntacticians working in other theoretical frameworks will wonder about the empirical evidence used to support the existence of a functional category Pr because – as B himself points out – 'discrete, easily identifiable phonetic reflexes of the category Pr are not always to be found. Instead, the presence of Pr must be inferred indirectly from the effects that it exerts on other categories and the syntactic patterns it induces' (328).

In the chapter that follows, 'Case', Hiroyuki Ura examines the role of case in syntax within the framework of Generative Grammar. An easily accessible review of how case is analyzed within Government and Binding (GB) theory is followed by an in-depth discussion of the relationship between case and grammatical functions and relations that pose problems for how case is analyzed in GB. U presents empirical data from a variety of languages that demonstrate many problems associated with determining the role of case in syntax. Finally, U presents how case and grammatical functions and relations are analyzed in the Minimalist Program. U's detailed contribution will be of great interest to syntacticians with different theoretical persuasions because its analysis of various syntactic phenomena pertaining to case includes clearly written background information about the 'fundamental conceptions of the Minimalist Program and the theory concerning formal features' (348).

Naoki Fukui's chapter on 'Phrase Structure' gives an extensive overview of the role of phrase structure in contemporary linguistic theory. After a review of the role of X'-theory in Chomskyan linguistics throughout the 1970s and 1980s, F discusses the DP-analysis and the Predicate-Internal Subject Hypothesis. This sets the stage for an in-depth presentation of the status of phrase structure and linear order in the Minimalist Program. F's contribution is of great interest because it chronicles in detail the analysis of phrase structure within the Chomskyan framework and points out commonalities between the Minimalist Program and approaches such as Head-Driven Phrase Structure Grammar (Pollard & Sag 1994) when it comes to 'explicit mechanisms of feature systems' (403).

With his chapter on 'The Natures of Nonconfigurationality' Mark Baker addresses the question of how to analyze different types of nonconfigurational languages such as Warlpiri, Mohawk, Japanese, and Hindi. Focusing on different typological properties such as head marking, dependent marking, basic category system, and word order, B argues that 'the same Universal Grammar holds for this full range of languages, where Universal Grammar is viewed as (primarily) a set of formal constraints and (derivatively) a library of structures that obey those constraints' (434). B complements his Principles and Parameters analysis of the data with two important points. First, a

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comparison of how Lexical-Functional Grammar accounts for nonconfigurationality. Second, a section on the relevance of pragmatics pointing out that 'sentences with secondary predication in Warlpiri/Jiwarli are not used in the same kinds of situation as sentences with secondary predication in English, and they do not have the same communicative effect' (432).

In the following chapter, Kyle Johnson discusses 'What VP Ellipsis Can Do, and What it Can't, but not Why'. The first section is concerned with the syntactic environments in which VP ellipsis is licensed in English and Dutch. The second section deals with the structural relations between an elided VP and its antecedent. The third section examines how the meaning of the ellipsis is recovered from its antecedent. Combining all three areas of inquiry, J argues for a derivational interpretation of VP ellipsis that involves moving the elided VP which 'is neither a pro-form nor a trace. It is a creature apart' (473).

Part IV is a collection of contributions on 'Functional Projections' which examine issues that are to a large degree relevant only to syntacticians working within the Chomskyan framework. Adriana Belletti's contribution deals with 'Agreement Projections'. Surveying the development of the Infl(ection) functional node in the Principles and Parameters framework, B is concerned with the impact of the 'Split-Infl Hypothesis' on the characterization of the inflectional head, ultimately leading to various phi-features contained in the Agr(eement) projection in the Minimalist Program. B examines the status of Agr in Determiner Phrases, Complementizer Phrases, and Small Clauses, and points out the relevance of Agr for research in language acquisition.

Raffaella Zanuttini surveys current research on 'Sentential Negation' within the Chomskyan framework. Based on a theory-neutral discussion of negation in various languages Z seeks to 'determine the syntactic category to which negative markers belong' (512). To achieve this goal, Z compares the distribution of negation markers (and the projection NegP) with that of VP-adverbs and pre-verbal clitics, which leads her to conclude that 'not all negative markers belong to the same projection, but that more than one must be postulated' (523). Based on this assumption, Z examines different tests that can help determine 'whether a negative marker is a head or a maximal projection' (523). Finally, Z discusses the role of Universal Grammar in determining the range of variation when it comes to the distribution of sentential negation in different languages.

The chapter titled 'The DP Hypothesis: Identifying Clausal Properties in the Nominal Domain' by Judy Bernstein is concerned with parallels between clausal and nominal structures in terms of head movement. First, B reviews morphological, syntactic, and semantic evidence that supports the existence of Determiner Phrases as nominal counterparts to Complementizer Phrases in English and other languages. Then, B argues that there are 'several types of syntactic movement internal to the DP' (554) which leads her to examine two functional projections specific to the DP, namely one pertaining to number (NumP), and another pertaining to gender (GenP).

In 'The Structure of DPs: Some Principles, Parameters, and Problems', Giuseppe Longobardi takes up a set of problems related to those dealt with by Bernstein in the previous chapter. L looks in detail at the lexical and functional structures surrounding head nouns. Based on a review of different syntactic phenomena in various languages, he argues that 'the argument structure of nominal phrases is governed by a number of probably universal *principles*, largely shared with clausal structures' (577). His detailed

discussion of determiners and N-Movement lead L to posit a set of UG principles in combination with a set of binary parameters that account for the variation within DPs. Although L considers a quite impressive number of different languages, it is not clear how this approach will lead to a truly universal analysis of DPs. Considering thousands of languages that have *not* been included in L's discussion, non-minimalist syntacticians might wonder about how L came to estimate the probable number of possible parameters at the end of his chapter: 'On the whole, it is not too hazardous to expect that the order of magnitude of core grammatical variation in the DP-domain may ultimately turn out to be roughly equivalent to something between 15 and 20 binary parameters, perhaps even including intrinsically morphophonological parameters' (599).

Part V of the Handbook contains contributions on the 'Interface with Interpretation'. In 'The Syntax of Scope', Anna Szabolcsi examines several examples of scopal dependencies in order to determine the scope of quantifiers. A discussion of different scope relations is followed by an examination of how the scope of an operator is determined. S then goes on to survey previous analyses of quantification, before she finally turns to the treatment of scope in the Minimalist Program. Contrary to 'the mainstream assumption of LF' (632), S argues that the 'Spell-Out syntax' operation is sufficient for accounting for quantifier scope in natural language.

In 'Deconstructing Binding', Eric Reuland and Martin Everaert look at how the Binding Theory of the Principles and Parameters framework (Chomsky 1981) applies to various syntactic phenomena. The authors first present a detailed review of the Standard Binding Theory, explaining the main concepts of indexing, c-command, binding conditions, and LF-movement. Pointing out some empirical problems with the original Binding Theory, R & E argue that there is a difference between 'coreference' and 'bound variable anaphora' which leads them to an in-depth discussion of how long distance anaphora, logophoricity, different types of anaphoric expressions, and reflexivity should be analyzed from a minimalist perspective.

In the following chapter on 'Syntactic Reconstruction Effects' Andrew Barss surveys different analyses investigating what happens to moved elements that are interpreted as if they had not been moved. Considering a number of accounts that deal with the asymmetry between moved predicate phrases and non-predicate phrases, B shows that 'reconstruction is fundamentally a property of movement dependencies' (692) and that 'certain cases of anti-reconstruction may require appeal to non-syntactic pragmatic preference strategies' (693).

Finally, part VI of the Handbook deals with the 'External Evaluation of Syntax'. In the chapter on 'Syntactic Change', Anthony Kroch shows how a synchronic theory of syntax can inform diachronic studies of syntax and vice versa. Examining in detail diachronic concepts such as language change, stability, first language acquisition, language contact, and syntactic change (including its diffusion), K discusses how a theory of syntactic change can benefit from a richly specified Universal Grammar. In my view, this contribution is one of the most informative chapters in the Handbook, because K successfully shows that work on syntactic change 'has succeeded in creating a lively field with well-posed problems on its agenda and a fruitful dialectic between theoretical concerns and empirical findings' (727). It is the interdisciplinary nature of K's chapter as well as the wide range of empirical data and their theoretical interpretation that will appeal to syntacticians coming from a variety of theoretical backgrounds.

The final chapter of the Handbook is titled 'Setting Syntactic Parameters'. Janet Fodor is concerned with the logical problem of language acquisition. A summary of various learnability concerns comes to the conclusion that 'a goal of linguistic research has been to consolidate facts and posit as few parameters as possible consistent with crosslanguage variation' (734). Based on a 'working assumption here that there are exactly 20 binary syntactic parameters' (734), F sets out to discuss the mechanisms by which children are assumed to set their parameters during the process of language acquisition. A discussion of issues surrounding the number of input sentences a child hears during the first few years of its life is followed by an examination of parametric ambiguity and parametric decoding. Finally, F looks at the role of ambiguity and the status of Universal Grammar in language acquisition. While F's contribution covers in great detail various issues in language acquisition within the Chomskyan framework (e.g., Minimal Attachment, Minimal Chain Principle), I was surprised by the absence of two important points. First, in contrast to all other chapters in the Handbook, F's contribution does not present a single data set illustrating how research on language acquisition is conducted within this theoretical paradigm. Second, F does not mention alternative accounts concerned with language acquisition (e.g., Tomassello (1992), and Bates & Goodman (1999)).

To conclude this review, the editorial work by Mark Baltin and Chris Collins has been extraordinary. The presentation of the chapters, an extensive bibliography, and a meticulously catalogued index make the Handbook extremely user friendly. Many will consult the Handbook for specific information on various aspects of generative syntactic theory. I found only one misprint, on p. 1 of the 'Introduction'. The correct version of 'Head Driven Phrase Grammar' is 'Head-Driven Phrase Structure Grammar'.

The editors have undoubtedly produced one of the most comprehensive reference works on syntactic theory. However, I am disappointed that the title of the Handbook suggests that it is *the* 'Handbook of Contemporary Syntactic Theory'. Except for the first chapter by Joan Bresnan, which combines insights from Optimality Theory and Lexical-Functional Grammar to discuss a specific morphosyntactic problem, the individual contributions seem to suggests that contemporary syntactic theory consists primarily of Chomsky's Government and Binding theory and its successor, the Minimalist Program. Except for Bresnan's contribution, all chapters are written from a Chomskyan perspective and only pay lip service to Head-Driven Phrase Structure Grammar, Lexical-Functional Grammar, and to some degree Categorial Grammar. Other prominent frameworks such as Cognitive Grammar (Langacker 1991), Construction Grammar (Goldberg 1995, Kay & Fillmore 1999), Dependency and Valency Grammar (Tesnière 1959, Mel'čuk 1988, Heringer 1996), Functional Grammar (Dik 1991, Halliday 1994), Lexicon Grammar (Gross 1994), and Word Grammar (Hudson 1984) are not mentioned. All in all, Baltin and Collins have only partially reached their goal of following 'the twin paths of ecumenicalism and comprehensiveness of empirical coverage by focusing on areas of grammar for our coverage, rather than particular frameworks' (1).

Leaving these shortcomings aside, I conclude that the Handbook exhaustively describes the field of Minimalist Syntax. The twenty-three contributions contain worlds of information and will serve as an excellent resource for syntacticians working in the Chomskyan paradigm for many years to come.

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