This pathbreaking study presents a new perspective on the role of derivation, the series of operations by which sentences are formed. Working within the Minimalist Program and focusing on English, the authors develop an original theory of generative syntax, providing illuminating new analyses of some central syntactic constructions. Two key questions are explored: first, can the Extended Projection Principle (EPP) be eliminated from Minimalist analysis without loss, and perhaps with a gain in empirical coverage; and second, is the construct ‘A-chain’ similarly eliminable? The authors argue that neither EPP nor the construct ‘A-chain’ is in fact a property of Universal Grammar, but rather their descriptive content can be deduced from independently motivated properties of lexical items, in accordance with overarching principles governing derivation. In investigating these questions, a range of new data is introduced, and existing data is re-analyzed, presenting a pioneering challenge to fundamental assumptions in syntactic theory.

Samuel David Epstein is a Professor in the Linguistics Department at the University of Michigan. He is co-author of *A Derivational Approach to Syntactic Relations* (with E. Groat, R. Kawashima and H. Kitahara), and co-editor (with N. Hornstein) of *Working Minimalism* (1999). He is co-founder (with S. Flynn) of the journal *Syntax*.

T. Daniel Seely is Professor of Linguistics and Chair of the Linguistics Program at Eastern Michigan University. His work in syntax has appeared in *Linguistic Inquiry* and *Syntax*. He is organizer and editor of ‘Geometric and Thematic Structure in Binding’ (1996), the first LINGUIST List online conference, and he is co-editor (with S. D. Epstein) of *Derivation and Explanation in the Minimalist Program* (2002).
In this series

66 Anthony R. Warner: English auxiliaries: structure and history
67 P. H. Matthews: Grammatical theory in the United States from Bloomfield to Chomsky
68 Liljana Progovac: Negative and positive polarity: a binding approach
69 R. M. W. Dixon: Ergativity
70 Yan Huang: The syntax and pragmatics of anaphora
71 Knud Lambrecht: Information structure and sentence form: topic, focus, and the mental representation of discourse referents
72 Luigi Burzio: Principles of English stress
73 John A. Hawkins: A performance theory of order and constituency
74 Alice C. Harris and Lyle Campbell: Historical syntax in cross-linguistic perspective
75 Liliane Haegeman: The syntax of negation
76 Paul Gorrel: Syntax and parsing
77 Guglielmo Cinque: Italian syntax and universal grammar
78 Henry Smith: Restrictiveness in case theory
79 D. Robert Ladd: Intonational morphology
80 Andrea Moro: The raising of predicates: predicative noun phrases and the theory of clause structure
81 Roger Lass: Historical linguistics and language change
82 John M. Anderson: A notional theory of syntactic categories
83 Bernd Heine: Possession: cognitive sources, forces and grammaticalization
84 Nomi Ertshik-Shir: The dynamics of focus structure
85 John Coleman: Phonological representations: their names, forms and powers
86 Christina Y. Bethin: Slavic prosody: language change and phonological theory
87 Barbara Dancygier: Conditionals and prediction
88 Claire Lefebvre: Creole genesis and the acquisition of grammar: the case of Haitian creole
89 Heinz Giegerich: Lexical strata in English
90 Kerin Rice: Morpheme order and semantic scope
91 April McMahon: Lexical phonology and the history of English
92 Matthew Y. Chen: Tone Sandhi: patterns across Chinese dialects
93 Gregory T. Stump: Inflectional morphology: a theory of paradigm structure
94 Joan Bybee: Phonology and language use
95 Laurie Bauer: Morphological productivity
96 Thomas Ernst: The syntax of adjuncts
97 Elizabeth Closs Traugott and Richard B. Dasher: Regularity in semantic change
98 Maya Hickmann: Children’s discourse: Person, space and time across languages
99 Diane Blakemore: Relevance and linguistic meaning: The semantics and pragmatics of discourse markers
100 IAN ROBERTS and ANNA ROUSSOU: Syntactic change: a minimalist approach to grammaticalization
101 DONKA MINKOVA: Alliteration and sound change in early English
102 MARK C. BAKER: Lexical categories: verbs, nouns and adjectives
103 CARLOTA S. SMITH: Modes of discourse: the local structure of texts
104 ROCHELLE LIEBER: Morphology and lexical semantics
105 HOLGER DIESSEL: The acquisition of complex sentences
106 SHARON INKELAS and CHERYL ZOLL: Reduplication: doubling in morphology
107 SUSAN EDWARDS: Fluent aphasia
108 BARBARA DANCYGIER and EVE SWEETSER: Mental spaces in grammar: conditional constructions
109 MATTHEW BAERMAN, DUNSTAN BROWN and GREVILLE G. CORBETT: The syntax–morphology interface: a study of syncretism
109 MARCUS TOMALIN: Linguistics and the Formal Sciences: The origins of generative grammar
110 SAMUEL D. EPSTEIN and T. DANIEL SEELY: Derivations in Minimalism

Earlier issues not listed are also available
DERIVATIONS IN MINIMALISM

SAMUEL D. EPSTEIN  
*University of Michigan*

and

T. DANIEL SEELY  
*Eastern Michigan University*
This book is dedicated to Elaine, Molly and Sylvie; and to Hannah, Piper and Charlie; and to our students: past, present and future.
# Contents

Acknowledgments xiii  
Preface xiv  

1 Orientation and goals 1  
1.1 Some methodological preliminaries 1  
1.2 Outline and rationale 4  

2 On the elimination of A-chains 14  
2.1 Chains are not syntactic objects 14  
2.2 A-chains are not specifiable under X’ invisibility 20  
2.3 A non-isomorphism between A-chains and successive cyclic A-movement 31  
2.4 An alternative analysis without chains 42  

3 On the elimination of the EPP 48  
3.1 Introduction 48  
3.2 The EPP 49  
3.3 There-insertion and raising: more problems created by the EPP 56  
3.4 The conjecture class of verbs 70  

4 More challenges to the elimination of the EPP: some movement cases 113  
4.1 Introduction 113  
4.2 Evidence for successive cyclic A-movement as evidence for the EPP 114  
4.3 The Bošković approach 116  
4.4 Some alternative solutions 130  
4.5 Lasnik’s cases 164  

5 Exploring architecture 174  
5.1 Derivational architecture of CHL 174  
5.2 Some final notes on the derivational model; eliminating feature strength, and ‘obligatory’ transformational rule application 197
Acknowledgments

We thank Andrew Winnard (Senior Commissioning Editor for Language and Linguistics), Helen Barton (Editor for Language and Linguistics), and Elizabeth Davey (Production Editor for Humanities and Social Sciences) of Cambridge University Press for their interest in our research, and for their patience, consideration and kindness during the production of this book.

We are also indebted to Catherine Fortin and Mary Beers for indispensable editorial and linguistic assistance. Steve Peter expertly prepared the entire manuscript and provided crucial input at all stages, which we gratefully acknowledge here.

We are very grateful to Scott Atran, Pam Beddor, Chris Collins, Diana Cresti, Josh Epstein, Justin Fitzpatrick, Jon Gajewski, Sam Gutmann, Mark Hale, Norbert Hornstein, Hisatsugu Kitahara, Rick Lewis, Peter Liem, Peter Ludlow, Fred Mailhot, Jim McCloskey, David Pesetsky, Esther Torrego, Christina Tortora, and C. Jan-Wouter Zwart for valuable discussion of many of the ideas presented here.

We also especially thank Jim McCloskey, Željko Bošković and Roger Martin, as well as Margaret Speas and Naoki Fukui, whose research challenging the EPP has significantly influenced the work reported here. We’ve also been influenced by Howard Lasnik’s recent research supporting the EPP, which has helped to clarify the obstacles confronted in attempting to eliminate this principle.

We also owe a very special thanks to our colleague Acrisio Pires, who co-authored a manuscript with us, entitled “EPP in T?” (2004), which was written and submitted for publication during the writing of this book, and is discussed in Chapter 3. We also thank Acrisio for detailed and highly insightful comments on earlier drafts of many parts of this book, which have led to notable improvements in the final version.

We are extremely indebted to Noam Chomsky for his interest in our work, and for protracted discussion of many of the ideas presented here.

Needless to say, all errors are ours, and nobody acknowledged here necessarily agrees with any of the hypotheses presented.
Preface

. . .understanding always involves the notion of composition. This notion can enter in one of two ways. If the thing understood be composite, the understanding of it can be in reference to its factors, and to their ways of interweaving so as to form that total thing. This mode of comprehension makes evident why the thing is what it is. The second mode of understanding is to treat the thing as a unity, whether or not it is capable of analysis, and to obtain evidence as to its capacity for affecting its environment. The first mode may be called the internal understanding, and the second mode is the external understanding. . . . The two modes are reciprocal; either presupposes the other. The first mode conceives the thing as an outcome, the second mode conceives it as a causal factor. . . . It is true that nothing is finally understood until its reference to process has been made evident. (pp. 45–6)

Process and individuality require each other. In separation all meaning evaporates. The form of process . . . derives its character from the individuals involved, and the characters of the individuals can only be understood in terms of the process in which they are implicated. (p. 97)

The whole understanding of the world consists in the analysis of process in terms of the identities and diversities of the individuals involved. (p. 98)

Excerpted from Alfred North Whitehead, Modes of Thought.1

Chapters 2 and 3 of this book are based in part on a manuscript written and circulated in 1999 and presented at the 1999 LSA Summer Institute Workshop on Grammatical Functions, ‘SPEC-ifying the GF “Subject”: Eliminating A-chains and the EPP within a Derivational Model’. Chapters 1, 4 and 5 are, to a good approximation, entirely new, as are many aspects of Chapters 2 and 3.

We thank Stanley Dubinsky and William Davies for inviting us to the workshop and we thank Howard Lasnik for his valuable commentary on this paper.

It should be noted that in the same year a Minimalist paper with certain similarities to our Chapters 2 and 3, concerning A-chains and the EPP, was independently written and distributed: Castillo, Juan Carlos, John Drury and Kleanthes K. Grohmann, 1999, ‘Merge Over Move and the Extended Projection Principle’, in University of Maryland Working Papers in Linguistics 8:63–103.

A revised version was then published as: Grohmann, Kleanthes K., John Drury and Juan Carlos Castillo, 2000, ‘No More EPP’, in Proceedings of the 19th West Coast Conference on Formal Linguistics, 153–166.

As further concerns the elimination of A-chains (‘as we know them’), another recent analysis has appeared since the completion of Epstein and Seely (1999), that of Manzini and Roussou (2000), which regretfully we do not address here. Their analysis invokes quite different mechanisms than those proposed here. Earlier still (as recently pointed out to us by Norbert Hornstein, to whom we are indebted for doing so), Pauline Jacobson (1992) advanced an analysis of raising in a quite different framework in her ‘Raising Without Movement’. More generally, there has existed for quite some time an unclarity, and we think interesting debate, both within and between frameworks, in both syntax and semantics (which we cannot comprehensively review here) concerning the proper treatment of the categorial status, internal structure and derivation of raising infinitives.

In this regard, it is important to note that at the very inception of GB theory (and the postulation of A-chains and the EPP), Chomsky (1981) explicitly addressed the broad issues at hand and explicated the nature of their importance in attempting to explain aspects of human knowledge of language, and its growth in the individual. As opposed to the GB-theoretic analyses he proposes, Chomsky (1981:92) considers an alternative:

Consider . . . a different theory, call it “Theory II,” which generates different s-Structures . . . lacking empty categories – traces or PRO. One might imagine other variants of Theory II in which some of the structures with gaps . . . have trace and others do not (perhaps movement-to-Comp might be distinguished from NP-movement in this way, for example). Theory II is rather different in its properties from Theory I. For example, Theory II does not observe the projection principle; furthermore, it assigns θ-roles to arguments that are not in θ-positions by devices quite different from those that are employed to relate operators such as wh-phrases to the variables they bind . . . Furthermore, it does not relate the properties of interpreted gaps to those of overt anaphors and pronouns with disjoint reference . . . Theory I and [Theory] II appear, at least, to be rather different in their conceptual and empirical properties; not so much in their coverage of data – presumably either can be developed in such a way as to deal in some manner with phenomena that are at all well-understood – but in their frameworks of unifying principles and assumptions about the nature of UG.

Portions of the following material were also presented at: the meeting of the Michigan Linguistics Society held at Eastern Michigan University (2001); Wayne State
University Department of Linguistics colloquium (2000); the LOT Summer school and the 1st Tools in Linguistic Theory Conference (TiLT), both held at the University of Utrecht (2001); and the LSA Summer Institute held at Michigan State University (2003). We thank the organizers and audiences there for their interest in and comments on our work.

We also each thank our graduate students for their many valuable contributions made during the presentation of this material in various classes (including some joint Eastern Michigan University – University of Michigan courses) and syntax workshops. In particular, we specifically acknowledge the following linguistics students from Eastern Michigan University: Scott Fults, Lydia Grebenyova, Neil Salmond, and Heather Taylor; and from the University of Michigan: Christopher Becker, Gerardo Fernandez-Salgueiro, Catherine Fortin, Rose Letsholo, Michael Marlo, Hamid Ouali, Andrea Stiasny, and Annemarie Toebosch; and (formerly at Eastern, and now at the University of Michigan) Dina Kapetangianni.

Abbreviations


