On Formal Properties Of Minimalist Grammars

#Minimalist Grammars #Formal Properties #Grammar Theory #Computational Linguistics #Syntactic Theory

Explore the foundational formal properties that define Minimalist Grammars (MGs), a prominent framework within syntactic theory. This analysis delves into the computational and mathematical characteristics underlying MG operations, offering critical insights for researchers in computational linguistics and advanced grammar theory studies.

Exploring Crash-proof Grammars

The Minimalist Program has advanced a research program that builds the design of human language from conceptual necessity. Seminal proposals by Frampton & Gutmann (1999, 2000, 2002) introduced the notion that an ideal syntactic theory should be crash-proof . Such a version of the Minimalist Program (or any other linguistic theory) would not permit syntactic operations to produce structures that crash . There have, however, been some recent developments in Minimalism especially those that approach linguistic theory from a biolinguistic perspective (cf. Chomsky 2005 et seq.) that have called the pursuit of a crash-proof grammar into serious question. The papers in this volume take on the daunting challenge of defining exactly what a crash is and what a crash-proof grammar would look like, and of investigating whether or not the pursuit of a crash-proof grammar is biolinguistically appealing."

Interfaces + Recursion = Language?

Human language is a phenomenon of immense richness: It provides finely nuanced means of expression that underlie the formation of culture and society; it is subject to subtle, unexpected constraints like syntactic islands and cross-over phenomena; different mutually-unintelligeable individual languages are numerous; and the descriptions of individual languages occupy thousands of pages. Recent work in linguistics, however, has tried to argue that despite all appearances to the contrary, the human biological capacity for language may be reducible to a small inventory of core cognitive competencies. The most radical version of this view has emerged from the Minimalist Program: The claim that language consists of only the ability to generate recursive structures by a computational mechanism. On this view, all other properties of language must result from the interaction at the interfaces of that mechanism and other mental systems not exclusively devoted to language. Since language could then be described as the simplest recursive system satisfying the requirements of the interfaces, one can speak of the Minimalist Equation: Interfaces + Recursion = Language. The question whether all the richness of language can be reduced to that minimalist equation has already inspired several fruitful lines of research that led to important new results. While a full assessment of the minimalist equation will require evidence from many different areas of inquiry, this volume focuses especially on the perspective of syntax and semantics. Within the minimalist architecture, this places our concern

with the core computational mechanism and the (LF-)interface where recursive structures are fed to interpretation. Specific questions that the papers address are: What kind of recursive structures can the core generator form? How can we determine what the simplest recursive system is? How can properties of language that used to be ascribed to the recursive generator be reduced to interface properties? What effects do syntactic operations have on semantic interpretation? To what extent do models of semantic interpretation support the LF-interface conditions postulated by minimalist syntax?

Minimalism and Beyond

The Minimalist Program is just that, a “program”. It is a challenge for syntacticians to reexamine the constructs of their models and ask what is minimally needed in order to accomplish the essential task of syntax – interfacing between form and meaning. This volume pushes Minimalism to its empirical and theoretical limits, and brings together some of the most innovative and radical ideas to have emerged in the attempt to reduce Universal Grammar to the bare output conditions imposed by these conceptually necessary interfaces. The contributors include both leading theoreticians and well-known practitioners of minimalism; the papers thus both respond to broad questions about the nature of human language and the architecture of grammar, and provide careful analyses of specific linguistic problems. Overarching issues of syntactic computation are considered, such as the role of formal features, the mechanics of movement and the property of displacement, the construction of words and phrases, the nature of Spell-Out, and, more generally, the forces driving operations. The volume has the potential to reach a wide audience, favoring inter-theoretical debate with a concise state-of-the-art panorama on Minimalism and advances about its future developments.

Generalized Transformations and Beyond

Die Reihe publiziert Originalarbeiten zur Beschreibung und theoretischen Analyse der Struktur natürlicher Sprachen. Schwerpunkt sind die Prinzipien und Regeln der grammatischen und lexikalischen Kenntnis sowohl unter einzelsprachlichen wie unter sprachvergleichenden Gesichtspunkten. Abgedeckt werden alle systematischen Bereiche der Sprachwissenschaft, insbesondere Phonologie, Morphologie, Syntax, Semantik und Pragmatik, unter Einbeziehung von Aspekten des Spracherwerbs, des Sprachwandels, der Sprachverwendung und der phonetischen und neuronalen Realisierung.

Formal Grammar

This book constitutes the refereed proceedings of the 19 International Conference on Formal Grammar 2014, collocated with the European Summer School in Logic, Language and Information in August 2014. The 10 revised full papers presented together with 2 invited contributions were carefully reviewed and selected from a total of 19 submissions. Traditionally linguistics has been studied from the point of view of the arts, humanities and letters, but in order to make concrete ideas which might otherwise be fanciful the study of grammar has been increasingly subject to the rigours of computer science and mathematization i.e. articulation in the language of science.

Formal Properties of Grammars

The Minimalism Program is many things to many researchers, and there are by now many alternative versions of it. Central to all is the fundamental question: to what extent is the human language faculty an optimal solution to minimal design specifications. Taken as a whole, the volume outlines the main features of Minimalism, its historical and conceptual sources, and provides an illustration of minimalist theorizing by looking at several properties of the syntactic component of grammar. Some contributions concentrate on what kind of computational tools are made available in a minimalist syntactic component, and how the computational system interacts with external and interface domains of the mind/brain. Other contributions specifically focus on direct empirical gains that emerge from adopting minimalist guidelines.

Minimalist Essays

This book is the first dedicated to linguistic parsing - the processing of natural language according to the rules of a formal grammar - in the Minimalist Program. While Minimalism has been at the forefront of generative grammar for several decades, it often remains inaccessible to computer scientists and others in adjacent fields. This volume makes connections with standard computational architectures, provides efficient implementations of some fundamental minimalist accounts of syntax, explores

implementations of recent theoretical proposals, and explores correlations between posited structures and measures of neural activity during human language comprehension. These studies will appeal to graduate students and researchers in formal syntax, computational linguistics, psycholinguistics, and computer science.

Minimalist Parsing

The volume is a collection of 12 papers which focus on empirical and theoretical issues associated with syntactic phenomena falling under the rubric of Relativized Minimality (Rizzi 1990) or, in more recent terms, Minimal Link Condition (MLC, Chomsky 1995). The bulk of the papers are based on the ideas presented at the Workshop "Minimal Link Effects in Minimalist and Optimality Theoretic Syntax" which took place at the University of Potsdam on March 21-22, 2002. All contributors are prominent specialists in the topic of syntactic Minimality. The empirical phenomena brought to bear on Minimality/MLC in the present volume include, but not limited to: Superiority effects in multiple wh-questions, including those with 'D-linked' wh-phrase(s) (Müller, Haida, Haider) Stylistic Fronting in Germanic and Romance (Fisher, Poole) Transitive sentences in Hindi-type ergative languages (Stepanov) Word order 'freezing' effects in double-nominative constructions in Korean (Lee) Double object constructions in Greek (Anagnostoupoulou) Remnant constituent displacement in German and Japanese (Hale and Legendre) Nine of the proposed accounts are couched in the Minimalist framework (Chomsky 1995, 2000, 2001), three in the framework of Optimality Theory (Prince and Smolensky 1993). Thematically, the contributions divide into three groups addressing the following major questions: How can apparent violations of syntactic Minimality/MLC be accounted for? (Haida, Stepanov, Poole, Fisher, Anagnostopoulou) What is the status of MLC? Is it a primitive or a theorem in the grammar? (Müller, Fanselow, Lechner, Vogel, Lee, Haider) Can Minimality phenomena shed decisive evidence in favor of a derivational (Minimalist type) or a representational (Optimality theory like) framework? (Hale and Legendre, Haider)

Formal Properties of Functional Categories

The Minimalist Program consists of four recent essays that attempt to situate linguistic theory in the broader cognitive sciences. In these essays the minimalist approach to linguistic theory is formulated and progressively developed. Building on the theory of principles and parameters and, in particular, on principles of economy of derivation and representation, the minimalist framework takes Universal Grammar as providing a unique computational system, with derivations driven by morphological properties, to which the syntactic variation of languages is also restricted. Within this theoretical framework, linguistic expressions are generated by optimally efficient derivations that must satisfy the conditions that hold on interface levels, the only levels of linguistic representation. The interface levels provide instructions to two types of performance systems, articulatory-perceptual and conceptual-intentional. All syntactic conditions, then, express properties of these interface levels, reflecting the interpretive requirements of language and keeping to very restricted conceptual resources. The Essays Principles and Parameters Theory Some Notes on Economy of Derivation and Representation A Minimalist Program for Linguistic Theory Categories and Transformations in a Minimalist Framework

Minimality Effects in Syntax

Dynamical Grammar explores the consequences for language acquisition, language evolution, and linguistic theory of taking the underlying architecture of the language faculty to be that of a complex adaptive dynamical system. It contains the first results of a new and complex model of language acquisition which the authors have developed to measure how far language input is reflected in language output and thereby get a better idea of just how far the human language faculty is hard-wired.

The Minimalist Program

This book constitutes the proceedings of the 12th Biennial Meeting on Mathematics in Language, MOL 12, held in Nara, Japan, in September 2011. Presented in this volume are 12 carefully selected papers, as well as the paper of the invited speaker Andreas Maletti. The papers cover such diverse topics as formal languages (string and tree transducers, grammar-independent syntactic structures, probabilistic and weighted context-free grammars, formalization of minimalist syntax), parsing and unification, lexical and compositional semantics, statistical language models, and theories of truth.

Dynamical Grammar

This book is the first dedicated to linguistic parsing - the processing of natural language according to the rules of a formal grammar - in the Minimalist Program. While Minimalism has been at the forefront of generative grammar for several decades, it often remains inaccessible to computer scientists and others in adjacent fields. This volume makes connections with standard computational architectures, provides efficient implementations of some fundamental minimalist accounts of syntax, explores implementations of recent theoretical proposals, and explores correlations between posited structures and measures of neural activity during human language comprehension. These studies will appeal to graduate students and researchers in formal syntax, computational linguistics, psycholinguistics, and computer science.

The Mathematics of Language

This book constitutes the refereed proceedings of the 6th International Conference on Logical Aspects of Computational Linguistics, LACL 2011, held in Montpellier, France, in June/July 2011. The 18 revised full papers presented were carefully reviewed and selected from 31 submissions. The papers address a wide range of logical and formal methods in computational linguistics such as type-theoretic grammars, dependency grammars, formal language theory, grammatical inference, minimalism, generation, and lexical and formal semantics.

Minimalist Parsing

In view of its exploratory nature, Chomsky's 'minimalist' model has undergone multiple changes, triggering in response numerous proposals that are consistent with the tendencies that it follows or anticipates, and numerous proposals that offer alternatives to it. A good illustration of the variety of 'parallel' proposals is provided in the present volume. The articles derive from papers read at the "Challenges of Minimalism" session of the Open Linguistics Forum, held in Ottawa, in March 1997. This OLF meeting started as a graduate student initiative, but because of the topic chosen, attracted a wide and international audience. The twenty contributions are grouped in five sections: I. Syntactic Structure, Relations, Operations; II. Syntactic Movement: Cyclicity, Optionality, (Non)overtness; III.Case, Topic, Focus, Interrogativity; IV. Ellipsis, Reconstruction and Related Phenomena; V. DPs: Features and Syntactic Relations.

Logical Aspects of Computational Linguistics

Edited in collaboration with FoLLI, the Association of Logic, Language and Information, this book inaugurates the new FoLLI LNAI subline. It constitutes the refereed proceedings of the 5th International Conference on Logical Aspects of Computational Linguistics, LACL 2005, held in Bordeaux, France in April 2005. The 25 revised full papers presented were carefully reviewed and selected from over 40 submissions. The papers address a wide range of logical and formal methods in computational linguistics with studies of particular grammar formalisms and their computational properties, language engineering, and traditional topics about the syntax/semantics interface.

The Minimalist Parameter

This book constitutes the refereed proceedings of the 7th European Conference on Artificial Life, ECAL 2003, held in Dortmund, Germany in September 2003. The 96 revised full papers presented were carefully reviewed and selected from more than 140 submissions. The papers are organized in topical sections on artificial chemistries, self-organization, and self-replication; artificial societies; cellular and neural systems; evolution and development; evolutionary and adaptive dynamics; languages and communication; methodologies and applications; and robotics and autonomous agents.

Logical Aspects of Computational Linguistics

Syntactic dependencies are often non-local: They can involve two positions in a syntactic structure whose correspondence cannot be captured by invoking concepts like minimal clause or predicate/argument structure. Relevant phenomena include long-distance movement, long-distance reflexivization, long-distance agreement, control, non-local deletion, long-distance case assignment, consecutio temporum, extended scope of negation, and semantic binding of pronouns. A recurring strategy pursued in many contemporary syntactic theories is to model cases of non-local dependencies in a strictly local way, by successively passing on the relevant information in small domains of syntactic structures. The present volume brings together eighteen articles that investigate non-local dependencies in movement,

agreement, binding, scope, and deletion constructions from different theoretical backgrounds (among them versions of the Minimalist Program, HPSG, and Categorial Grammar), and based on evidence from a variety of typologically distinct languages. This way, advantages and disadvantages of local treatments of non-local dependencies become evident. Furthermore, it turns out that local analyses of non-local phenomena developed in different syntactic theories (spanning the derivational/declarative divide) often may not only share identical research questions but also rely on identical research strategies.

Advances in Artificial Life

This volume focuses on recursion and reveals a host of new theoretical arguments, philosophical perspectives, formal representations and empirical evidence from parsing, acquisition and computer models, highlighting its central role in modern science. Noam Chomsky, whose work introduced recursion to linguistics and cognitive science and other leading researchers in the fields of philosophy, semantics, computer science and psycholinguistics in showing the profound reach of this concept into modern science. Recursion has been at the heart of generative grammar from the outset. Recent work in minimalism has put it at center-stage with a wide range of consequences across the intellectual landscape. The contributor to this volume both advance the field and provide a cross-sectional view of the place that recursion takes in modern science.

Local Modelling of Non-Local Dependencies in Syntax

Research monographs (which may be based on PhD works).

Recursion: Complexity in Cognition

"The workshop that originated this book was entitled "Understanding language : forty years down the garden path". It took place in July 2010." --Acknowledgements p. [xii].

The Mathematics of Language

This book explores the syntactic and semantic properties of movement and adjunction in natural language. A precise formulation of minimalist syntax is proposed, guided by an independently motivated hypothesis about the composition of neo-Davidsonian logical forms, in which there is no atomic movement operation and no atomic adjunction operation. The terms 'movement' and 'adjunction' serve only as convenient labels for certain combinations of other, primitive operations, and as a result the system derives non-trivial predictions about how movement and adjunction should interact; in particular, it yields natural explanatory accounts of the constituency of adjunction structures, the possibility of counter-cyclic attachment, and the prohibitions on extraction from adjoined domains (adjunct islands) and from moved domains (freezing effects). This work serves as a case study in deriving explanations for syntactic patterns from a restrictive theory of semantic composition, and in using an explicit grammatical framework to inform rigourous minimalist theorising.

Language Down the Garden Path

This book critically reviews grammatical research into logical form over the past 20 years and reconsiders some of its major themes in the light of recent theoretical innovations. In the late 1970s generative grammarians proposed the existence of an abstract syntactic level of grammatical representation derived from surface structure which was phonetically invisible. This level, dubbed logical form, has been thought of as the information that the grammar contributes to semantic interpretation. The first part of the book reviews the standard arguments for the existence of LF and its format.

Syntactic Effects of Conjunctivist Semantics

This book presents a unified formal approach to various contemporary linguistic formalisms such as Government & Binding, Minimalism or Tree Adjoining Grammar. Through a careful introduction of mathematical techniques from logic, automata theory and universal algebra, the book aims at graduate students and researchers who want to learn more about tightly constrained logical approaches to natural language syntax. Therefore it features a complete and well illustrated introduction to the connection between declarative approaches formalized in monadic second-order logic (MSO) and generative ones formalized in various forms of automata as well as of tree grammars. Since MSO logic (on trees) yields only context-free languages, and at least the last two of the formalisms mentioned

above clearly belong to the class of mildly context-sensitive formalisms, it becomes necessary to deal with the problem of the descriptive complexity of the formalisms involved in another way. The proposed genuinely new two-step approach overcomes this limitation of MSO logic while still retaining the desired tightly controlled formal properties.

Logical Form

This book presents a unified formal approach to various contemporary linguistic formalisms such as Government & Binding, Minimalism or Tree Adjoining Grammar. Through a careful introduction of mathematical techniques from logic, automata theory and universal algebra, the book aims at graduate students and researchers who want to learn more about tightly constrained logical approaches to natural language syntax. Therefore it features a complete and well illustrated introduction to the connection between declarative approaches formalized in monadic second-order logic (MSO) and generative ones formalized in various forms of automata as well as of tree grammars. Since MSO logic (on trees) yields only context-free languages, and at least the last two of the formalisms mentioned above clearly belong to the class of mildly context-sensitive formalisms, it becomes necessary to deal with the problem of the descriptive complexity of the formalisms involved in another way. The proposed genuinely new two-step approach overcomes this limitation of MSO logic while still retaining the desired tightly controlled formal properties.

Two-Step Approaches to Natural Language Formalism

An Introduction to Syntactic Analysis and Theory offers beginning students a comprehensive overview of and introduction to our current understanding of the rules and principles that govern the syntax of natural languages. Includes numerous pedagogical features such as ‘practice’ boxes and sidebars, designed to facilitate understanding of both the ‘hows’ and the ‘whys’ of sentence structure Guides readers through syntactic and morphological structures in a progressive manner Takes the mystery out of one of the most crucial aspects of the workings of language – the principles and processes behind the structure of sentences Ideal for students with minimal knowledge of current syntactic research, it progresses in theoretical difficulty from basic ideas and theories to more complex and advanced, up to date concepts in syntactic theory

Two-step Approaches to Natural Language Formalisms

Edited in collaboration with FoLLI, the Association of Logic, Language and Information, this book constitutes the refereed proceedings of the 7th International Conference on Logical Aspects of Computational Linguistics, LACL 2012, held in Nantes, France, in July 2012. The 15 revised full papers presented together with 2 invited talks were carefully reviewed and selected from 24 submissions. The papers are organized in topical sections on logical foundation of syntactic formalisms, logics for semantics of lexical items, sentences, discourse and dialog, applications of these models to natural language processing, type theoretic, proof theoretic, model theoretic and other logically based formal methods for describing natural language syntax, semantics and pragmatics, as well as the implementation of natural language processing software relying on such methods.

An Introduction to Syntactic Analysis and Theory

This book introduces formal grammar theories that play a role in current linguistic theorizing (Phrase Structure Grammar, Transformational Grammar/Government & Binding, Generalized Phrase Structure Grammar, Lexical Functional Grammar, Categorial Grammar, Head- Driven Phrase Structure Grammar, Construction Grammar, Tree Adjoining Grammar). The key assumptions are explained and it is shown how the respective theory treats arguments and adjuncts, the active/passive alternation, local reorderings, verb placement, and fronting of constituents over long distances. The analyses are explained with German as the object language. The second part of the book compares these approaches with respect to their predictions regarding language acquisition and psycholinguistic plausibility. The nativism hypothesis, which assumes that humans posses genetically determined innate language-specific knowledge, is critically examined and alternative models of language acquisition are discussed. The second part then addresses controversial issues of current theory building such as the question of flat or binary branching structures being more appropriate, the question whether constructions should be treated on the phrasal or the lexical level, and the question whether abstract, non-visible entities should play a role in syntactic analyses. It is shown that the analyses suggested

in the respective frameworks are often translatable into each other. The book closes with a chapter showing how properties common to all languages or to certain classes of languages can be captured.

Logical Aspects of Computational Linguistics

This volume showcases the contributions that formal experimental methods can make to syntactic research in the 21st century. Syntactic theory is both a domain of study in its own right, and one component of an integrated theory of the cognitive neuroscience of language. It provides a theory of the mediation between sound and meaning, a theory of the representations constructed during sentence processing, and a theory of the end-state for language acquisition. Given the highly interactive nature of the theory of syntax, this volume defines "experimental syntax" in the broadest possible terms, exploring both formal experimental methods that have been part of the domain of syntax since its inception (i.e., acceptability judgment methods) and formal experimental methods that have arisen through the interaction of syntactic theory with the domains of acquisition, psycholinguistics, and neurolinguistics. The Oxford Handbook of Experimental Syntax brings these methods together into a single experimental syntax volume for the first time, providing high-level reviews of major experimental work, offering guidance for researchers looking to incorporate these diverse methods into their own work, and inspiring new research that will push the boundaries of the theory of syntax. It will appeal to students and scholars from the advanced undergraduate level upwards in a range of fields including syntax, acquisition, psycholinguistics, neurolinguistics, and computational linguistics.

Grammatical theory: From transformational grammar to constraint-based approaches (Fifth revised edition)

This book introduces formal grammar theories that play a role in current linguistic theorizing (Phrase Structure Grammar, Transformational Grammar/Government & Binding, Generalized Phrase Structure Grammar, Lexical Functional Grammar, Categorial Grammar, Head- Driven Phrase Structure Grammar, Construction Grammar, Tree Adjoining Grammar). The key assumptions are explained and it is shown how the respective theory treats arguments and adjuncts, the active/passive alternation, local reorderings, verb placement, and fronting of constituents over long distances. The analyses are explained with German as the object language. The second part of the book compares these approaches with respect to their predictions regarding language acquisition and psycholinguistic plausibility. The nativism hypothesis, which assumes that humans posses genetically determined innate language-specific knowledge, is critically examined and alternative models of language acquisition are discussed. The second part then addresses controversial issues of current theory building such as the question of flat or binary branching structures being more appropriate, the question whether constructions should be treated on the phrasal or the lexical level, and the question whether abstract, non-visible entities should play a role in syntactic analyses. It is shown that the analyses suggested in the respective frameworks are often translatable into each other. The book closes with a chapter showing how properties common to all languages or to certain classes of languages can be captured.

The Oxford Handbook of Experimental Syntax

Edited in collaboration with FoLLI, the Association of Logic, Language and Information, this book constitutes the refereed proceedings of the 23rd International Conference on Formal Grammar, FG 2018, collocated with the European Summer School in Logic, Language and Information in August 2018. The 7 full papers were carefully reviewed and selected from 11 submissions. The focus of papers are as follows: Formal and computational phonology, morphology, syntax, semantics, and pragmatics Model-theoretic and proof-theoretic methods in linguistics Logical aspects of linguistic structure Constraint-based and resource-sensitive approaches to grammar Learnability of formal grammar Integration of stochastic and symbolic models of grammar Foundational, methodological, and architectural issues in grammar and linguistics Mathematical foundations of statistical approaches to linguistic analysis

Grammatical theory

Discusses a topical set of issues in syntactic theory, including a number of original proposals at the cutting edge of research in this area. The book provides a theory of the basic grammatical operations and suggests that there is only one that is distinctive to language.

Formal Grammar 2018

Noam Chomsky's current theory, published in 1995, is known as The Minimalist Program and has been presented as his crowning achievement. Minimalism has spawned in linguistics an entire research program, despite being fundamentally misguided, according to distinguished linguist and philosopher of language Pieter Seuren. Seuren's accessible and spirited attack argues that the Minimalist Program is deeply flawed. Seuren points to the original acrimonious split in the 1960s and 1970s between Chomsky's generative grammar and the alternative generative semantics proposed by his followers, and argues that the latter theory was sounder and unfairly suppressed. Seuren maintains that this suppression, and the cult surrounding Chomsky and Minimalism more generally, has done great damage to linguistics by impairing open discussion of empirical issues and excluding valid alternatives.

Words and Languages Everywhere

This volume presents a series of papers written by Epstein, Kitahara and Seely, each of which explores fundamental linguistic questions and analytical mechanisms proposed in recent minimalist work, specifically concerning recent analyses by Noam Chomsky. The collection includes eight papers by the collaborators (one with Miki Obata), plus three additional papers, each individually authored by Epstein, Kitahara and Seely, that cover a range of related topics including: the minimalist commitment to explanation via simplification; the Strong Minimalist Thesis; strict adherence to simplest Merge, Merge (X, Y) = {X, Y}, subject to 3rd factor constraints; and state-of-the-art concepts and consequences of Chomsky's most recent proposals. For instance, the volume clarifies and explores: the properties of Merge, feature inheritance and Agree; the nature of phases, cyclicity and countercyclicity; the properties of Transfer; the interpretation of features and their values and the role formal features play in the form and function of syntactic operations; and the specific properties of derivations, partially ordered rule application, and the nature of interface representations. At the cutting edge of scholarship in generative syntax, this volume will be an essential resource for syntax researchers seeking to better understand the minimalist program.

A Theory of Syntax

Essays present explicit syntactic analyses that adhere to programmatic minimalist guidelines. The essays in this book present explicit syntactic analyses that adhere to programmatic minimalist guidelines. Thus they show how the guiding ideas of minimalism can shape the construction of a new, more explanatory theory of the syntactic component of the human language faculty. Contributors Zeljko Boskovic, Samuel David Epstein, Robert Freidin, Erich M. Groat, Norbert Hornstein, Hisatsugu Kitahara, Howard Lasnik, Roger Martin, Jairo Nunes, Norvin Richards, Juan Uriagereka, Amy Weinberg Current Studies in Linguistics No. 32

Chomsky's Minimalism

This volume examines how the displacement property of language is characterized in formal terms under the Minimalist Program and to what extent this proposed characterization of it can explain relevant displacement properties. The birth of the Principles and Parameters Approach makes it possible to simplify transformational rules so radically as to be reduced to the single rule Move. The author proposes that Move, as conceived as a special case of Merge, named internal Merge, under the Minimalist Program requires two prerequisite operations: one is to "dig" into a structure to find a target of Merge, called Search, and the other is to make this target reach the top of the structure, called Float. The author argues that these two different operations are constrained by "minimal computation." Due to the nature of how they apply, these operations are constrained by this economy condition in such a way that Search must be minimal and Float obeys Minimize chain links, which requires that this operation cannot skip possible landing sites. The author demonstrates that this mechanism of minimal Search and Float deals with a variety of phenomena that involve quantifier raising, such as rigidity effects of scope interaction, the availability of cumulative readings of plural relation sentences and pair-list readings of multiple wh-questions. Also demonstrated in this volume is that the same mechanism properly captures the locality effects of topicalization, focus movement, and ellipsis with contrastive focus.

Optimality Theory and Minimalism

This volume examines two main questions: What is linguistics about? And how do the results of linguistic theorizing bear on inquiry in related fields, particularly in psychology? The book develops views that depart from received wisdom in both philosophy and linguistics. With regard to questions concerning

the subject matter, methodological goals, and ontological commitments of formal syntactic theorizing, it argues that the cognitive conception adopted by most linguists and philosophers is not the only acceptable view, and that the arguments in its favor collapse under scrutiny. Nevertheless, as the book shows, a detailed examination of the relevant psycholinguistic results and computational models does support the claim that the theoretical constructs of formal linguistics are operative in real-time language comprehension. These constructs fall into two categories: mental phrase markers and mental syntactic principles. Both are indeed psychologically real, but in importantly different ways. The book concludes by drawing attention to the importance of the often-elided distinction between personal and subpersonal psychological states and processes, as well as the logical character of dispositional and occurrent states. By clarifying these concepts, particularly by reference to up-and-running psychological and computational models, the book yields a richer and more satisfying perspective on the psychological reality of language.

Explorations in Maximizing Syntactic Minimization

Working Minimalism