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With its wide appeal across multiple audiences and its focused and coherent content, this book is an essential volume of the ‘Comparative handbooks of linguistics’ series published by De Gruyter Mouton. Thirteen syntactic theories are each represented by a chapter detailing the theory’s own perspective on goals, data, conceptual tools, and evaluative criteria, together with an analysis of the sentence After Mary introduced herself to the audience, she turned to a man that she had met before, to illustrate how different theories treat the same material. Following these theoretical chapters are six chapters of metatheoretical commentary, drawing on the philosophy of science to provoke foundational questions seldom asked in linguistic theorizing.

Of the broadly comparable books cited in the introduction, this one is most reminiscent of Stefan Müller’s magisterial textbook Grammatical theory, now in its fourth edition (2020); both share in combining broad coverage of theories and metatheoretical analysis putting theories in context. Yet Kertész, Moravcsik, and Rákosí’s compendium fills a different niche, as it is neither a textbook nor a work written from a single author’s point of view. Rather, the chapters on theory are a carefully curated collection written by proponents of the respective theories, explicitly ad-
dressing a specific set of key issues, and the metatheoretical chapters challenge any linguist to reflect deeply on foundational issues. The collection is intentionally structured to help working linguists and graduate students speak and write more precisely about the positions of different syntactic theories in a wide multidimensional landscape. The chapters are a bit uneven in how well they follow the editors’ framework, perhaps to be expected given the diversity of theoretical content being described.

Edith Moravcsik’s introduction sets the stage for a systematic analysis. Sections on goals, data, conceptual tools, and evaluative criteria each prepare the reader for differences in how authors in Part I might address these required points. A brief section pointing to Part II makes it clear that reflection on the applicability of Popperian falsificationism (Popper 1959) to linguistics is a major focus, although more general concerns are also considered, for example, what kind of properties linguistic theories must ideally have and what processes constitute satisfactory linguistic theorizing. The chapter concludes with sections in which Moravcsik applies some of these organizing principles to the theories contained in Part I; I wish that a full chapter in Part II could have been devoted to these and similar analyses.

The thirteen theory chapters of Part I run in alphabetical order by author. Although this choice safely avoids communicating anything misleading or awkward, it would have been defensible and perhaps a helpful act of iconicity to attempt to lay out the chapters according to any of the dimensions along which syntactic theories vary. This review proceeds in order of decreasing distance from Chomsky, beginning with approaches initiated in full-scale opposition and ending with minimalism.

Ronald Langacker’s cognitive grammar (CG) was conceived as a thoroughgoing repudiation of autonomous syntax; instead, meaning is paired with form within its basic building blocks, which both exist in themselves and are assembled with each other according to known cognitive principles. Beginning with principles like categorization and construal, Cristiano Broccias launches into the meat of the theory, namely the multifarious elaborate diagrams that represent everything from attentional focus to irreality to a unit’s status as head or modifier or complement, and more. Assemblages of lower-level units schematize grammatical patterns in which constituent-like elements form various kinds of clauses. Broccias presents a balanced view, ascribing value to this descriptive approach, which incorporates cognition so fully, while acknowledging the need for still greater theoretical clarity and empirical testability.

Ritva Laury and Tsuyoshi Ono’s chapter on usage-based grammar focuses on interactional linguistics as developed by Elizabeth Couper-Kuhlen and Margret Selting and on Paul Hopper’s emergent grammar, representing the discourse-functional and functional-typological wing of usage-based linguistics. While the goals and data sections convey a vision that the full range of usage-based linguists share—that real usage in context must be at the heart of a linguistic theory—the tools and sample analysis sections may discomfit linguists (usage-based and otherwise) who expect the sentence to be dissected and put back together using some theoretical machinery. Yet Laury and Ono are surely correct when they point out that an isolated sentence without an interactional context is hardly suitable material for analysis according to theories whose purpose is to discover and display crosslinguistic regularities in how the details of usage events emerge from discourse context—for example, that, across languages, discourse givens are encoded primarily as affixes or pronouns.

The other end of the usage-based spectrum lies nearer Ch. 3’s construction grammar (CxG), which itself entertains variants engaging formalism to different degrees. The sample analysis employs a notation on the more formal side of the CxG spectrum, but throughout the exceptionally thorough exposition, Rui Chaves does an excellent job of apprising the reader of the range of theories that hold to the core idea: grammars are fundamentally networks built of constructions that are learned from input, and that then are often, with further experience, analyzed more finely and/or generalized into more abstract (i.e. underspecified) constructions. Like most writing introducing CxG, the data prominently feature expressions that point to the continuity between idiosyncratic and regular; the argument is that any grammar that handles the quasi-regularity of idiosyncratic forms can handle a system consisting entirely of constructions. The formal
grammar fragment and sample analysis provided show explicitly how CxG principles can be instantiated with any given input and how these constructions serve as the basis of generalization.

The categorization of linguistic theories as functionalist vs. formalist has seen its day; constructionist usage-based theories are one place where the dichotomy fails. But the dichotomy fails monumentally with functional discourse grammar (FDG), which sees communicative function as a central fount of grammatical structure; simultaneously, a core purpose is to formalize this mapping. With the support of some essential diagrams, J. Lachlan Mackenzie patiently works through the dense but consistent representational system beginning to end, leaving readers with a strong sense of the logic of the system. A continuation of Simon Dik’s functional grammar and intellectual heir to Kenneth Pike’s tagmemics, it remains distinct from ‘West Coast’ functionalism, despite a shared mandate for typological, cognitive, and pragmatic adequacy. A lament of the scholarly divides stemming from the procrustean separation of functionalism from formalism closes the chapter.

A utilitarian workhorse, dependency grammar’s (DG) base-level contribution is its robust, sophisticated and theoretically stringent (375) representational framework for sentence structure, which serves as an alternative to phrase structure grammars. In DG branching structures, all nodes are syntactic categories that are filled directly with words, and never abstract categories that might not have words directly attached. The simplicity of this difference leaves room for substantial variety in what practitioners actually do with DG, including writing grammars of actual languages. But this simple difference also has far-reaching consequences for natural language processing by computer (NLP); the representation can be more combinatorially efficient and it more simply represents noncontiguous structures. DG also captures much human data, such as on constituency tests, as well as or better than comparable phrase-structure grammars. It has thus understandably been a representation of choice in the NLP world, dominant among the freely available treebanks available for NLP research. Timothy Osborne gives a straightforward, even humble, account.

In contrast, optimality theory’s (OT) focus rests not on representation, but rather on process: the process of choosing among competing structural representations. The assumption is that there is a universal set of simple yet violable well-formedness constraints. Since these constraints routinely conflict, the constraints are ranked, such that the optimal candidate structure is the one most faithful to the highest priority constraints. Géraldine Legendre points out that OT works just as well for syntax as for phonology, posits universals that are unequivocally universal, and explains typology as variation in ranking. Legendre does particularly well clearly stating points of commonality and difference with other theories. An especially important strength of this chapter is how she directly addresses common misunderstandings, such as the idea that candidate structures are too numerous, or that adding constraints is too easy. While her choice to substitute a wholly alternative sentence for the sample analysis is understandable due to the overwhelming amount of detail that would be required, there would have been value in choosing to analyze even just part of the assigned sentence.

Given its limited influence to date, one might wonder why Sam Featherston’s decathlon model was selected for this volume. Perhaps it is because it serves well as a foil to OT. Like OT, the decathlon model is competition-based, but rather than selecting a winner based on high-ranking all-or-nothing constraints, it simply places a fixed cost on each constraint and then sums the costs of violations on a linear scale. Cost estimations are informed by statistically meaningful informant judgment experiments about how bad, on an anchored absolute scale, different violations of standard constraints of generative grammar are. A new sentence would be assigned a structure based on a relative valuation of alternative candidates. While specifics like where candidate structures come from are not fully fleshed out, Featherston is quick to acknowledge that this model is in its early stages; its insights into how generative grammar can be combined with the psycholinguistic reality of gradient intuitions deserve further elaboration.

Turning now to the declarative unification-based approaches, Mary Dalrymple and Jamie Y. Findlay present lexical-functional grammar (LFG). Rather than pressing phrase structure into representing syntactic functions that are sometimes instantiated in long-distance dependen-
cies, LFG’s syntax is divided into two parallel components that serve their respective purposes more naturally. Collecting information from semantic and pragmatic components, the f-structure component (‘f’ for function) represents abstract functions such as subject, object, tense, and so on in a crosslinguistically applicable attribute-value matrix, while c-structure (‘c’ for constituency) represents language-specific hierarchical and linear form in a phrase structure tree. The lexicon then specifies the mapping from c-structure to phonology. Dalrymple and Findlay’s presentation is clear and focused; the sample analysis is reassuringly thorough yet satisfyingly predictable. A minor complaint: this chapter does not compare LFG with theories such as head-driven phrase structure grammar (HPSG), with which it is often compared.

Both the chapter on LFG and that on HPSG highlight ways that their declarative, ‘model-theoretic’ approach contrasts with minimalism and government and binding (GB): declarative grammars specify what forms are allowed without regard to how the forms were generated, unlike generative grammars, which specify rules for generating forms. But Stefan Müller and Antonio Machicao y Priemer frame their comparisons of HPSG not primarily with LFG but with CxG, including sign-based construction grammar, HPSG’s most closely related counterpart. An interesting take on the competence-performance distinction lets nonoccurring phenomena that mainstream generative grammar tries to rule out with the competence model be seen rather as being due to predictable constraints from an expanded performance model outside of syntax. HPSG’s widespread use in computational linguistics and the long-term stability of its architecture make it an appealing choice for many linguists. Distinguishing this chapter is its inclusion of links to relevant webpages, such as a regularly updated HPSG resource page for computational linguists and a page containing full, click-expandable details of their analysis of the assigned example sentence.

Ch. 8 on parallel architecture and Ch. 4 on simpler syntax belong together, as the former (PA) is an integrative approach to language in the context of cognition, while the latter (SS) is the syntactic subcomponent of the former. In PA, parallel rule sets create syntactic, phonological, and semantic structures, which may link directly with each other (and with other cognitive modules). PA’s declarative schemas are configurations of variables whose values may be other schemas, specific material, or nothing. Larger structures are composed by superposing multiple schemas in a process of unification. Like HPSG, syntactic information is held in what amounts to the lexicon, though here the schemas at the center of both syntax and the lexicon lie on a continuum that encompasses lexical items (fully specified schemas), irregular constructions, and regular syntactic schemas (in which semantic information is composed, yet all phonological material remains unspecified). A strength of Ray Jackendoff and Jenny Audring’s chapter is how directly it lays out PA’s relationship with multiple other theories.

Peter W. Culicover and Ray Jackendoff’s Ch. 4, on simpler syntax (SS), picks up where Ch. 8 leaves off. Whereas Ch. 8’s sample sentence analysis illustrates how the three subcomponents interact, Ch. 4’s analysis of the same sentence zooms in on the syntactic subcomponent: an unremarkable tree, simple as advertised. The drive for simplicity in each subcomponent means that surface structures are the focus; complexity is explained by the interactions between syntax and the other components of cognition, especially semantics and phonology. The substance of the chapter is in the motivation and elaboration of SS’s treatment of a variety of syntactic phenomena, which include control and raising, passives, long-distance dependencies, and ellipsis. There is enough redundancy in this chapter for it to be comprehended independently, but not so much as to be tiresome.

Like many of the theories already described, Mark Steedman’s combinatory categorial grammar aims to explain the structure and acquisition of language, using a fully formalized and radically lexicalized framework that is well-suited for computers to do generation and parsing. Unlike the others, though, it is not fundamentally constraint-based but rather is akin to minimalism—generative, only without movement rules. One interesting feature of the architecture is that multiple simultaneous analyses are generated, with a multiplicity of constituents that include not only ordinary constituents but also groupings of ‘surface constituents’ delimited by prosodic
boundaries. It remains agnostic about the representation of formally equivalent alternatives, for
example, whether to use rules to indicate generalizations over lexical classes vs. to always list
separate lexical items. Steedman offers a remarkably clear and attractive exposition of highly
technical formalism, though grasping the notation may require patience from the inexperienced.
Extensive references to and objective comparisons with other theories further contribute to the
joy in reading this chapter.

Ch. 7’s title, ‘The stupendous success of the minimalist program’, alerts readers to the anom-
alous nature of NORBERT HORNSTEIN’s chapter, which chafes throughout at the structure provided
by the editors. In the assigned section for explicating conceptual tools, Hornstein explicitly states:
‘we are not going to discuss tools’. The sample analysis using the EXTENDED MERGE HYPOTHESIS
is truncated due to ‘space limitations’, while nearly a full page rehearses the universally appreci-
ated fact that any given speaker could have acquired any given language; meanwhile, pages are
devoted to questionable claims, such as that nongenerative linguists ‘disagree’ with the aim of de-
scribing ‘the actual mental state’ of speakers (188). Stripped down to its basics, though, without
the ironic counterproductivity of this ‘full-throated advertisement’, the argument is not particu-
larly controversial: namely, that given an assumption that GB is basically true (including un-
bounded hierarchy), then the merge hypothesis provides a way of unifying the relevant modules
of the faculty of language in order to yield many of the properties GB demands.

The metatheoretical chapters of Part II are reviewed here in the order they appear in the book.
PHILIP CARR’S Ch. 15 is essentially an exposition of the wherefores and therefore of his late ac-
ceptance of Esa Itkonen’s position (cf. Ch. 16) that because social convention cannot be studied
as a natural science, linguistics as traditionally conceived cannot be a natural science. Hypothesis
testing of the (linguistic) natural world requires the production of utterances, which are in-
escapably products of socialization and not idealizable by absenting social contingencies.
Through an adaptation of Popper, and skirting the social sciences, the consolation prize he offers
is for scientific linguistics to investigate language modules in the physically observable brain and
how they develop, which is not equivalent to investigating an internal and not-physically-observ-
able I-language.

Conveniently, ESA ITKONEN’S own chapter comes next, arguing for hermeneutics and elaborat-
ing the point that generative linguistics is hermeneutic, not positivistic science. Itkonen’s argu-
ments are precise, pointed, and more fully developed here than they could have been in Carr’s
chapter, where they functioned only as the background of a related argument. Itkonen concludes
by laying out and commenting upon ten specific areas in which generative grammar has dithered
about its status as positivist science vs. hermeneutics. The extensive use of Chomsky’s own
words lends a stunning power to this chapter.

Maintaining a steadfastly neutral stance, ANDRÁS KERTÉSZ and CSILLA RÁKOSI ask: ‘What is
the nature of [actual, in-practice] generative linguistic theorizing?’. Without impugning either
practice or ideal, they suggest that the argumentation practices of generative linguists, though as-
sumed to be scientific, would run into problems in the standard philosophy of science, due to its
reliance on uncertainty, its toleration of inconsistency, and its nonlinear reasoning. Kertész and
Rákosí bring new developments in the philosophy of science to bear, setting linguistic argumenta-
tion practices on a new footing, centered on the philosophical notion of PLASIBILITY. Their argu-
ments are rigorous and fully illustrated with one extensive example. They urge linguists to
self-reflect and seek the input of philosophers to maximize the validity of their theorizing.

STEPHAN KORNMESSER opens his perfectly tuned chapter by highlighting two aspects of
philosopher Thomas Kuhn’s (1962) foundational theory of the history of science, namely, (i) that
mature science only has room for one stable paradigm at a time, and (ii) that a key aspect of sci-
cientific revolutions is the incommensurability of a new paradigm in relation to the old paradigm.
Kornmesser disputes these claims empirically, citing (but not elaborating on) evidence that there
are mature sciences within which multiple competing paradigms exist simultaneously. A very
useful history and analysis of Chomskyan linguistics, and of its status as a paradigm, is followed
by a much shorter section on construction grammar. He concludes that they are incommensurable
parallel paradigms within the field of linguistics, based on examination of each approach’s data, methods, and theoretical constructs, and including especially the observation that (pace Hornstein) both share the same research questions.

Peter Ludlow’s chapter serves both as an argument that theories are good to the extent that they serve the research goals of the linguist and also as a (mostly implicit) defense of generative theory. His three-point argument begins by knocking down data coverage as an objective measure for theories; in line with contemporary philosophy of science, he points out that observations are theory-laden, and he furthermore argues that it cannot be predetermined what data are within scope for a theory. Second, he throws the criterion of simplicity into question by suggesting that a theory’s reducibility to a more basic science and its ability to unify different fields of inquiry both reduce to simplicity in the sense of cognitive ease for present or future theorists, which he therefore takes as the most relevant sense of the term. Finally, he dispenses with formal rigor as a potential waste of time, depending on what a linguist’s research goals are. Though the writing severely lacks in copyediting, Ludlow successfully makes the point that there is room in linguistics for multiple viable approaches, with a further implication that generative theory will resist attack.

Like Kornmesser’s chapter, Pius ten Hacken’s will be a valuable resource for any student or researcher seeking a systematic, perceptive, and unbiased analysis of the fundamental tenets of Chomsky’s work, of their evolution, and of how they compare with those of others. Defining the concept of research program with three Kuhn-inspired questions, ten Hacken considers Chomsky’s positions, over time, on what language is, what data are relevant for studying language scientifically, and what criteria should be used to evaluate theories. Disagreements in the criteria give rise to different theories, and the chapter elaborates on three possible alternatives. Ten Hacken concludes with a gracious reflection on how attention to the bases of research programs contributes to an appreciation of the intellectual coherence of different approaches and to the possibility of constructive dialog.

Editors András Kertész and Csilla Rákosi wrap up the volume with a fresh look back at what was covered in its chapters. First, they review how an updated understanding of the philosophy of science among practicing linguists could save the field from unnecessary angst. Second, they issue an exhortation for linguists to make a habit of comparing theories on the four parameters that structure each chapter of this volume—data, goals, tools, and evaluation—and offer a panoply of ways that doing such metatheory could enliven their own and others’ linguistic inquiry.

Overall, this volume will be a core reference work; it meets a deep need that has remained surprisingly ill-satisfied until now in the field of linguistics, namely a sympathetic but uncompromising explicitly comparative examination of the marketplace of syntactic theories. It achieves huge success in its goal of helping readers to place syntactic theories with respect to each other and to understand why different linguists argue as they do. Indeed, this metatheoretical approach should bear fruit in the creation of better theories on the research front, but it also bears immediate value on the teaching front. While the reading level of most chapters is too high to assign in undergraduate courses, teachers of undergraduates may find useful motivating insights. And this volume will be golden for graduate students and those who mentor them. Almost all chapters in Part I present their material clearly and thoroughly enough that even readers who do not have a background in the approach covered will subsequently be able to pick up research articles taking that approach and read them with a basic understanding of what is being argued and—importantly—why. This ability to read a discipline cannot be taken for granted, being a key skill developed throughout one’s academic career (Carillo 2017, Manarin 2022), especially in graduate school. It requires a feel for authors’ presumptions about goals, evidence, and evaluation criteria, that is, an intuition for the metatheory, without which research from a foreign approach can seem mysterious or even nonsensical. Given a multiparadigmatic field, graduate training without intentional metatheoretical reflection risks deepening the mutual incomprehension between schools of thought, or worse, mutual disdain. Having this volume at hand, with its insistence on metatheoretical clarity, will ease the task of shepherding graduate students and inquisitive undergraduates through the comprehensive multiparadigmatic education that they need.
In the end, the only substance I was left wishing for was a broader range of metatheory from other related disciplines, not just philosophy of science. A welcome addition to Part II would have been a chapter like Pullum 2019, referencing the theory of computation, or a comparative evaluation from cognitive psychology, since so many linguistic theories claim to be studies of cognition. Yet these are relatively minor quibbles. Despite (or because of) my bicoastal upbringing in linguistics, this volume, more than any other single publication, has helped me to appreciate not only how fundamentally different approaches to syntax make sense on their own terms but also how they all in their diversity contribute to the overall goal of understanding language.

REFERENCES


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In this impressive volume, Gregory Matoesian and Kristin Enola Gilbert provide the field of law-and-language studies with an important set of analytic tools, insisting that systematic study of multimodal conduct be integrated into research on legal communication. In particular, M&G focus on modes of communication such as gesture, gaze, posture, movement, and speakers’ interactions with physical objects—modes that have not received as much attention within language-and-law research as has legal language in a more traditional conception. For scholars who are unfamiliar with studies of multimodal conduct, the book offers a rigorous but accessible introduction to the field, along with sophisticated analyses of legal interactions demonstrating the value of the authors’ approach. For linguists, sociolinguists, and linguistic anthropologists more generally, the volume offers an inventive entry in the growing literature integrating multimodal analysis into microanalysis of linguistic exchanges—and the macroanalysis of language within institutions. For those interested in research on legal language, this study advances the field through its comprehensive vision of how we can incorporate multimodal analysis into existing paradigms.

One of the big problems with incorporating multimodal conduct into our studies of linguistic exchanges in general—and courtroom discourse in particular—is the sheer volume of that kind of conduct. As M&G amply demonstrate, every second of our interactions with each other contains multitudes. It was already challenging enough to perform detailed analyses of language in legal...