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REVIEWS

John Coleman, *Phonological representations: their names, forms and powers* (Cambridge Studies in Linguistics, 85). Cambridge: Cambridge University Press, 1998. Pp. xvii + 345.

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The purpose of Coleman's book is to motivate the need for an alternative approach to phonological analysis and then to present a representational approach that responds to the concerns.[1] In his minimally revised 1991 doctoral thesis, Coleman argues that generic nonlinear transformational generative phonology (GP) – roughly that practiced in the United States and by students of Morris Halle from the late 1960s to the early 1990s – focused on empirical adequacy at the cost of formal restrictiveness. As a result, the theory developed is Unrestricted in the Chomsky Hierarchy sense, and so is untenable. Coleman's approach has a primary formal focus, first arguing that Declarative Phonology (DP) is context-free, and therefore restrictive, and then exploring the model's empirical adequacy.

The book is divided roughly into two parts. The first part, chapters 2–4, presents the case against GP. The second part presents the alternative, DP (chapter 5), and exemplifies it through an analysis of fragments of the Japanese and English sound systems (chapters 6 and 7, respectively). This review follows the structure of the book, beginning with a summary and an evaluation of the arguments of the first part, followed by a sketch of the DP model and an evaluation of the analyses of English and Japanese. In closing, I evaluate the success of the book as a whole.

Chapters 2–4 are chronologically presented. Chapter 2 addresses segment representation, chapter 3 addresses 1960s *SPE* style transformational rules (Chomsky & Hale 1968), and chapter 4 considers developments from the 1970s and 1980s, autosegmental and metrical representations. Chapter 2 concludes with the surmise that certain alternations that have been taken to be phonological are, in fact, the phonetic interpretation of a phonological representation. For example, the intrusive [t] in English words like *false*, *prince* and *once* can be viewed as the phonetic overlap of the closure of the sonorant and the voicelessness of the following obstruent. Chapter 3 presents the key formal argument, that transformational generative grammars are Unrestricted. Context-sensitive deletion rules ($A \rightarrow \emptyset / \ C\_\_D$) are possible

[1] Thanks to my colleagues, Mike Hammond, for useful discussion of Declarative Phonology and of English stress, and Kazutoshi Ohno, for help in understanding the Japanese data.

only in a formally Unrestricted grammar and such rules are accepted in transformational generative phonology.

Chapter 4, reiterating Coleman & Local (1991), points out that the formal characterization of an autosegmental representation is a planar graph. The definition of a planar graph entails no lines crossing. Thus, the No Crossing Condition is not specifically a linguistic constraint but rather is a general property of planar graphs. This conclusion leads Coleman to the further conclusion that autosegmental representations are not an adequate grammatical framework. Metrical representations fare better. Coleman demonstrates that 'imperative' rules building metrical structure (syllables and feet) can be restated easily as 'declarative' rules defining the well-formedness of a structure. He suggests that autosegmental effects be restated as metrical effects; if so, they too can be stated declaratively.

The strength of the first chapters is the steadfast focus on formal rigor. Therein too lies its weakness: there are very few phonological examples used to illustrate the points being made, and those are only sketchily presented. The phonologist who is not yet formally rigorous will struggle with this section rather than emerge with a clear understanding of the formal issues and their empirical repercussions.

Parts of the DP model are presented in the early chapters, but chapter 5 attempts to lay DP out in full. The core characteristics come from Wheeler (1981). (i) Phonological representations are monostratal and distinct from phonetics (they are interpreted by phonetics, but not changed in any way to become a phonetic representation). (ii) Phonological representations are structured (metrical structure). (iii) Phonological operations are monotonic (no deletion or insertion, simply concatenation and interpretation; feature-filling is not viewed as insertion). Several different phonological processes are evaluated in DP terms, both phonologically and phonetically. For example, epenthesis is viewed phonetically as the overlap of articulations, such as intrusive [t] in English, noted above. Phonologically, either epenthesis is the assignment of default features to a featureless element (no examples given, no formal account given) or it is the selection of one of two lexically listed alternants. For example, in /r/-dropping dialects of English, 'ear' is lexically represented as /iə(r)/, with a possible final [r]. The lexical '(X)' is also offered for a representation for phonological deletion. Coleman states that the manifestation of (X) as θ in morphologically underived forms corresponds to epenthesis ([iə] 'ear'), and (X) as θ in morphologically derived forms corresponds to deletion (/hɪm(n)/, underived [hɪm] 'hymn' is erroneously presented as an example of deletion; no other phonological examples are given). Phonetically, deletion is again viewed as overlap to the extent that the segment is not perceived independently of flanking elements. Chapter 5 also offers a formalism for phonological representations. This section is quite helpful for it presents familiar examples. For example, the formal construct IMPLICATION is illustrated with default rules like '[+nasal] → [+voice]', while

QUANTIFICATION is illustrated with part of the prosodic hierarchy, 'every foot contains a syllable'. The chapter closes by revisiting the phonetic interpretation of phonological objects, reiterating the point that phonological representations remain constant while phonetic interpretation varies.

Japanese and English are used throughout the work to illustrate various points. Chapters 6 and 7 exemplify DP through a more complete treatment of these fragments. The Japanese analysis focuses on two aspects of Japanese grammar, (i) the representation of well-formed syllables and moras, and (ii) the palatalization of coronal obstruents before /i/. Devoicing and deletion of vowels factor into the discussion of syllabic and moraic structure. Words such as [ski] 'like' (*suki*) are analyzed as a monosyllabic word consisting of two CV moras; words like [tanoʃk] 'happily' (*tanosiku*) are disyllabic, ending with a syllable containing three CV moras, *nosiki/u*. The syllable domain is based on the phonetic realization of the word while the moraic structure is phonological. Syllable structure rules are nonetheless treated as phonological. The case dramatically illustrates the interdependence between phonological representations and phonetic interpretations, a point that is not highlighted in the text.

A second point that goes without comment is the reliance on O(nset)-R(ime) syllable structures. These are assumed from the outset of the book, yet in discussing Japanese, Coleman uses moraic structure which is interpreted as Antirime-Coda (AR) syllables (with the Anti-rime containing Onset and Nucleus). No motivation for the OR (or AR) structure is ever offered; there is minimal recognition of the works by McCarthy & Prince (1990) and others motivating moraic structure rather than the OR structure.

Chapter 7 explores English phonotactics, presented with a minimum of data sporadically offered. First up is the representation of vowels and consonants, with special attention to the representation of vowel height and the Great Vowel Shift. The latter is addressed by representing vowels which undergo shift with a height value 'shift([height:n])' and a general rule telling how *n* is interpreted under shift. Where shift holds, the shifted value is interpreted; where shift does not hold, the unshifted value is interpreted.

Syllable structure and stress are also examined in some detail. Syllable structure is given as OR, with a long list of constraints limiting how O and R can be instantiated. This discussion is based on monosyllabic words, with minimal recognition of the differences between word-medial and word-peripheral syllable margins, and minimal recognition of the formal similarity between some of the various restrictions.

English stress analysis requires discussion of English morphology; Coleman divides the English lexicon into Germanic and Latinate morphemes. Latinate-final words have a stress on one of the final three syllables; the necessary rules are carefully formalized. Germanic words and the remainder of Latinate words have stress on syllables alternating from the beginning of the stem/word; the rules are not formalized. Disappointingly, this section

does not address some of the major puzzles of English stress. Although words stressed like *Wìnnepesáukee* are discussed and accounted for, the minority pattern of *Epàminóndas* is ignored. Although morphological structure is acknowledged to play a significant role in English stress location, the aspiration/flapping contrast in *mìli*[t^h]*arístic* vs. *càpi*[*D*]*alístic* is ignored. Although general vowel reduction is examined and suggested to be a result of phonetic interpretation, not phonological feature changing, the *còndensátion/còmpensátion* contrast is ignored. The case for the empirical adequacy of the DP model is suspect without a coherent explanation of these apparently cyclic effects.

This is an ambitious work, flawed by its own ambition. The formal discussions contain too little phonology to make them tangible to the phonologist who is not yet as formally rigorous as Coleman urges. Further, much of the phonological data and analysis is sketchily presented, with critical details omitted. The phonologist who looks for empirical coverage first, contra Coleman's recommendation, may well be skeptical of the empirical import of the formal issues. Finally, the phonological phenomena that are selected for presentation are not obviously the most challenging test cases for the model. Key to the formal motivation for a new model is the issue of deletion rules, yet virtually no deletion rules are explored in the entire work. The '(X)' notation for phonological epenthesis/deletion is sketched, but the relevant rules are not presented, nor is there any discussion of why/how the value for 'X' is limited – or even whether it should be limited.

Perhaps the greatest merit of the book is its strong argument that the study of language sound systems can readily benefit from a clear understanding of formal systems. Parts – or all – of chapters 2–5 might be used in upper division and graduate courses on the formal foundations of linguistic theory, courses that typically contain little or no reference to phonology. The weakness of this section is that it does not stand alone. The phonologist who does not already have a good understanding of set theory, graph theory, formal language theory, and Unification Grammar formalism is likely to struggle with understanding the significance of these chapters for phonological theory. On the other hand, the formalist without familiarity with phonological phenomena and theory is given too little by way of exemplification to appraise the content. Use of this book in such courses would introduce a new generation of phonologists to an early appreciation of the value to phonological research of understanding and using formal systems rigorously.

A final disappointment of this work is the refusal to engage in discussion of Optimality Theory (OT) (e.g. McCarthy & Prince 1993, 1994), due no doubt to it being based on a 1991 dissertation. There is much that is conceptually similar between OT and DP, and OT has largely replaced the transformational model. Consequently, much of the discussion reads as a straw man argument: 'But nobody DOES transformational generative

phonology anymore!' Without directly examining whether OT falls foul of the Chomsky Hierarchy and directly comparing the two models, the book can be viewed as another reason to adopt OT, rather than a reason to embrace Declarative Phonology.

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Mike Davenport & S. J. Hannahs, *Introducing phonetics and phonology*. London: Arnold, 1998. Pp. xi + 196. **Carlos Gussenhoven & Heike Jacobs,** *Understanding phonology*. London: Arnold, 1998. Pp. xii + 286. **Iggy Roca & Wyn Johnson,** *A course in phonology*. Oxford: Blackwell, 1999. Pp. xxi + 725. **Philip Carr,** *English phonetics and phonology*. Oxford: Blackwell, 1999. Pp. xviii + 169.

Reviewed by Ken Lodge, University of East Anglia

The 1990s have seen an eruption of phonology textbooks; in a way this is not surprising because, first, there had been only a few in several years, e.g. Hyman (1975), Lass (1984), and secondly, there have been considerable advances in various areas of and approaches to phonological theory. These needed to settle down somewhat before authoritative statements of their nature could be provided. Now we have a number of different offerings, four of which are reviewed here. For ease I shall refer to the jointly authored ones by surname initials: D&H, G&J, R&J, and to Carr's book as PC. I shall start with a general consideration of what is on offer, then deal briefly with each in turn and conclude with some comparative comments.

First of all, one has to consider what is meant by 'coursebook' or 'textbook' (and are they the same thing?). It could be argued that a

coursebook is designed to be the basis of a particular course and to that extent defines the structure of that course. A textbook, on the other hand, could be seen as a reference manual for aspects of a subject that need to be studied outside the classroom context. However, it is not clear that such a distinction is really maintained either in these particular cases or generally, so that there is some ambiguity in description. It also means that a comprehensive reference work such as Lass (1984) or the recent presentation of Optimality Theory (Kager 1999) counts as a textbook, even though they could not be used as the basis for a course. The inclusion of exercises, as in all the books under consideration, should put them towards the 'coursebook' end of the continuum. It can often be very helpful for the teacher to have exercises provided, and even more helpful to have the answers! The latter are also useful for students to enable them to work on their own.

Secondly, one has to ask what constitutes 'a course'. Here the answer is not straightforward and may differ from one institution to the next. Certainly the statement 'Our department offers a course in phonology/phonetics' has many possible meanings. As far as the United Kingdom is concerned, a course may last a term (8 or 9 weeks), a semester (11 or 12 weeks) or a year (16–24 weeks). Viewed from this perspective, the present books are suited to different circumstances. Carr is quite explicit about the book's structure: in Newcastle he had 11 lecture slots in the first semester of the first year to present English phonetics and phonology (ix) and the book has 11 chapters; D&H, co-authored in nearby Durham, also has 11 chapters, which would fit a similar pattern. G&J, from the Dutch context, has 15 chapters, so on this basis would suit a year-long course. R&J has 20 long chapters, running to 664 pages; I find it hard to envisage a Linguistics programme at undergraduate level in the UK that would have room for a course of an equivalent size. The book is divided into three parts: I Phonetics and phonology; II Suprasegmental structure; III Advanced theory. Clearly a minimum of two years would be needed to cover all this in detail. If, as the authors themselves suggest (xvi), the first part is used as the basis of an introduction to phonetics and phonology then it is a considerable outlay for those students who do not need or want the rest of the book.

My third and last general point is the content of such courses. The basic question is: should phonetics and phonology be taught together or separately? Elsewhere (e.g. Lodge 1997) I have argued strongly for keeping the two clearly separate. This is not meant to deny their relationship, but only by separating them clearly can we start to understand their far from obvious connections. Given that we are here considering introducing students to such matters, it is all the more important to have the two clearly distinguished. D&H make this division clear in the first chapter (even if there are small slips in places – see below) and the book is divided into two parts, the first dealing with phonetics, the second with phonology. The book is well suited in this respect to a short introductory course in phonetics followed by one in

phonology. PC also has two similar parts but is restricted to English. G&J gives an overview of phonetic description in the first chapter, but this is not a full introduction, even to articulation. Rather it is a handy guide for phonologists and is tailored to be useful to the types of theoretical view to come; we have 'segments' already on page 1! R&J intertwines phonetics and phonology in the first part: the first chapter is concerned with the production of obstruents, followed by one on assimilation to demonstrate the phonetics/phonology distinction, followed by sonorants, followed by natural classes and distinctive features, then cardinal vowels, then phonological processes relating to vowels, then the vowels of English and finally the timing tier and the Great Vowel Shift. Personally, I find the rationale behind some of this arrangement difficult to determine. Since the title of the book only refers to phonology, are the phonetic interludes in Part I intended to be refreshers of some previous instruction? They do not appear to be refreshers, as they are presented, very clearly and expertly, as introductions to the topics.

I will now deal with each book in turn. D&H is an introduction to both areas which does not claim to take the student to any advanced level. This makes it very suitable for a first year set book. It introduces students to the IPA alphabet, which the authors use throughout (with a few slips, e.g. [i:kway], 113, presumably for [i:kwaj] and [ʖ] is the old symbol for the lateral click, not the alveolar (non-lateral) one, as claimed on p. 20). The authors also try to keep the two aspects separate, while acknowledging their relatedness, though here, too, the separation is not always clear. For instance, LIQUIDS and GLIDES are introduced as manners of articulation (12–13), rather than APPROXIMANT, though the description of the articulation is clearly that.

After the introduction to articulation in the first four chapters, chapter 5 gives a useful introduction to acoustic phonetics. Chapter 6 deals with binary features and chapter 7 with phonemic analysis. It would have been possible to have these two chapters the other way round, so that after an introduction to the basic notions of meaningful contrast, complementary distribution and rules, binary features could be presented as a way of capturing the necessary generalizations, rather than appearing to be a bridge between the two halves of the book. There are one or two unfortunate typographical errors that have been missed (but there is an errata sheet available on Hannahs' web page) and a few odd slips, e.g. the plural of *leaf* is described as having a voiced fricative between vowels (118; only in the spelling!) and the phoneme /t/ 'becomes' the allophone [ʔ] (120), rather than 'is realized as'. The book presents the notion and mechanisms of derivation in Chapter 10 and finishes with a brief chapter on constraining the model, where a number of recent developments are referred to. Basically the book provides a good introduction to a classical derivational approach to phonology, though fires some warning shots as it does so.

G&J concentrates on phonology and goes much further than derivations. There is a suitable progression and an unusual but interesting approach in chapter 3 to the issue of derivations versus constraints by looking at loanwords. Optimality Theory is introduced briefly, presented as an alternative to rules in chapter 3, with a longer treatment of stress in chapter 14. Its description as '(t)he most successful constraint-based theory' (46) seems somewhat premature. It is claimed that the IPA alphabet is used throughout but there are a number of dubious and/or misleading transcriptions at various places, e.g. a final voiced uvular fricative at the end of German *Beamter* (6), a subscript dot to indicate retroflexion as well as the IPA symbols in the same data set (83), and a lack of clarity as to the type of English being represented (UK or US?) with [stɔp] and [skwɒd] in the same data set (70). Errors of this kind should be avoided at beginners' level. Several of the topics in D&H are given more extensive treatments in G&J, such as syllable structure, which takes up the whole of chapter 10, and the additional chapters give scope for going beyond classical derivation: there are two chapters on feature geometry, two on stress and one on phonology above the word. The latter contains English data relating to palato-alveolar assimilation across syntactic boundaries (244–245), which do not reflect the norm in British English. In my experience [tʃ] for /t/ + /j/ will be used equally in all of the following:

Mind it doesn't hit you.
Tonight your name will be on everybody's lips.
If you met John Knott, you'd like him.

In linguistics data cause more arguments than anything else!

R&J is a much more ambitious offering. It could easily have been marketed as two books: Part I as an introduction to phonetics and phonology, Parts II and III as a continuation. The style and presentation are different from in the other three books. There is a direct address to the reader, highlighted key points and margin summaries. A lot of thought and effort have gone into this approach and it should prove useful for students and teachers alike. Such a 'teaching' style is no doubt based on actual teaching practice in that feedback and guidance are built in. In the sections on phonetics the proprioceptive abilities of students are overestimated, e.g. in the discussion of the difference of place between bilabial and assimilated labiodental stops in English (32–34), and the characterization of assimilation as 'contamination' (34, even in scare quotation marks) seems infelicitous, to say the least. Some of the English data are surprising, e.g. [ʔ] for [d] is very limited (not 'common', 34): some Cockney speakers may have it and, depending on the theoretical assumptions, West Riding of Yorkshire speakers have it before other consonants, as in *Bra*d*ford*; and the claim that the final obstruents of the first words in *five tons*, *lose ten-nil*, and *edge trimmer* are voiceless (39–41) needs much more careful explanation.

Preceding vowel length and time of cessation of vocal cord vibration both need to be brought into the discussion. The more advanced sections of the book are detailed and for the most part clearly set out. There is a lot of discussion of data from many different languages besides English. Part II has two chapters on the syllable, including a very useful treatment of English phonotactics, three on metrical matters and one on tone. Part III develops the theoretical framework and moves the discussion toward the present, covering the cycle, rules and derivations, underspecification, markedness and feature geometry, and constraints. Chapter 19 is an excellent introduction to Optimality Theory which works through a number of simple analyses of aspects of English.

PC is designed for students of English as well as students of linguistics, so the theoretical issues are treated only insofar as they are needed to give a proper linguistic description of the chosen topics. Carr is very clear and honest about his intentions in the two prefaces, one for the teachers and one for the students. He refreshingly points out that despite the guffaws of one's peers oversimplification of the issues is necessary because 'students have to learn to walk before they can learn to run; they also have to learn to crawl before they can learn to walk' (x). So we have a practical introduction to both the phonetics and the phonology of English of a solid descriptive kind. After the first four chapters on phonetics we have separate chapters on the phonemic principle, the phonemes of English, English syllable structure, word stress, rhythm and connected speech and intonation. A final chapter and the appendix have a useful overview of a small number of different accents of English.

There are two general points I want to make in conclusion. The first concerns the set of data that is usually presented as Standard English pronunciation (RP). The vowel set, in particular, is derived largely from Jones (1918) and its subsequent editions, which certainly reflects an interwar pronunciation, via Gimson (1962) and its later editions. By the present day two things have changed: the status of RP even in the British Isles and the nature of what may be described as a standard pronunciation. RP is no longer the ubiquitous standard of the media; a more general Southern-type of pronunciation is taking its place. (Whether this is what is meant by 'Estuary English' – see R&J: 171 – is difficult to say, since there are no proper linguistic descriptions of this accent.) It is time that linguists did some more descriptive work to bring descriptions of British English data up to date. Some mention of these changes is made by D&H, but someone needs to be bold enough to say that *bear* is pronounced [bɛː], *sure*, *shore* and *Shaw* are [ʃɔː] and /uː/ is now fronted to at least [ʉ̟ʉ] in the speech of large numbers of people.

The second point concerns the status of textbooks in the British Research Assessment Exercise. (This only affects some of the authors involved.) The fact that I am reviewing no less than four books all at once must say

something about their perceived status. However, I would want to argue that such books are absolutely crucial for each new group of beginners in linguistics courses and that there must be good, bad and indifferent ways of treating the topics under consideration. In other words they deserve careful consideration and evaluation just as much as monographs and learned papers, even though the criteria will be different.

All the books on offer are good in different ways. They each seek to do something different and cannot be compared directly for that reason. They all appear on my reading lists now; if I had to recommend just one as an introductory coursebook, then I would choose D&H.

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Liliane Haegeman (ed.), *Elements of grammar: handbook of generative syntax* (Kluwer International Handbooks of Linguistics, **1**). Dordrecht: Kluwer Academic Publishers, 1997. Pp. vii + 349.

Reviewed by Anna Roussou, University of Cyprus.

Research in the framework of generative grammar has covered lots of ground both empirical and theoretical in the last few decades. The present edited collection is representative of the most current achievements in the field as it spans a range of topics, such as theta theory, aspects of clause structure, the notion of subjects and morphosyntax. It also represents a diversity of approaches from the Government and Binding (GB) framework to versions of Minimalism (e.g. radical Minimalism) and Optimality. The volume consists of seven papers, written by leading figures in the field. As it is not feasible to review each of the papers in detail due to space limitations, I will outline briefly the main ideas presented in each of them and consider how they reflect on current research.

The introductory chapter by Liliane Haegeman, the editor, summarises in a very succinct way the development from GB to Minimalism. It first discusses the levels of representation in GB and then moves on to

Minimalism, focusing on clause structure (Merge), movement (checking theory, copies), parametric variation (bound vs. free morphemes) and on radical Minimalism as proposed by Brody (1995, reviewed in *Journal of Linguistics* vol. 34). In the following sections Haegeman presents the rest of the papers in the volume in a way that does not affect the overall coherence of the introduction. The section on thematic structure relates to the contributions of Baker and McCloskey. The section on clause structure relates to the papers by Pollock and McCloskey again (the IP domain) and Rizzi (the CP domain). Optimality Theory (the paper by Grimshaw) is discussed in a separate section at the end of the chapter, as it represents an alternative approach and also focuses on morphosyntax. In general, the introduction provides the reader with a clear expectation of what follows in the subsequent chapters and as such fulfils its purpose.

In his contribution Mark Baker discusses the problem of linking thematic roles to syntactic positions. His aim is to support the Uniformity of Theta Assignment Hypothesis (UTAH). To this end, he argues for a coarser-grained theory of theta roles, closer to Dowty's (1991) proto-theta roles. The suggested thematic hierarchy is Agent > Theme > Goal. The arguments come from a variety of constructions. With respect to Agent, Baker argues that Experiencers can also be analyzed as proto-Agents and as such be generated in the relevant position. The same holds for ergative subjects which are generated and also surface in their thematic position, i.e. spec of higher VP. Agents in languages like English are generated in this position and then move to spec,IP. The main argument for the Theme > Goal hierarchy comes from Double Object constructions (DOC). Baker argues that in DOC like *John gave Mary the book*, the surface Goal *Mary* is generated in a position lower than Theme (in lower Spec,VP) and in particular as the complement of a null P. From that position it moves to Spec,AspP which splits the VP shell. On the other hand, locative constructions, which show an alternation with and without a P, such as *John loaded the hay onto the wagon* vs. *John loaded the wagon with hay*, differ in what counts as the affected argument. To be more precise, what counts as the Theme is the DP *the hay* in the former and the DP *the wagon* in the latter. Similar arguments in support of the absolute UTAH come from 'primary' and 'direct object languages', showing that the thematic position is the same for Themes and Goals but it is the surface position that may differ due to parameterisation. Finally, UTAH is considered in the light of Minimalism and in relation to lexical decomposition as in Hale & Keyser (1993).

The paper by Michael Brody presents a clear criticism of Chomsky's (1995) Minimalism and offers an alternative that eliminates any kind of imperfections from the theory of grammar. First the distinction between overt and covert movement operations with its implications for cyclicity is considered (covert operations are by necessity countercyclic). Brody criticises the postulation of strong features which in Chomsky's system are introduced

to guarantee cyclicity (they have to be eliminated as soon as possible in the derivation) and also yield categorial pied-piping. Brody instead defines 'strong' features morphologically, i.e. as those that are satisfied by categories (full copies), while 'weak' features are satisfied by feature copies. This reformulation paired with the idea that the assembly of syntactic structure takes place in one step leads to the elimination of the cycle. At the same time this approach allows for the presence of chains which are characterised by both categorial and feature copies in different positions (as in A-chains, where intermediate traces correspond to feature copies). The overt vs. covert distinction reduces to the distinction between primary and secondary chains, which is discussed in more detail in Brody (1995). The next major advantage of this system is that it eliminates the distinction between interpretable and uninterpretable features, giving rise to 'bare checking theory'. Thus there are no mediating features as in Chomsky's system and those features that are present more than once (cf. the phi-features of the subject and those of the verb) are interpreted as a single instance of the same feature under chain formation. Finally, Last Resort is seen as a condition that requires that all categories be licensed under Full Interpretation, while Procrastinate simply does not arise, a most desirable result.

The paper by Jane Grimshaw is presented within the frame of assumptions of Optimality Theory and considers the interaction of lexical insertion and syntax, by focusing on a given set of clitic combinations. The basic construction has to do with the unavailability of double *si* sequences in Standard Italian, and the replacement of the first *si* by the clitic *ci* (cf. *Ci si lava* 'one washes oneself'). The idea is that there is a constraint, *XX, which is highly ranked in the grammar of Standard Italian, which excludes duplication of clitic sequences; thus the clitic *ci* is selected as the one which best fits the input. In those dialects where the *si si* sequence is possible, the *XX constraint is ranked lower, while in Spanish the null counterpart of *si* is selected. This system is based on a set of universal constraints that can be violated in well-formed sentences. Different constraint rankings predict different crosslinguistic patterns. The question that remains of course is to what extent constraint ranking mirrors properties of the lexicon. If this is true, then the natural question one would ask is why we need to have a grammar that duplicates the information that is already specified (fully or partially) in the lexicon.

In his paper Jim McCloskey considers the notions of subject and subjecthood and provides a historical excursus on the topic. The discussion shows that the notion of subjecthood can be decomposed and reconstructed derivationally, as a cluster of properties that spread across three positions, one of which is the thematic one, while the other two are inflectional. McCloskey first provides arguments for the need of a lower subject position. The 'lower origin arguments' show that a DP subject originates low in the clause structure. These arguments have to do with coordination facts,

quantifier float, scopal interactions of modals and negation with the subject, and reconstruction effects with predicate fronting. Another set of arguments shows that the subject can surface in a lower position ('lower position arguments'). These are facts from VSO languages like Irish, imperatives in Ulster English where the object pronoun shifts over the subject, and transitive expletive constructions as in Icelandic. However, as McCloskey points out, the picture becomes more complicated if one considers more carefully the data regarding VSO and transitive expletive constructions, which show that the subject is lower than in English but higher than its thematic position. The split Infl hypothesis offers an answer to the problem as it makes available at least two inflectional positions that may be occupied by the subject in different languages. Thus the notion of subjecthood is not unitary but a derivative one, which interacts with the availability of lexical projections embedded under a number of inflectional heads. The nominal character of the subject also has to do with the features that characterise these heads, such as agreement.

In his contribution Jean-Yves Pollock returns to the issue of the split Infl hypothesis and offers new solutions to some old problems. He argues that languages may differ with respect to how their morphological properties interact with syntax. In languages like English and French, lexical elements are inflected in the lexicon and their features are checked in the syntax, starting from the outermost morphemes. This predicts a clause structure where Tense dominates Agreement. In languages that show true incorporation, inflectional affixes are attached in the syntax (in accordance with the Mirror Principle). A feature is strong if it is morphologically identified, in the sense that it stands in clear opposition with at least one other morpheme in the inflectional paradigm. English main verbs lack morphologically identified features for Agreement, so they cannot move to AgrS, and consequently to Tense (as opposed to Modals, *have*/*be* and *do*, which have some morphological specification). Pollock also postulates one extra functional position above T, namely Mood, and argues that the loss of V-movement in Modern English is linked to the loss of mood (indicative, subjunctive, imperative) morphology, while the availability of V-movement in French goes along with the retention of this morphology. The advantage of this analysis is that it makes the link with agreement less strong and provides a clearer understanding of the former $\pm$opaque specification. At the same time the dominance of the Agr projections by Tense and Mood gives rise to a clause structure where all argument related projections (Agr) are clustered together.

In the final paper, Luigi Rizzi discusses the articulated C-structure, arguing that the C system splits into two basic heads that express finiteness (lower C) and force (higher C), called Fin and Force respectively. In between we find further projections specified for Focus and Topic. Rizzi argues that Topic projections can be generated freely on both sides of Focus and that *wh*-

elements target Spec,FocP, at least in languages like Italian. Further differences between Topic and Focus are accounted for. For example Topic is non-quantificational, it can be iterated, can be associated with a resumptive clitic and cooccur with a *wh*-phrase. Romance topic constructions involve a clitic (Clitic Left Dislocation), while their English counterparts involve a null anaphoric operator (in Spec,Fin) identified by the topic (in Spec,TopP). Rizzi also considers the interaction of C with the subject on the basis of three main cases: adjacency effects on Case, PRO and traces. With respect to Case, Rizzi shows that a complementiser like *for* in English must occur in the lower C position, from where it head governs the subject in Spec,IP. The same holds for the Italian *di*, which assigns null Case to PRO. Finally, a zero C in subject *wh*-extraction is the realisation of Agr features on Fin. The case of anti-adjacency effects on the subject trace with intervening adverbials is also considered (cf. *Who do you think that for all intents and purposes will win the prize?*). Topicalised adverbials, unlike arguments, do not involve a null operator in Spec,FinP and thus allow for Agr in Fin. Furthermore the intervening adverbial splits the Force and Fin heads, so that *that* obligatorily realises Force and the zero form realises Agr in Fin (and also in Topic). It is also argued that this split takes place when necessary, providing a picture of clause structure where functional projections may be optionally present, to some extent reminiscent of Grimshaw's (1997) Optimality approach. Overall the split C system offers an account of topicalisation and focusing phenomena as well as the interaction of C with the subject. The influence of Rizzi's work has appeared in more recent research.

As the above brief discussion shows, the papers in the present collection cover a wide range of topics. Despite the different approaches and analyses provided, there are some common themes that emerge. One such theme has to do with the definition of strong features as morphological ones and their relevance for checking mechanisms and consequently for crosslinguistic variation. This topic is discussed in both Brody's and Pollock's contributions. Another theme involves the projection of heads: what positions are available and how they are licensed. This is covered in most of the papers and in particular in Pollock (IP), Rizzi (CP), McCloskey (in relation to possible subject positions) and to some extent in Baker (in relation to thematic positions mainly). At the same time the papers by Baker and McCloskey share the intuition that there has to be a clear distinction between thematic and inflectional positions, at least with respect to the subject, but as Baker shows this easily extends to objects as well. Moreover, notions such as subject and object need to be reconsidered along the lines of clustering different positions in the clause structure. Finally, the relation between what the lexicon makes available and how this is dealt with in syntax forms the topic of Grimshaw's account and to this end it partly relates to Baker's discussion. It's also worth pointing out that the papers by Baker and Brody have a reductionist flavour (the former with respect to thematic roles and the latter,

primitive notions of the grammar). On the other hand, the paper by Grimshaw offers a proliferation of constraints that seem to enrich the grammar. Finally, enrichment albeit of a different type is also found in the papers by McCloskey, Pollock and Rizzi where the postulation of a larger number of functional projections is argued for. These are just some of the trends that one can identify in the present book.

The overall result is impressive and it provides the reader with a clear understanding of some of the current research topics. It is without doubt a necessary companion to anyone interested in grammar. It would help of course if the price of the volume were a bit more accessible to the ordinary reader.

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Shalom Lappin & Elabbas Benmamoun (eds.), *Fragments: studies in ellipsis and gapping*. New York: Oxford University Press, 1999. Pp. xiii + 298.

Reviewed by YAN HUANG, University of Reading

The collection under review contains a short introduction followed by nine papers, eight of which grew out of a workshop on VP-ellipsis held at the School of Oriental and African Studies, University of London, in the autumn of 1996. Given that VP-ellipsis has recently re-generated a considerable amount of interest in formal syntax and semantics (e.g. Berman & Hestvik 1993), this book makes a valuable addition to the literature on this fascinating topic.

In their Introduction, Lappin & Benmamoun provide a summary of the analyses of the individual contributors. They also isolate a number of questions that are central to the study of VP-ellipsis. These include (i) at what level of representation is VP-ellipsis resolved, (ii) what are the syntactic conditions which dictate the distribution of different kinds of elided elements,

(iii) how are the relations that hold between an ellipsis site and its possible antecedents characterized, (iv) what are the procedures through which the ellipsis site is interpreted, (v) what is the relation between VP-ellipsis and NP-anaphora, (vi) is VP-ellipsis the result of PF deletion or the initial presence of ECs in the derivation of a sentence, and (vii) to what extent can different types of VP-ellipsis be treated in a unified way? While these are among the questions that are at the frontier of current research on VP-ellipsis, one crucial question is not mentioned, namely what Fiengo & May (1994) have called the eliminative puzzles, that is, the question why VP-ellipsis reduces the number of possible interpretations of sentences relative to their nonelided counterparts.

The first paper, 'Interactions of scope and ellipsis', by Shieber, Pereira & Dalrymple, which is a reprint of their article with the same title from *Linguistics and Philosophy*, examines the interaction between ellipsis resolution and scope determination utilizing Dalrymple, Shieber & Pereira's (1991) equational analysis. It demonstrates rather convincingly how the interaction between ellipsis, quantification, anaphoric dependencies and intentional operators can be given an elegant account in equational terms.

Somewhat related to Shieber, Pereira & Dalrymple's article is Crouch's essay 'Ellipsis and glue languages'. Like Shieber, Pereira & Dalrymple, Crouch is also concerned with the interaction between ellipsis and scope. He notes that the equational analysis is faced with a number of problems, especially from a computational point of view. As an alternative, he develops a semantic, 'glue' approach – so-called because of the role played by high-order linear logic in 'glueing' together object-level meanings assigned to words and constituents (see Dalrymple 1999 for an overview of the 'glue' approach). The underlying idea of this account is that ellipsis resolution can be stated and solved by making minimal changes to the derivation of the meaning of the antecedent, source expression to engender the meaning of the elliptical, target expression.

Lappin's contribution outlines 'An HPSG account of antecedent-contained ellipsis'. Antecedent-contained ellipsis (ACE) or antecedent-contained deletion (ACD) has long had a central place in the analysis of VP-ellipsis. One crucial issue in the treatment of ACE concerns the question of how to avoid the threat of indefinite regress. The classic syntactic way to tackle this problem is to analyze the quantificational NP object as undergoing QR at LF – a position that Lappin has called the extraction view. Lappin's own solution is to postulate syntactic reconstruction in situ. But I am not sure that examples such as *Dulles believed everyone that Hoover did to be a spy*, which can be interpreted only as having a broad scope reading (Fiengo & May 1994), can be captured by such an analysis.

Lobeck, in line with her earlier work, is of the view that VP-ellipsis can be treated as an empty pronominal (*pro*). Her paper 'VP ellipsis and the minimalist program: some speculations and proposals' considers how this

idea can be executed within the framework of Chomsky's Minimalist programme. There are two central claims. The first is that VP-ellipsis is licensed by checking strong Spec-head agreement features. The second is that VP-ellipsis is not derived from PF deletion, but rather is base-generated as a *pro*. This proposal is interesting in that other things being equal, a unified theory of both VP- and NP-anaphora is preferable from a metatheoretical viewpoint. However, there are several points in her analysis that are rather questionable. First, given that VP-ellipsis and *pro* are licensed by the same mechanism, why does English, for example, allow VP-ellipsis but exclude *pro*? Secondly and more importantly, VP-ellipsis in languages such as Chinese, Japanese and Korean remains unexplained, for these languages lack strong agreement features (Huang 1994, 2000).

Doron, in 'V-movement and VP-ellipsis', discusses VP-ellipsis in Hebrew. Unlike in English, VP-ellipsis in Hebrew 'strands' the verb. On the basis of a range of syntactic evidence, she concludes that VP-ellipsis in Hebrew is the outcome of the overt raising of the main V to T, leaving a null VP. From a typological perspective, of some interest here is that VP-ellipsis in Hebrew seems to behave in a fashion parallel to that in Chinese and Japanese.

Lasnik, in 'Pseudogapping puzzles', takes up the relation between pseudogapping and VP-ellipsis, particularly ACE. Following Jayaseelan, he argues that both pseudogapping and ACE involve movement of an object NP into Spec Agr_0. However, contra Lappin, he maintains that ACE cannot be wholly reduced to pseudogapping. Interestingly, this analysis is in contrast to Lobeck's position that (i) pseudogapping and VP-ellipsis are distinct, and (ii) VP-ellipsis is not derived from PF deletion.

Gapping is the topic of the next two chapters. In 'Gapping, PF merger, and patterns of partial agreement', Aoun & Benmamoun investigate partial subject-verb agreement in Standard, Lebanese and Moroccan Arabic. Of direct relevance here is so-called first conjunct agreement – the phenomenon whereby when the postverbal subject is a conjoined NP, the verb may agree with the first conjunct only. By contrast, when the subject is in preverbal position, first conjunct agreement is ruled out. This is explained by a gapping analysis. First conjunct agreement, argue Aoun & Benmamoun, has to do with a gapped biclausal coordination, while the lack of it results from the absence of backward gapping in all the three dialects of Arabic, which are head-initial.

Abe & Hoshi compare the 'Directionality of movement in ellipsis resolution in English and Japanese'. The main thrust of their argument is that gapping in both English and Japanese involve movement of a constituent out of the antecedent, source clause to a position where it can be copied onto the parallel, elliptical, target clause with the null verb. But the movement differs with respect to direction: while gapping in English, which is head-initial, undergoes rightward movement, gapping in Japanese, which is head-final, undergoes leftward movement. This analysis, if correct, has obvious

implications for syntactic theory; it contradicts Chomsky's recent view that direction and linearity play a role only in the PF but not the LF component.

The final paper, by Kempson, Meyer-Viol & Gabbay, 'VP-ellipsis: toward a dynamic, structural account', outlines a unified theory of anaphora resolution within a formal model of language understanding called Labelled Deductive System for Natural Language (LDS_{NL}). On this account, VP-ellipsis resolution, on a par with NP-anaphora interpretation, is analyzed as involving a copy/substitution process. This process assigns as value to the elliptical, target expression a context-dependent representation in a dynamic way in which interpretation is incrementally projected onto a natural language string. The level over which the process operates is not the natural language itself but rather a level of logical form language. I find this analysis particularly thought-provoking.

Generally speaking, there are two approaches to VP-ellipsis: (i) syntactically oriented, and (ii) semantically oriented. Both are well represented in this book. The syntactic approach is represented by e.g. Lappin, Lobeck, and Lasnik. By way of contrast, Shieber, Pereira & Dalrymple, Crouch, and Kempson, Meyer-Viol & Gabbay can be said to belong to the semantic camp. However, as I point out in Huang (2000), VP-ellipsis clearly involves syntactic, semantic and pragmatic factors. If this is the case, then neither a purely syntactic nor a purely semantic approach would be adequate. Just as a purely syntactic analysis would fail to accommodate semantic cases of VP-ellipsis, so too would a purely semantic analysis fail to deal with syntactic cases. For example, it is not clear how Dalrymple, Shieber & Pereira's analysis can handle the 'barrier effects' of ACE. In addition, both syntactic and semantic approaches need to be augmented by a pragmatic component to account for certain pragmatic aspects of VP-ellipsis that have been well known since the 1970s. But this is neglected by all the contributors except perhaps Kempson, Meyer-Viol & Gabbay.

Secondly, as in NP-anaphora, VP-ellipsis also involves two factors: (i) licensing, and (ii) resolution. Licensing refers to the question of how VP-ellipsis is sanctioned in a language. By contrast, resolution is concerned with the question of how the ellipsis site is interpreted. While a lot is said about the latter, with the exception of Lobeck, very little is said about the former in this volume.

Thirdly, most of the analyses being considered here seem to share a common problem, namely the problem of overgeneration. This may be a superficial manifestation of a more deeply rooted problem of parallelism determination. Parallelism is a general constraint which ensures that in VP-ellipsis, the source and target clauses are interpreted in a parallel manner. However, solutions to this problem remain to be worked out (cf. Kehler 1995).

Fourthly, one of the major weaknesses in the study of VP-ellipsis is its rather limited cross-linguistic coverage of data. Unlike in the case of analyses

of NP-anaphora, there has been a noticeable absence both in breadth and depth of analyses of VP-ellipsis in languages other than English. Although this book makes a significant improvement in this respect, I would still wish that data drawn from more languages could have been discussed. While VP-ellipsis exhibits a number of universal properties, it also displays a number of language-specific ones. For instance, *John revised his paper before the teacher did, and Bill did, too* has at least three interpretations, if not more. Its Norwegian analogue, however, lacks the across-the-board strict reading which the English original has (Huang 2000). Another case in point comes from Chinese-type languages. In this type of language, VP-ellipsis may lack the locality effect on the sloppy reading (Hoji 1998, Huang 2000). This may pose problems for any syntactic and/or semantic account which has to impose a strict locality condition on the sloppy construal of VP-ellipsis. Needless to say, a better understanding of VP-ellipsis can be attained only if its cross-linguistic empirical coverage is to be widened and deepened.

These things being considered, the collection constitutes a major contribution to the analysis of VP-ellipsis, and is indispensable for anyone interested in this important topic in theoretical linguistics.

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Marianne Mithun, *The languages of Native North America* (Cambridge Language Surveys). Cambridge: Cambridge University Press, 1999. Pp. xx + 773.

Reviewed by EDWARD J. VAJDA, Western Washington University

This important publication deserves a place among the best standard references on Native American languages, superseding in part the now somewhat outdated Campbell & Mithun (1979), and nicely complementing more recent books such as Campbell's (1997) landmark treatment of Native American diachronic linguistics historiography and the *Handbook of North American Indians*, vol. 17: *Languages* (Goddard 1996), which likewise surveys Native North American languages from a typological and genetic perspective. The information in these works concurs in all important respects, but Mithun has gathered a wealth of specific descriptive detail on synchronic language structure, typology and sociolinguistics previously unavailable in any single source. Brimming with illustrative examples from every language family of North America, many recorded by the author herself and some of the data representing fieldwork with the last known native speaker of this or that disappearing language, Mithun's book will offer much to the serious typologist as well as to anyone convinced of the urgency and intrinsic value of recording and preserving linguistic diversity.

The main body of the book is divided into two distinct sections, each of which could serve by itself as a separate monograph. Part I, entitled 'The nature of the languages' (13–294), is a wide ranging typological survey of Native North America focusing on those structural features distributed with unusual frequency across the region or which happen to be rare or otherwise noteworthy from a cross-linguistic perspective. Part II, 'Catalog of Languages' (295–605), groups the languages according to their proven genetic affiliation and supplies up-to-date sociolinguistic data on each surviving language and dialect. The contents of both sections will be discussed in more detail below. Also important are the author's introduction (1–12), which spells out the unique value of Native North America as a linguistic region; a transcription key (xiii-xv), with the development of transcription conventions discussed further on pages 20–22; and a dozen maps showing the known range of languages and languages families in various parts of the continent at about the time of contact (because contact with Europeans occurred at different times in the various regions, the maps do not reflect a temporally uniform situation). Some of the maps are adapted from Goddard (1996), while others were specifically prepared for this book. Finally, an extensive bibliography (617–750) includes every important and readily accessible publication on individual North American languages or language families, so that Mithun's survey represents an encyclopedic

overview of virtually all important synchronic work on Native American linguistics.

Part I, which surveys Native North American languages according to various structural parameters rather than from a genetic perspective, will be of the greatest interest to general typologists. The phonological features covered include: consonant and vowel inventories, syllable structure, tone, vowel harmony, sound symbolism and an overview of Native American writing systems beginning with Sequoyah's Cherokee syllabary of the early 1800s and continuing through more recent developments of the lesser known Cree and Yupik syllabaries of Northern Canada. Of special note are the rich consonant inventories observed in many North Pacific languages (Tlingit has 45 consonant phonemes, over half of which are voiceless velar or postvelar obstruents). Glottalized or labialized obstruents and lateral fricatives or affricates also turn up fairly commonly across the continent. A number of languages lack phonemic nasals (these include Quileute, Makah and Lushootseed, which belong to three separate but contiguous Pacific Northwest families). Labial (as opposed to labialized) consonants are also weakly represented in many languages of northwestern North America. Also noteworthy is the frequency with which tones have developed on the basis of laryngeal constriction or other non-melodic features in many unrelated families and the tendency for glottalization to produce low rather than high tone, the exact opposite of the pattern typically observed among the tone languages of Southeast Asia. Examples of sound symbolic expression of diminutive or augmentative meaning are also well attested among members of several different language families and a section is devoted to this topic.

The section comparing word derivation patterns across languages is particularly interesting, as Native America has long been famous for its formally and functionally diverse lexical systems. Mithun notes the prevalence of complex lexical morphology (polysynthesis) but is careful to emphasize that many Native American languages are merely synthetic, though monomorphemic words do not predominate in any of them. Yupik and Northern Iroquois examples illustrate various types of polysynthesis, incorporation and morpheme ordering patterns. Additional illustrations from Athabaskan or Tlingit would have been particularly useful here, as the templatic prefixing structures of verbs in these languages differ strikingly from the type of word formation found in Yupik and most other families. Other highlights include the difficulty of formally delimiting nouns from verbs in a number of Pacific Northwest families (among which the case of Salish is best known). Grammatical, as opposed to lexical, categories receive discussion in a separate section, with attention to such unusually prevalent features as the distinction between inclusive and exclusive first, and person, the phenomenon of 'obviation' – a formal distinction between topicalized as opposed to non-topicalized, or obviated, third person actants, the latter normally being referred to as the 'fourth person'. The rich variety of

classificatory phenomena in many Native American languages, which may receive formal expression in nouns, verbs or numerals, is also given detailed attention, as are the elaborate inventories of instrumental affixes, demonstratives, and morphemes expressing a range of particular nuances of space or direction found in some languages. Grammatical variations in the expression of tense and aspect distinctions are also briefly discussed, and examples illustrate the frequency of grammatical distinctions involving 'evidentiality' (the degree and nature of speaker assessment regarding the truth value of statements). A separate section discusses grammatical patterns on the sentence level, such as word order, and grammatical relations and case, patterns of conveying possession (with alienable vs. inalienable possession often receiving different formal expressions), methods of introducing oblique (as opposed to core) arguments into the sentence, the use of applicatives (derivational affixes which add the role of instrument, locative, etc. to verbs as core arguments), characteristic techniques of clause linkage, and switch reference – an anaphoric discourse pattern first described in 1967 for Washo, a Nevada isolate, and now known to be particularly prevalent in New Guinea, among other areas. The prevalence in the Americas of variations of the agentive/active agreement patterns (as defined in Mithun 1991) is typologically noteworthy, but examples also illustrate large numbers of Native American languages with nominative/accusative, ergative/absolutive, and direct/inverse patterns of noun/verb coordination, as well as certain combinations of these strategies. The exploitation of these and other grammatical strategies for discourse purposes, while not given a separate section, is mentioned in passing throughout the discussion. The final section of Part I, entitled 'Special language' (272–294), covers such topics as baby talk, animal talk (special phonological patterns that characterize speech addressed to animals in certain languages), abnormal speech patterns, special narrative and ceremonial styles of language, and formalized structural differences between men's and women's speech (observed in Lakhota, Koasati, Yana and a scattering of other languages from diverse families). Several examples of language games and other forms of speech play, as well as a description of the special language form called Plains Sign Talk (PST), a lingua franca whose roots seem to predate contact with Europeans, round out this part of the book. Topics that might have been added with profit here include a survey of culturally noteworthy semantic patterns of Native American lexeme creation, including observed cross-linguistic differences in attitude toward borrowing new vocabulary, and a discussion of the main sources of Native American lexical items that have found their way into the vocabularies of English and other European languages.

Part II, 'Catalog of languages', follows with an encyclopedic description of the language families attested north of Mexico. Each appears in alphabetical order and begins with an outline of family membership that includes a listing of local dialects. Each entry also contains a thorough

account of the scholarly publications and research which contributed to our current knowledge of the family. In addition, estimates of the current location and number of native speakers are provided and alternate language names are discussed. Most important, a great deal of space is devoted to providing an account of the typological distinctiveness (or at least the salient structural features) of each genetic family. Detailed, though by no means exhaustive, data on the phonology and grammar of representative languages in each family are included, along with a historiographic account of how each family came to be recognized and described. Here too, emphasis is placed on synchronic, typological factors rather than on residual disputes regarding genetic classification. Most significant from a diachronic perspective, Greenberg's (1987) tripartite genetic classification is rejected as speculative, and only non-controversial, generally recognized language families are presented as valid genetic units. Postulations of deeper genetic connections, such as Gulf, Aztec-Tanoan, Na-Dene, Hokan, Penutian, and several others, receive only brief discussion (301–310), as do patterns of borrowing and other forms of language contact (310–321). Readers interested in these aspects of Native American linguistics will find a much more detailed treatment in Campbell (1997) or Goddard (1996). But Mithun's synchronic descriptions of each family are superb and represent the best, most inclusive single source available on the topic. Also, the examples included in this half of the book complement, rather than duplicate, those provided in the earlier typological survey.

Mithun estimates that at least 300 distinct languages may have been spoken in North America on the eve of European contact. Of these, many disappeared without being adequately recorded or were not recorded at all. Of those that remained long enough to be documented in some appreciable detail, Goddard (1996: 3) lists 120 as already extinct by the mid 1990s, and 72 as spoken by only a handful of elderly speakers. Of the remaining languages, 91 are no longer being learned naturally by children, and only 46 are still currently spoken by appreciable numbers of people of all ages. To this Mithun adds precise detail as to the exact number of speakers still extant, though unfortunately even her numbers are now probably a bit optimistic in some cases. This ongoing, catastrophic loss of so much of the continent's linguistic diversity makes Mithun's book all the more important as a record of what is being lost and as a possible inspiration to today's linguists to take up the synchronic description of the remaining languages. In this sense, the descriptive work already completed, so wonderfully represented in the present book, will only grow in importance with every passing year. One wonders whether the vast amount of effort spent during the past forty years in subjecting familiar European languages to a parade of trendy theoretical interpretations might have been applied with greater profit to the profession of linguistics if more attention had been placed on describing the disappearing languages of the world. Given the world's present sociolinguistic situation, it

is hardly possible to overestimate the value of the contributions to linguistics made by Mithun and her numerous Native Americanist colleagues.

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Suzanne Romaine (ed.), *The Cambridge history of the English language*, vol. IV: *1776–1997*. Cambridge: Cambridge University Press, 1998. Pp. xx + 783.

Reviewed by RICHARD W. BAILEY, The University of Michigan

Recent English – that is, the language since about 1700 – has been famously described by Charles Jones as a 'Cinderella' in her pre-princess days, sitting neglected in the chimney corner (1989: 279). With this volume, Cinderella has brushed off the ashes and soot and presents herself to us as a dazzler. Feeling (or feigning) surprise that English since 1776 has any interesting history whatsoever is a theme running through this massive book.

Even the editor of the volume, Suzanne Romaine, is reluctant to present dowdy Cinderella in her full glory, writing in the very first sentence of her introduction that 'the final decades of the eighteenth century' were a dull time. Radical changes in grammar 'had already taken place', changes in morphology 'are insignificant by comparison with those of previous periods', 'the phonology of English underwent nothing like the series of changes called the Great Vowel Shift' (1). The same sentiment is expressed by David Denison at the beginning of his chapter on syntax: 'By 1776 the English language had already undergone most of the syntactic changes which differentiate Present-Day English ... from Old English' (92). He then launches into more than 200 densely packed pages devoted to some of the residue. Michael K. C. MacMahon begins with these words: 'Superficially, the period under consideration might appear to contain little of phonetic and phonological interest' (373). His chapter then goes on with 162 pages to show that this superficial view is false.

The seven authors who treat this material can't quite believe their eyes. Older histories of English, of course, were designed to display the antiquity of the British people and the excellence of their tongue; those books were part of a national enterprise to show that the language was worthy and could be contemplated, however modestly, in comparison to Greek and Latin. Nationalism and the imperial theme are now embarrassments, and diffidence is – as it is here – the usual rhetorical stance.

Thus, at the end of her introduction, Romaine devotes two pages to a section titled: 'Conclusion: a remarkable success story?' (54–56). In employing that question mark, she directs readers to the distant future. English may not be forever; it may face stiff competition from other languages, even in its homelands; it may be affected by the insecure and the bigoted. Yet what a transformation over the period encompassed by this volume, which, after all, begins in an era when David Hume and Edward Gibbon could discuss the future of English without being able to come to a confident conclusion that it had one.

Planning for the six volumes contemplated for the *Cambridge history* was consolidated in 1985, and one volume has yet to appear. It is remarkable that the plan approaches completion with so little change from the original design, and both Cambridge University Press and Richard M. Hogg, the general editor, are to be congratulated for their perseverance. It seems that there were few limits put on the ambition of the contributors or any attempt to curtail their desire to multiply examples. (For instance, how many examples are necessary to illustrate words that show no variability and no change in their stress patterning since 1764? The answer is nearly 35 and the number of sources testifying that there is no change is 25 (494–495).) The result of all this prolixity is a sprawling book, but it is a volume of enormous value.

Vocabulary is usefully discussed by John Algeo who, more than most of the authors, reviews the scholarship that underpins his observations. His taxonomy of word forms is especially useful and reflects a career-long interest in this kind of inquiry. His list of six major types (59–60) can be turned to immediate classroom application, particularly if amplified by his categories of semantic and pragmatic shifts (69–71). Conventional and popular wisdom are also usefully revised: borrowing 'has recently become less important' (76; recent lists of 'new words' show that only about 6% of the innovations are loanwords); 'Words that are coinages *ex nihilo* are extremely rare if they exist at all' (66). Grammatical shift as a source of innovation is probably as common in the UK as in the USA (if not more so), the observation of the Prince of Wales about the American vice of making verbs out of nouns notwithstanding (68).

In common with other contributors, Algeo declares that the *Oxford English dictionary* is 'chiefly literary' (61), and Romaine leads readers to think that it mainly illuminates 'Common Words of literature and

conversation' (29). Edward Finegan further affirms this idea of 'citations of literary usage' (563) as the central accomplishment of the editors of the *OED*. All three are misled by what James Murray presented in his famous diagram showing 'common words' surrounded by rays leading to the labels 'scientific', 'foreign', 'dialectal', 'slang', 'technical', and so on. Murray devised this diagram to reassure those who feared that his dictionary was too inclusive. His critics (and their admirers in this volume) fail to notice that the *OED* was as inclusive as he could make it. A reader is hard pressed to locate scientific and technical terms current in Murray's day that are NOT treated (see Curzan 2000). A century ago, Murray was trying to stave off critics who thought his dictionary was not literary enough and he accidentally led people who ought to know better to believe that it was too literary. Looking at nearly any page of the *OED* discovers an abundance of words that are not and have never been literary or conversational – thousands of names for minerals, for instance.

A similarly surprising conclusion about dictionaries is found in Finegan's celebration of Samuel Johnson's 'noteworthy commitment to the centrality of usage in ascertaining and codifying the language' (556). Of course Johnson did include quoted 'authorities' in his entries, but he had no hesitation in dropping words found in Nathan Bailey's larger and earlier dictionary, however well supported they were by usage, and he was famous for attacking the very authors he quoted. So, for instance, he describes as 'low' the word *clever* even though Addison and Pope had used it respectably, and he is similarly scornful of *voyage* 'attempt' even though Shakespeare had employed it. *Talent* 'quality' is, he says, 'an improper and mistaken use' despite the quotation from Swift that illustrates it. Similarly, Robert Lowth in 1762 celebrated as 'great authorities' these and other names, but he and his fellow grammarians then proceeded to lambaste those very same writers for their mistakes. As Sundby has shown in his comprehensive study of eighteenth-century grammarians, the very worst writers when it came to particulars were the very ones celebrated in general as 'authorities' (Sundby et al. 1991: 35). The big bugbear of usage was Jonathan Swift with 224 quotations in these grammars of flawed usage, and right behind him was the authorized version of the New Testament (with 221 'errors' cited).

In his useful summary of naming practices, Richard Coates has an abundance of examples, but he too is influenced by the idea of what should be true. So he describes as 'striking' the supposed tendency of American place names to be derived from 'incident-names' (364). As an instance, he offers *Massacre Rocks* (ID), a place surely akin to *Battle Abbey*, a name in southern England that provides an obvious counter-example to his claim that English namers never create 'incident-names for fields' (365). Onomastics struggles toward generalizations and seldom rises above the collection of data, but it might have been useful to look to fictional names for tendencies that illuminate real world ones – for instance, *Cold Comfort Farm*,

Hogwarts School or *Hyacinth Buckett*. It is certainly not the case that for American personal names 'the only constraint on their form appears to be the phonology of the possible English word' (348). One would be hard pressed to find an American whose given name is also a preposition.

In many respects, this volume would have profited from careful criticism just before going to press. On page 49, for instance, Romaine reports that in 1786 Sir William Jones gave an influential talk to the Philological Society and that his remarks provided a 'firm basis for the comparative-historical study of language'; on page 558, Finegan writes that Jones spoke to the Asiatic Society of Bengal and that his remark was 'virtually ignored' in Britain. It would take no uncommon alertness to detect this inconsistency. Copyediting might have fixed such typographical errors as *tragtag* for *ragtag* (75); comparison of quotations with their sources might well have kept us from the laughable gaffe of 'Ha,Ha' for *ha-ha* 'sunken fence' in a quotation from Jane Austen (652). A willingness to admit ignorance would have drawn attention to the glossary entry for SYSTEMIC, which is gibberish. It is unreasonable to presume that so huge and complicated a volume would be free of error, but this one might easily have been made better by the attention of scholarly readers and alert copyeditors.

Some of these mistakes are not harmless. For instance, Romaine writes that Samuel 'Johnson did not visit America and his negative attitudes towards it and the English used there are well known' (26). The first two of these claims are true. Johnson did not visit America, and he came to regard the American 'patriots' as disloyal revolutionaries unwilling to pay their taxes. But what were Johnson's views of American English? Romaine cites Allen Walker Read (though at second-hand and through a notoriously unreliable intermediary) but does not report that the anonymous review is not certainly by Johnson and that the quoted remark states merely that 'some mixture of the *American* dialect' creeps in as is to be expected with 'every language widely diffused' (Read 1933: 317; Anon. 1756: 294). No offending examples of English are mentioned, and the tone of the review is cordially favorable to the book and to Americans – though the review was written, of course, twenty years before the minutemen began shooting at redcoats.

In the 1750s, Johnson was cordial to Americans. In his dictionary, he quoted Charlotte Lennox, an American, and he was on friendly terms with such luminaries of the revolution as Benjamin Franklin and Arthur Lee. Most eighteenth-century English writers marveled at the purity and uniformity of American English (insofar as they thought about it). Only in the nineteenth century did vituperation over linguistic nuance begin to be normative in Britain. Samuel Johnson certainly came to despise Americans, but there is no certain information (known to me) that he paid critical attention to our English. He himself 'never got entirely free of those provincial accents' of Litchfield, and Garrick would mock him by

pronouncing *punch* as *poonsh* (Boswell 1949, vol. 1: 628–629). Allen Walker Read is certainly correct in reporting: 'America was far enough away for many Englishmen to have no notion of the traits of American speech' (314). It does no good to lead people to believe that Samuel Johnson and, say, John Honey are cut from the same cloth.

Three chapters elevate the history of modern English to the very highest level.

MacMahon provides a richly detailed account of phonology, dwelling mainly on vowels and consonants individually treated but also describing stress patterns in polysyllables and resurrecting (from the very scant record) information about intonation and rhythm (517–519). Once again, the details of book production fall short of the ideal – for instance, a complete chart of IPA symbols appears unpaged between pages 421 and 424 but there is no hint of what it is in the text, nor any explanation of its purport.

Circulation of this chapter in manuscript to informed readers might have helped to improve the presentation. For instance, glottal plosives (in, for instance, *butter*, *water*) are described as noticed 'from the late nineteenth century onwards' (486), though Andréson's long-available and excellent monograph shows that Alexander Melville Bell had recognized this feature as early as 1860 and other observers soon commented upon it. Unfortunately, too, MacMahon embraces the long discredited notion of a 'GenAm.' dialect, but since he has written a history of the prestige dialect of London (with occasional American asides based mainly on observations by Noah Webster, W. D. Whitney, and C. H. Grandgent) this fiction does no great harm. Major changes that differentiate British and American varieties – for instance, the vowel of *laugh*, *grass*, *command* – might have been greatly illuminated but that opportunity is lost (see 436–438). The distribution of the AmE vowels in *cot/caught*, *hock/hawk*, *don/dawn* is not described – except, opaquely, as co-variability (438) – at all (see *Phonological atlas*).

Concentrating on missed opportunities or lapses of detail would, however, be wrong. MacMahon's huge chapter is rich in unfamiliar information. For instance, he has given careful scrutiny to unpublished letters written by Henry Sweet to Johan Storm (archived in the University Library in Oslo), and in them Sweet was far more candid about his own pronunciation and that of others than in his published phonetic writings. Many directions for further inquiry are opened (some of them clearly described in his conclusion, 520–522), and it is of particular interest that he admits that the study of 'the other "educated", but non-RP, accents' (521) in modern Britain has been neglected. This situation, he confesses, 'compares unfavourably with the position taken by nineteenth-century phoneticians such as Ellis and Sweet, and by twentieth-century phoneticians in the USA' (521). He opens the way to remedy it.

For a book edited by an American, this volume contains a surprising variety of nonsense about American English. Denison, for instance, draws

attention to 'recent Midwest American *frypan*' (129), though the word is not recent (first used in America by Thoreau in 1857), Midwest (according to the *Dictionary of American Regional English* it appears nearly everywhere except the Midwest), nor American (if the first quotation from the *OED* [1832] is to be trusted). (A little snooping in the databases turns up citations in *The Daily Telegraph* [1993, 1995] and *The Daily Mail* [1995] but not in *The Chicago Tribune*.) Elsewhere he writes about the 'AmerE indefinite adverbs of place' and then notes that they first appear 'in BrE and Irish dialects' (233). If so, how are they 'American,' except in the journalistic sense of *Americanism* (which, in Britain, is often applied to any usage the writer finds distasteful)? Both the usages in question – *someplace* and *anyplace* – appear in the British National Corpus, so they seem not to be American in origin or present-day distribution. (*Someplace* appears just once in both the LOB and Brown corpora.)

On the whole, Denison's chapter is excellent, covering in part ground he had treated in his 1993 book but with additions and expansions. To provide empirical support for this work, he created the Corpus of Late Modern English Prose, a collection of letters written between 1861 and 1919 by British authors. This he has made available for general use. Given the minute particulars treated here, it is surprising that he does not discuss double modals:

'We'll can agree fine' (Stevenson, *Kidnapped*; *Scottish National Dictionary*, s. v. *can*)
'Did you, when you used to could, work?' (Leicestershire, *English Dialect Dictionary*, s. v. *can*)
'You might ought to go' (*Dictionary of American Regional English*, s. v. *might*)

His excellent account of the modal system (164–180) would be made more profound by analysis of such sentences as these. It would also have been useful for him to have considered tag questions as part of his illuminating discussion of the verbal group, perhaps leading foreigners to discern the grammatical origin of the title of the 1999 British comedy, 'Don't Look at my Sister … Innit!' (the language of which was described by *The Scotsman* [August 17, 1999] as 'a wild mixture of American, Cockney and Urdu' – a variety that will perhaps become salient the next time Cambridge undertakes a history of the language).

Denison gives particularly detailed attention to the 'progressive passive': 'while this chapter *was being written*' (150–58). Sentences like these seem entirely normal nowadays but were the targets of puristic wrath in the nineteenth century. He pursues the attractive hypothesis that sentences like these were promoted by the poets Robert Southey and Samuel Taylor Coleridge, and that they were diffused through their social networks. Here the careful reading of literary texts by volunteers for the *OED* leads to bias;

famous writers were better read for the dictionary. More reading yields examples that support the view that examples from the Southey/Coleridge crowd are 'a mere accident of sampling and of the subsequent status of the writers' (154). Two such were discovered by Denison in a collection of letters from the 1770s (152), and it is possible to find others that predate the Southey/Coleridge conspiracy:

> 'I intend to be handed down to posterity, and while you are being lampooned in ballads and newspapers, I mean to cut a figure in the history of England' (Frederick Reynolds, *The Dramatist* (1793), p. 37; Chadwyck-Healey English Prose Drama Database)

The collapse of this evidence for his social-network hypothesis is, of course, just the sort of result that emerges from very careful and thorough scholarship of the sort found throughout Denison's chapter.

Sylvia Adamson's essay on literary language is a refreshing restorative to those who imagined that the study of English language and literature had been entirely rent asunder. (Pessimism on this divide is supported by the fact that the editor thought that 'code-switching' did not require a glossary entry but that 'iambic pentameter' did.) Adamson's thesis is that there were two literary-linguistic revolutions since 1776: the Romantic and the Modernist. Each had a foundation in the kind of language selected for literary expression, and she writes persuasively of what was shucked off (as dowdy and outworn) and what was put on as the splendid apparel of truth and beauty. (In so doing, Adamson adopts a specifically modernist perspective – the view that poetic innovation makes familiar language unusual and the ordinary strange [see O'Toole & Shukman 1977: 35–36].)

Perhaps Adamson exaggerates when she writes that 'with very few exceptions, modern writers command a Standard variety of the language' (600). The much vilified writers of the 'Cockney' school – principally Keats – were criticized for rhyming *crosses* and *horses*, for instance, and Tony Harrison (1995: 34) in his vituperative poem about RP declares that Wordsworth rhymed *water* with *matter*. Rebellion against the standard, as Adamson points out, is a theme of some contemporary poetry:

> I dont need no axe
> to split/ up yu syntax
> I dont need no hammer
> to mash/ up yu grammar (Agard, 44)

Fortunately these very themes, so illuminatingly laid out by Adamson, have been treated in several recent books that add complexity and interest to the details of linguistic history. (See, for instance, Chamberlain 1993, Blank 1996, Jones 1999.) She shows, triumphantly, that the language historians have something to offer to their literary colleagues – and vice versa.

This volume is not, as I have pointed out, faultless. But it is abundant and often brilliant. The period of history it treats can never again be left to sit in a gloomy inglenook.

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Reviewed by PHILIP BALDI, Penn State University

The idea that some of the traditionally recognized language families of Europe, Asia and North Africa might be genetically related has been around at least since the 1800s, when Franz Bopp suggested a possible link between Indo-European and Kartvelian. Various connections were proposed by different scholars throughout the nineteenth and early twentieth centuries,

but the notion of distant genetic connections among language families, especially those involving Indo-European, got its real start in 1903, when the eminent Indo-Europeanist Holger Pedersen proposed the term Nostratic (< Lat. *nostrās* 'our countryman') as a designation for language families he claimed were related to Indo-European. In his still-to-be-recommended *Linguistic science in the nineteenth century* (1931/1962: esp. 335–339), Pedersen discusses various attempts to link Indo-European with other language families such as Semitic (= Afroasiatic), Altaic, Eskimo, Yukaghir, and Finno-Ugric and Samoyed (= Uralic). He was most emphatic about the close relationship of Indo-European with Uralic in their relatively recent histories and ascribes the relationship of Indo-European to Afroasiatic to a much earlier period. More distant relations are proposed for Yukaghir, Altaic and Eskimo. Pedersen does not include Dravidian, Kartvelian, Japanese, Korean or Ainu, which find their way into various later Nostratic membership lists.

Until fairly recently, most western linguists were largely ignorant of Nostratic and other efforts at Eurasian macrogrouping. Apart from serious work on the Uralic/Indo-European connection by Collinder and the Afroasiatic connection by Cuny, the issue of the wider relations of the major language families of Eurasia was left largely unattended until the 1960s, when Vladislav Illič-Svityč (d. 1966) took up the Nostratic issue and began to compile materials from the languages he was to consider as members of the Nostratic family. He was eventually joined in the effort by Aaron Dolgopolsky who, with Vladimir Dybo and some others, have continued and enhanced Illič-Svityč's efforts by refining and supplementing Illič-Svityč's materials for a comparative dictionary of the Nostratic languages, which is still in progress.

Since the 1970s a small but serious-minded group of scholars has aggressively pursued research on the Nostratic question. Some of them work in the so-called 'Moscow school' (e.g. Dolgopolsky, Dybo, Bulatova, Shevoroshkin, Starostin), while other, western, scholars, employing often different methodologies and counting different sets of language families as Nostratic, follow different schools of thought (Greenberg, Bomhard, Manaster-Ramer). By the time the conference on which the current volume is based was organized in 1993, Nostratic was assuming a place at the table of many western historical linguists. Some of the credit for this development must go to Raimo Anttila, who gives a careful and largely favorable review of Nostratic and the associated methodology of long-range genetic proposals in his influential textbook (1972/1989), including a list of phonological correspondences. One must also acknowledge the tireless efforts of Allan Bomhard, who published his first book on Nostratic in 1984, which he has followed with two others (Bomhard & Kerns 1994, Bomhard 1996). In the 1980s there was a good deal of activity on the Nostratic question in western venues. Of particular note here is work by M. Kaiser, V. Shevoroshkin and

T. Markey, including some translations of Russian Nostratic work, which not only brought the Nostratic question to the attention of western linguists but also discussed internal variations in the theory and provided an airing of the methodological assumptions of Nostraticists generally. Recently, Greenberg has forcefully highlighted the Nostratic question by becoming involved in the issue himself, lending his *auctoritas* to the matter while extending his mass comparison methodology (cf. Greenberg 1987) to Nostratic and Eurasiatic.

The current volume grows out of the Second Workshop on Comparative Linguistics, held in 1993 at Eastern Michigan University. The book is divided into three main sections: section I, 'The nature and status of Nostratic', contains contributions by E. Hamp, A. Bomhard, J. Greenberg, A. Manaster-Ramer (with P. Michalove, K. Baertsch & K. Adams), B. Vine and L. Campbell, section II, 'The mathematics of Nostratic', contains contributions by D. Ringe, R. Oswalt and W. Baxter. And finally section III, 'Relationships within Nostratic', has three papers, by C. Hodge, A. Vovin and B. Comrie. Not all those who presented papers at the conference chose to publish their contribution and there are several contributions by scholars who did not attend the conference. There is a subject index, as well as an index of names and languages. There is also an editors' introduction, which contains an outline of the main issues in the Nostratic debate (method being the central one), as well as the program for the conference.

In 'Some draft principles for classification', first composed for a different occasion, E. Hamp makes a series of characteristically no-nonsense proposals for strictness of methodology, respect for data, and total accountability in proposals for establishing filiation. Though densely written and sparsely illustrated, Hamp's cautionary words merit careful scrutiny.

A. Bomhard, in 'Nostratic, Eurasiatic and Indo-European', concisely summarizes his views on the methods, history and results of Nostratic scholarship and compares his results with those of other scholars working in the area, especially the Moscow linguists and Greenberg. One noteworthy aspect of Bomhard's approach is his attempt to navigate between the extremes of Greenberg's mass comparison technique and the strict traditional comparative method, which Greenberg rejects (1987), but which the Moscow school follows, or professes to follow. While sympathetic to mass comparison, Bomhard in fact is quite traditional in his postulation of sound correspondences and reconstructions, though his results are considerably different from those of the Moscow school, of whom he is mildly critical.[1] More detailed accounts of Bomhard's position can be found in Bomhard &

[1] Bomhard should be commended for his restraint, especially in light of the occasionally harsh remarks leveled at him and other western linguists. See, for example, Markey & Shevoroshkin (1986) and Kaiser & Shevoroshkin (1987). Some of the harshest words are served up in Shevoroshkin (1989), along with an unpalatable helping of ethnocentric self-

Kerns (1994) and Bomhard (1996), the latter of which provides much of the background for the present contribution. Bomhard's Nostratic is presented in figure 1.[2]

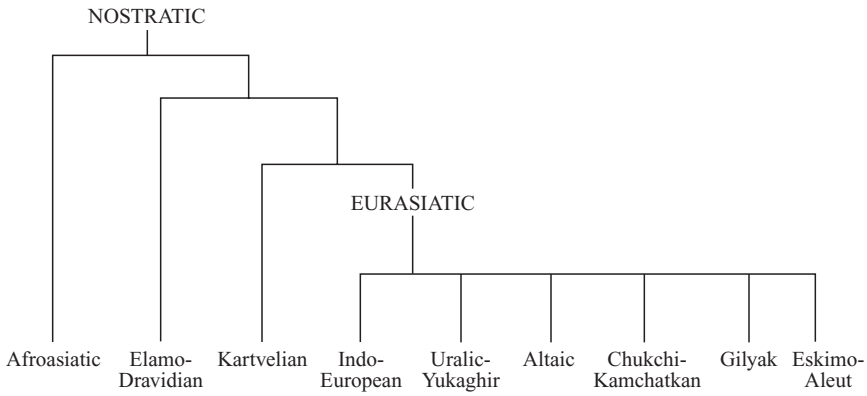

Figure 1

Bomhard attempts to accommodate the (for him) four Proto-Indo-European (PIE) laryngeals into his reconstructions, though in fact only Afroasiatic has phonemes equivalent to the Indo-European (IE) laryngeals and the Afroasiatic languages are admitted by Bomhard to be very distantly related to the IE languages. He also adopts Gamkrelidze & Ivanov's (e.g. 1995) glottalic hypothesis for Proto-Indo-European, which allows him to motivate certain Nostratic root-structure patternings and which correlates with some aspects of Kartvelian phonology. Unfortunately for Bomhard's purposes, the glottalic theory of Gamkrelidze & Ivanov is now almost universally rejected as a viable model for PIE (arguments summarized in Baldi 1999). A few technical problems arise in Bomhard's appendixes. Appendix 1 contains Sumerian as a Nostratic member, even though Sumerian is not proposed as part of the Nostratic family tree, nor is it discussed anywhere in the text. Note 7 on page 41 adds a misplaced note on Etruscan personal pronouns and Etruscan deictic markers are brought up in note 4 on page 43, even though Etruscan does not figure anywhere in the text. These intrusions appear to have been transported from the text underlying Bomhard (1996), where the relevant material is discussed in detail.

In 'The convergence of Eurasiatic and Nostratic', J. Greenberg attempts to relate his Eurasiatic family, comprising Indo-European, Uralic-Yukaghir, Altaic (Turkic, Mongolian, Tungusic), Korean, Japanese, Ainu, Gilyak,

congratulation. Campbell (this volume, esp. pages 143–145) is less restrained in rebutting attacks, some of them near slanderous, by Shevoroshkin.

[2] An updated version of Bomhard's tree, which includes Sumerian, albeit with a ?, can be found in Bomhard (1996: 22).

Chukotian and Eskaleut, with various Nostratic proposals, in particular those of Bomhard, Illič-Svityč, and Dolgopolsky. He devotes considerable space to a defense of his methodological cornerstone, mass comparison, but concludes, with Bomhard, that traditional methodologies and mass comparison are complementary, not opposing approaches. Greenberg does not go so far as to endorse reconstruction as the ultimate test of filiation, however. Greenberg's paper is a welcome programmatic introduction to his thinking on Nostratic and Eurasiatic. His long-awaited synthesis (*Indo-European and its closest relatives: the Eurasiatic language family,* Stanford) will no doubt lay the issues out in empirical detail.

Of the remaining nine papers, three stand out for special mention, viz. those by Manaster-Ramer et al., Vine and Campbell. Before turning to these, let me make a few summary remarks about the other six. The section on 'The mathematics of Nostratic' contains papers by Ringe, Oswalt and Baxter. In 'Probabilistic evidence for Indo-Uralic', Ringe applies statistical methods to confirm, or refute, the Indo-Uralic hypothesis. It is worth noting that even among non-Nostraticists, the Indo-Uralic connection is the one held to be most likely to be correct. Ringe's tests fail to establish Indo-Uralic with anything close to certainty. Given the strength of Indo-Uralic as against other Nostratic connections, Ringe is well-convinced by this failure that the rest of Nostratic will turn out to be undemonstrable. He concludes (187–188) with a withering attack on Nostraticists and their methods.

In 'A probabilistic evaluation of North Eurasiatic Nostratic', Oswalt illustrates his model by working through word-lists of some established Nostratic languages in an attempt to control quantitatively the data and the criteria for similarity. The presentation is quite readable even for the mathematically challenged, and the results, showing among other things an affinity among traditional branches of Altaic (Turkic, Mongolian and Tungus-Manchu), and good evidence for linking Japanese and Korean, are stimulating. Nonetheless, Oswalt remains skeptical about Nostratic as a macrofamily. In his 'Response to Oswalt and Ringe', Baxter, who is sympathetic to the Nostratic enterprise generally, seriously criticizes the methods and the negative results arrived at by Ringe and Oswalt. His conclusion (see further Baxter & Manaster-Ramer 1996): Oswalt and Ringe's probabilistic tests of the Nostratic issue have proven nothing. Indeed, they reflect 'a basic misunderstanding of hypothesis testing, which should be laid to rest promptly' (220).

Section III contains articles by Hodge and Vovin and a summary article by Comrie. In 'The implications of Lislakh for Nostratic', Hodge pursues his program to establish 'Lislakh'[3] as the single phylum which includes two

[3] According to Hodge (237) 'Lislakh' is coined from the Afroasiatic root **lis-* 'army' (cf. Aramaic *lisân*) and Sturtevant's Indo-Hittite root **lakw-* 'people, army', as in Greek *lâos* 'people'.

established linguistic families, namely Afroasiatic and Indo-European. The article is dense with phonological and morphological data, a comparison of which leads the author to the conclusion that Indo-European and Afroasiatic are direct descendants of a common ancestor, Proto-Lislakh. He demurs, however, on the implications of this conclusion for Nostratic (cf. the title), pointing out only a few methodological axioms that must be followed if the establishment of long-distance connections among purported Nostratic languages is to be achieved. To my mind, the Lislakh construct has little chance of being right. While all proponents of Nostratic agree on Indo-European as one of its members, many are skeptical about the inclusion of Afroasiatic. Even Pedersen put Afroasiatic in a more distant relation to Indo-European than other groups and Illič-Svityč considered the evidence for the relationship to be weak. Hodge's correspondences are not obvious and the possibility of *Wanderwörter* looms large. In 'Nostratic and Altaic', Vovin provides an extremely careful evaluation of aspects of the Nostratic hypothesis, primarily through a review of Illič-Svityč's original materials and a comparison of Indo-European, Uralic and Altaic[4] roots. The comparisons are cautious and conservative, with lexical parallels acknowledged among the families being compared only if there are regular sound correspondences to back them up. His tentative conclusion: Altaic is likely to be related to Indo-European and Uralic. Vovin does not, however, go so far as to classify Altaic as 'Nostratic', primarily because of a lack of firm phonological correspondences which guarantee a fit in the pronominal systems of Altaic, Indo-European and Uralic. In a thoughtful summary 'Regular sound correspondences and long-distance genetic comparison', Comrie takes up the issue of sound correspondences as a criterion for establishing filiation. He does this by assessing Vovin's conclusions, and by applying Vovin's criterion of strict phonological correspondence to the pronouns of Old and Modern English. He shows that at least four of the pronouns of Modern English cannot be derived from their known Old English ancestors by regular phonological rule. The conclusion: don't rush to judgment just because the phonological correspondences don't line up regularly. The forms still might be related. For Comrie, long-distance proposals like the Altaic-Indo-European-Uralic hypothesis suggest agnosticism as the safest position.

The remaining three papers, by Manaster-Ramer et al., Vine and Campbell, represent, each in its own way, the best of what current historical linguistics has to offer: philological depth, methodological and theoretical sophistication, and historical sensitivity. Each could be required reading for advanced courses in historical linguistics.

[4] A difficulty, of course, is that Altaic itself is not fully accepted as a linguistic family. See for example Unger (1990).

Manaster-Ramer et al. provide a genuinely objective assessment of the Nostratic hypothesis in their 'Exploring the Nostratic hypothesis'. Scholarly and historically accurate, Manaster-Ramer et al. assess the Nostratic hypothesis from a historical, primarily methodological point of view. They point out that many of the perceived flaws in Nostratic methods which are decried by traditional scholars are in fact not uncommon in standard work on linguistic filiation. While avoiding a polemical tone, Manaster-Ramer et al. are not bashful about pointing out circularity and downright stubbornness on the part especially of Indo-European scholars in dismissing the Nostratic hypothesis. The article touches a wide range of issues germane to genetic studies in general – standard methodologies, including a critique of Illič-Svityč's work and that of his successors; newer methodologies, including a rejection of Ringe's mathematical formulations; the data on which Nostratic etyma are identified; micro-Indo-European, Kartvelian and Altaic philology; and sober assessments of the entire foundations of the Nostratic enterprise. One lasting feature of this paper is the demonstration via several deep etymologies (particularly 'flesh', 'five' and 'dog, wolf') that detailed research can shed light on various long-standing issues in the study of the different families which make up Nostratic, either refining the hypothesis, or contributing to understanding in the individual families. The authors' overall recommendation on the Nostratic question is not whether Nostratic should be accepted or rejected, but that serious investigation should continue. 'Working to remedy the individual faults in Illič-Svityč's system has proven to be a much more profitable approach than abandoning the entire enterprise because of isolated failings and inconsistencies' (78). Specific details of this paper will be discussed in connection with Vine's contribution, immediately below.

In 'Indo-European and Nostratic: some further comments (a response to "Exploring the Nostratic hypothesis")', Vine lends his balanced, philologically sensitive Indo-Europeanist view to the Nostratic issue in a critical commentary on Manaster-Ramer et al. Vine concedes, at least partially, certain points that he had previously rejected, in particular those concerning the membership of the Nostratic family (consenting that questions about the composition of Nostratic do not invalidate the theory); the number of etymologies needed for a case to be convincing (Vine allows that language families have been proposed with far fewer sets of confirmed cognates, though he notes the need for supporting morphological material in these cases); and the rate of linguistic change and the time-depth of the comparative method. (It is a commonplace argument among opponents of Nostratic to argue that the limit of the traditional comparative method is about 5000–6000 years, a figure which happens to coincide rather snugly with traditional dating for PIE.) Vine is cautious on this subject, withholding judgment until a more thorough investigation of Nostratic personal pronouns is done and compared with broader typological studies; and

finally, borrowing, which Vine agrees must be studied more carefully. Vine then proceeds to a detailed examination of two purported Nostratic roots discussed by Manaster-Ramer et al., namely **Homsa* 'flesh' (Illič-Svityč's reconstruction); and **p'ayngV/*p'ayngo* 'five'. Vine approaches the issue by subjecting the Indo-European reflexes of these two roots to intense structural and semantic scrutiny. In the case of **Homsa*, Vine assesses Manaster-Ramer et al.'s claim that their revisions to Illič-Svityč's original reconstructions have strengthened Nostratic theory. Through wide-ranging analysis on the Indo-European side, Vine argues that in fact Manaster-Ramer et al. have failed to satisfy the methodological and philological demands imposed on them by the Indo-European data on this root. In the case of 'five', Manaster-Ramer et al. point out that Indo-Europeanists have long toyed with the idea that 'five' is related to 'hand', in particular some way of holding the hand. They try to show that the material provided by the Nostratic languages reveals a solution to the Indo-European etymology since various other Nostratic languages, in particular Uralic (Proto-Uralic **pinGV*), correlate the 'five' word with the meanings 'hand, finger' in ways that suggest that the original meaning of PIE **penkwe* had to do with some way of holding the hand which almost certainly involved holding the five fingers together. Here Vine unleashes an arsenal of Indo-European data which he claims show that there is a lack of fit between the form and meanings of PIE **penkwe* and Proto-Nostratic **p'ayngV/*p'ayngo*.

Vine's arguments are powerful and thought-provoking, though in my opinion not devastating, especially on the semantic side. There is still room to accept at least part of Manaster-Ramer et al.'s arguments on either of these roots, but especially 'five'. Vine ends on a cautiously supportive note: 'While I have not found the requisite precision and depth in the particular analyses AMR et al. propose, I am not thereby deterred from looking forward to more satisfying attempts' (103).

The centerpiece of the collection is surely L. Campbell's 'Nostratic: a personal assessment'. Campbell is of course well-known in historical linguistics circles as a high-profile Americanist, Uralicist and general specialist in diachronic studies, especially those concerning methodological issues. Campbell achieved a special prominence in diachronic linguistics in the late 1980s when, together with Ives Goddard, he led a protracted attack on Greenberg's mass comparison methodology (e.g. Greenberg 1987) and the results it yielded in Greenberg's still controversial classification of the languages of the Americas (see Campbell 1988). In the current contribution Campbell establishes himself as a 'linguist's linguist', i.e. a linguist who can approach data from a variety of languages and objectively apply established principles to achieve replicable results.

Campbell's goal is twofold: first, to evaluate the Nostratic thesis, primarily from a methodological point of view, focusing on Uralic materials; and secondly, to address certain criticisms of Americanist methodology con-

cerning distant genetic relations which have surfaced in Nostratic writings. Campbell begins with a mild scolding of members of the Moscow school for their reverential faith in Illič-Svityč's original work ('the Slava cult'). Though he notes the wide-ranging number of proposals for membership in the Nostratic family and the many empirical and methodological issues raised by the 'shape-shifting' of Nostratic, in the end he concentrates his assessment on Illič-Svityč's original Nostratic configuration and evaluates the status of Uralic (which – it should be recalled – is a cornerstone of EVERY Nostratic membership list). Although he touches on virtually every issue central to the Nostratic thesis, Campbell's great contribution is to assess the methodology on which standard Nostratic is based. How many cognate sets? How many members in each? What about areal considerations? How to recognize onomatopoetic forms? What about inexact sound correspondences ('Illič-Svityč's sound correspondences are not consistent with standard procedures of the comparative method' (116))? How to cope with semantically inexact comparanda (a point also raised by Vine)? How about diffused lexical items (*Wanderwörter*)? What about the problem of having multiple cognate sets for a single etymon (a feature of much long-distance work)?

Working through these questions, Campbell delves deeply into a maze of data proposed by Dolgopolsky and Kaiser & Shevoroshkin as they refined Illič-Svityč's originals, concentrating on the strongest sets. His goal here is to evaluate the etymological sets in terms of the Uralic data. The discussion is dense and detailed. Campbell's conclusion: 'I find serious problems with the methods utilized and with the data in a large number of the sets presented … I doubt that further research will come up with significantly greater support for the overall hypothesis' (142).

Campbell shows a depth and a sophistication in his assessment of the Nostratic issue that is a model of scholarly research. His unprejudiced eye and balanced methodological presentation provide a stinging repudiation of the Nostratic hypothesis and one which will, if taken seriously, gravely damage the efforts of supporters of the theory.

In my view, the prospects for Nostratic are not bright. For one thing, Nostratic has lost one of its most sophisticated and objective researchers now that Alexis Manaster-Ramer has left the field of linguistics. The Moscow school linguists will continue to speak mainly to each other, ignoring North American and European critics of their theory and method and accusing them of ignorance and bias. Bomhard will continue to work in relative isolation, ignored by the mainstream American and European linguists and marginalized by the Moscow group. Greenberg's Nostratic/Eurasiatic proposals will face strong resistance a priori because they are formulated in terms of mass-comparison methodology. Traditional Indo-Europeanists, who, like it or not, dominate historical studies, will continue to reject Nostratic, even if they haven't given it a fair chance. Last, but not least, high-

quality texts and treatises of historical linguists, most recently Hock & Joseph (1996), Lass (1997) and Campbell (1999), will present the Nostratic theory and other long-distance proposals in a harshly critical light, denying them a foothold at the basic level and dooming them to the margins of historical linguistic inquiry.

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Dominique Sportiche, *Partitions and atoms of clause structure: subjects, agreement, case and clitics* (Routledge Leading Linguists, **2**). London & New York: Routledge, 1998. Pp. vii + 435.

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Routledge has recently embarked upon a new series: *Routledge Leading Linguists*. Each one of these one-hundred dollar hardcover volumes is a collection of articles by well-known linguists: Higginbotham, Sportiche, Koopman, Rooryk, Epstein, Larson and Rizzi.

Of the eight chapters in the Sportiche book, five have been previously published in easily-accessible volumes (*Linguistic Inquiry*, *Lingua* and edited collections by Kluwer, Academic Press, etc.), one is a double-spaced reproduction of the single-spaced Koopman & Sportiche (1985) GLOW abstract (chapter 8) and the remaining two chapters, though unpublished, have been downloadable from Sportiche's home page for years.

There is, thus, nothing in the book that practising syntacticians haven't seen. If the other volumes making up this series are also compilations of old papers, then the conclusion is that *Routledge Leading Linguists* is a pure money-making scheme. For this reason, I wouldn't buy the book, subscribe to the series or ask my library to do so.

But let us not dwell on form and formalities. Dominique Sportiche's work is required reading for linguists with interest in French and Romance syntax. He touches, throughout his *œuvre*, basic theoretical issues of the Principles and Parameters framework. The better-written papers, i.e., those that have appeared in journals and have been reviewed and edited, can be proposed to advanced students as material for term papers.

In what follows, I attempt a critical review of about one fourth of the book. Chapter 1 of *Partitions and atoms of clause structure* is a reproduction of Dominique Sportiche's remarkable and highly influential *Linguistic Inquiry* paper on floating quantifiers, exemplified by *all* in (1).

(1) The phonologists have all been promoted to Dean.

All is floated, that is, displaced from the noun phrase *the phonologists*, adjacent to which it appears in the canonical (2).

(2) All the phonologists have been promoted to Dean.

Until Sportiche's paper, floating quantifiers had been treated – for example, by Kayne (1975) – as moved away from the NP, in other words, as floated rightwards. Sportiche's major contribution consisted of showing that, on the contrary, it is the NP which is displaced leftwards, stranding the quantifier *all*. The empty NP position adjacent to *all* and the surface subject position are related by an A-chain, as in (3a), just as with the empty

subject position of *unperturbed* and the surface subject position of raising *seem* in (3b).

(3) (a) [$_{NP}$ The phonologists] have all [$_{NP}$ e] left the party.
(b) [$_{NP}$ Charles] seems [$_{NP}$ e] unperturbed by OT.

Analyzed in this fashion, floating quantifiers constitute some of the most compelling evidence for the idea that subjects raise into their surface position in Spec/I and are not base-generated there. This latter hypothesis, by now an industry standard, emerged in the mid-eighties under the name of the VP-INTERNAL SUBJECT hypothesis. There are several versions of the idea, one of which is developed in Koopman & Sportiche's 'The position of subjects', reprinted as chapter 2 of the present book.

But if floating quantifiers mark subject positions, why is it that one position in which they cannot (naturally) appear is the VP-internal subject position? Although Sportiche considers (4b) awkward next to (4a), other French-speaking syntacticians, such as V. Déprez, mark (4b) as ungrammatical (see Déprez (1989: 23.) Whatever the precise status of this example, it is clear that it is degraded, a fact in need of explanation.[1]

(4) (a) Les alpinistes ont tous adoré le spectacle.
the alpinistes have all loved the show
'The mountain climbers have all loved the show.'
(b) ?/*Les alpinistes ont adoré tous le spectacle.
the alpinistes have loved all the show

On the basis of Pollock (1989), Cinque (1999) argues that past participles in French obligatorily raise above adverbs such as *à peine* 'hardly', as shown in the contrast between (5a) and (5b).

(5) (a) Jean-Jacques a fini à peine la moitié de sa choucroute.
Jean-Jacques has finished hardly the half of his sauerkraut
'Jean-Jacques has hardly finished half of his sauerkraut.'
(b) *Jean-Jacques a à peine fini la moitié de sa choucroute.
Jean-Jacques has hardly finished the half of his sauerkraut

Cinque further shows that the lowest position for a floating quantifier in French is to the left of and thus higher than that of an adverb such as *complètement* (*toutes* is the feminine of *tous*):

[1] Both Déprez (1989) and Bobalijk (1995) discuss Sportiche's observation to the effect that when the floating quantifier is modified or followed by adjunct material, it fares better in postverbal position (also in English, as Bobalijk remarks) and can marginally occur to the left of a direct object (in French). The generalization seems to be that when a floating quantifier is part of a larger constituent, it has the option of remaining lower, in positions unavailable to bare floating quantifiers. Prosodic considerations are also relevant to the degree of acceptability of such 'low' floating quantifiers.

(6) (a) Elles l'ont toutes complètement refait.
they.FEM it have all.FEM completely redone
'They have all completely redone them.'
(b) *Elles l'ont complètement toutes refait.
they.FEM it have completely all.FEM redone

What (4) shows, then, is that floating quantifiers can only mark subject positions above a certain point in the functional domain of the clause. If this were true only of subject floating quantifiers, one might argue that the base position of subjects is simply higher than *complètement*. But, as the contrast in (7) clearly shows, object floating quantifiers are subject to the same restriction.

(7) (a) Jean-Jacques les a toutes envoyées à l'éditeur (les épreuves).
Jean-Jacques them has all.FEM sent to the publisher (the proofs).
'Jean-Jacques has sent them all to the publisher (the proofs).'
(b) ??Jean-Jacques les a envoyées toutes à l'éditeur.
Jean-Jacques them has sent all.FEM to the publisher

One way of resolving the issue is to deny that floating quantifiers mark NP positions and treat them essentially as (base-generated) adverbs. This line was pursued by Bobalijk (1995), for example.

An alternative is to relate this fact to the observation that subjects appear external to VP in many VSO languages and VSO configurations. Postverbal subjects in Irish, for example, occupy a position higher than the base subject position, as evidenced by the strict adjacency that they must obey with respect to the verbo-inflectional complex (McCloskey 1996); similar facts hold for Standard Arabic. Postverbal subjects in Hebrew triggered (as opposed to *free*) inversion contexts must be higher than adverbs like *completely*, as shown by the contrast in (8) (Shlonsky 1997).

(8) (a) 'etmol gamra Rina ləgamrey 'et ha-'uga
yesterday finished Rina completely ACC the-cake
'Yesterday Rina completely finished the cake.'
(b) *'etmol gamra ləgamrey Rina 'et ha-'uga
yesterday finished completely Rina ACC the-cake

On the surface, these facts suggest that subjects are obligatorily raised out of VP (although the same evidence shows that they are internal to VP in Greek and Spanish, suggesting a parametric difference). Suppose, however, that, contrary to appearances, Irish, Arabic and Hebrew subjects ARE inside VP (or vP) and correlatively, that floating quantifiers DO mark the base position of the subject, object etc. The question then becomes why the base positions APPEAR higher, for example, to the left of COMPLETEMENT. A

possibility which comes to mind is to exploit remnant VP movement in light of Kayne's (1994) ANTISYMMETRY proposal, in ways that he and others have been recently exploring (see Kayne 1999, Koopman & Szabolcsi 2000, Kayne & Pollock in press). The idea would be that the VP, emptied of the verb, is itself moved leftwards to some specifier position in the functional domain of the clause, at which point the subject is raised out of it. There are various ways in which one could execute this idea and certainly many questions to answer as to the motivation for such an operation. Its prima facie attraction, however, is that it provides a possible resolution of the puzzle represented by the data in (4), left essentially unresolved by Sportiche.

Three chapters explicitly deal with clitics although these permeate, indeed haunt, the entire volume (as they do Kayne's (1975) *French syntax*). The chapter entitled *Clitic constructions* presents what has become a very influential solution to the 'clitic paradox', namely, the fact that clitics are X^0 categories which appear to be related to their thematic, base position via an A-chain (and not a head chain).

Sportiche's idea is as simple as it is ingenious: clitics are base-generated heads of functional projections attracting (silent) XPs to their specifiers. The locality conditions on cliticization hold not of the clitic itself, but of its associated XP. When the associate XPs are phonetically realized, we get clitic doubling.

Section 2 summarizes some familiar and less familiar properties of clitics, that they cannot be conjoined independently of their hosts (with *and*, although they may with *or*), that their hosts cannot be conjoined independently of them and that they form rigidly ordered clusters.

Sections 3 and 4 go through the movement analysis of clitics and compare it to the base-generation one. The strongest evidence for the former is the locality constraints that the clitic obeys: RELATIVIZED MINIMALITY (SPECIFIED SUBJECT CONDITION) effects, the CONDITION ON EXTRACTION DOMAINS (CED), the EMPTY CATEGORY PRINCIPLE (ECP) as well as the incontrovertible fact that direct object clitics trigger past participle agreement. Base-generation of the clitic is, on the other hand, the simplest way of dealing with source-less clitics such as ethical datives, inherent *se*, etc.

Sportiche's synthesis of the two approaches takes the following form: clitics are heads of functional projections encoding features. XPs bearing those features must raise to the clitic's specifier although they do not do so in the overt syntax because of a constraint barring multiple filling of the specifier and the head of a functional projection (aka the 'doubly-filled Comp filter').

Some questions immediately arise: how does the system explain KAYNE'S GENERALIZATION, i.e. the obligatory appearance of a (Case-assigning (?)) preposition next to the doubled DP? Kayne's Generalization is clearly not a universal property of clitic doubling (it isn't, for example, found in Greek), but it does manifest sufficiently robust crosslinguistic validity to be integrated

into an account of clitic doubling. As presented, Sportiche's theory of cliticization predicts that doubling objects should be no different from regular objects, unassociated to a clitic.

If clitic doubling is manifested when the clitic's associate is both overt and unraised to Spec/Clitic, then the relationship between the clitic and the double should NOT be subject to overt movement constraints. Belletti (1999), however, citing T. Siloni, argues that CED effects hold of cliticization in Spanish, in the presence of a doubled DP. Consider the contrast in (9), which shows that cliticization is possible out of an argument PP but blocked when occurring out of an adjunct.

(9) (a) Maria se le colocò cerca a Juan.
Maria self her.DAT positioned near to Juan
'Maria placed herself next to Juan.'
(b) *Maria le es feliz cerca a Juan.
Maria her.DAT is happy near to Juan
'Maria is happy next to Juan.'

Since the clitic's double is internal to the adjunct and since CED effects signal overt movement, the ungrammaticality of (9b) can be adduced as an argument against Sportiche's view.

In the second part of the chapter, the analysis is developed and extended, in directions that are not always persuasive. For example, it is argued that the feature encoded by the accusative clitic heads is 'specificity'. This permits Sportiche to relate Romance cliticization to Germanic scrambling. The relevant semantic property of Romance clitics, however, doesn't seem to be specificity, since the sentences in (10) are well formed, with the clitic referring to a non-specific topic.

(10) (a) Un assistant qui connaît Excel on le trouvera facilement.
an assistant who knows Excel one him.ACC find easily
'An assistant who knows Excel, we'll find easily.'
(b) Un gelato lo prendo volontieri.
an ice cream it.ACC (I) take willingly
'An ice cream, I'll willingly take.'

Rather, the semantic property of (accusative) clitics is REFERENTIALITY, as the contrast in (11) shows. (For obvious reasons, this can only be tested with cliticization of EXCEPTIONAL CASE-MARKED (ECM) subjects.)

(11) (a) Je considère probable que tu viennes.
I consider probable that you come
'I consider it probable that you'll come.'
(b) *Je le considère probable que tu viennes.
I it.ACC consider probable that you'll come
'I consider it probable that you come.'

Arbitrary pro is licensed in French in object position, as in (12a), but clitics with arbitrary reference are prohibited, as in (12b).

(12) (a) 'Carrefour' rend heureux.
'Carrefour' makes happy
'"Carrefour" (= name of a supermarket chain) makes one happy.'
(b) *'Carrefour' le rend heureux.
'Carrefour' it.ACC-makes happy
(The referential reading of the clitic is forced.)

Finally, whereas a climatological pro is possible as the (ECM) subject of the somewhat literary (13a), a clitic is plainly excluded in (13b).

(13) (a) Je regarde pleuvoir dehors.
I watch rain outside
'I watch it raining outside.'
(b) *Je le regarde pleuvoir dehors.
I it.ACC watch rain outside
'I watch it raining outside.'

The contrasts in (10)–(13) show that accusative clitics (in non-idiomatic contexts) are referentially restricted: they can only pronominalize fully referential objects. This restriction can be expressed à la Sportiche as a property or feature of the functional projection of which the clitic is the head.

Dominique Sportiche shows that the specifier of some clitic positions is an A′-position from which parasitic gaps can be licensed (genitive *en*), and proceeds to generalize this to accusative clitics. These, however, do not licence parasitic gaps, a fact which he relates to the optionality of past participle agreement with accusative clitics, attributing both to the possibility of delaying movement of the (silent) direct object to Spec/Clitic until LF.

By the same token, the obligatoriness of past participle agreement with Italian (third person) clitics is an indication that a direct object associate of an accusative clitic CANNOT be delayed until LF. Yet, Italian is exactly like French in prohibiting parasitic gap licensing by accusative clitics.

The problem could be avoided if Spec/AccClitic were an A-position and not an A′-position. The optionality of past participle agreement, which Sportiche would like to explain in terms of the movement options of the direct object DP, might perhaps be better dealt with by relating it to movement of the participle itself. Arguably, objects always raise through Spec/AgrParticiple, but the participle itself does not move as high as the participial head. This view might provide an insight into the differences between French and Italian participle agreement with object clitics by relating it to the independently-known differences in verb movement.

Finally, the intricate problem of the order of clitics within a cluster, mentioned at the outset of the chapter, is not dealt with and remains as obscure as ever.

Chapter 5 extends the theory of cliticization of chapter 4 to the domain of subject clitics and elaborates a new analysis of interrogative and complex inversion in French. The basic idea is that French subject clitics are heads of a nominative clitic projection and not full DPs in a specifier position. In this respect, subject clitics in French resemble the subject clitics of North Italian dialects. Contrary to some well-known previous analyses (e.g. that of Rizzi & Roberts 1989), Sportiche argues that I^0 does not raise to C^0 in French interrogatives. The contrast in (14) can be handled entirely in terms of the head/XP distinction: in (14a), the verb incorporates to the clitic head (within IP) while in (14b), there is no head preceding the subject to which the verb raises.

(14) (a) Sont- ils partis?
have they.NOM left
'Have they left?'
(b) *Sont les phonologues partis?
have the phonologists left
'Have the phonologists left?'

Under this analysis, French is a pro-drop language: if the subject clitic *ils* in (14a) is the head of a functional projection, its Spec is filled by a null pronominal subject. As with the proposal in chapter 4, the attractiveness of Sportiche's analysis lies in its simplicity: the (unstressed) series of nominative pronouns in French are ALWAYS heads of functional XPs. Whether they are phonological clitics or not depends, first, on whether the inflected verb has incorporated into the clitic head (whence the phonological clitic-like behavior of enclitics in (14a)) and second – in the absence of I-incorporation – on (arbitrary) lexical properties of the clitic head (i.e., *on* is a phonological clitic, *il* is not).

Sportiche's analysis has the further advantage of providing a completely straightforward and non-ad hoc explanation of the double subject problem in COMPLEX INVERSION, illustrated in (15). Since *ils* is a head, there is only a single subject in (15), namely *les phonologues*.

(15) Pourquoi les phonologues sont- ils partis?
why the phonologists are- they.NOM left
'Why did the phonologists leave?'

One problem with the approach advocated by Sportiche is that it engenders the prediction that Interrogative/Complex Inversion and STYLISTIC INVERSION in the sense of Kayne & Pollock (1978) should be compatible. In other words, the ungrammaticality of (16c) is prima facie surprising and totally unaccounted for in an approach to interrogative inversion, eschewing $I \rightarrow C$.

(16) (a) Où sont- ils allés?
where are- they.NOM gone
'Where did they go?'
(b) Où sont allés les phonologues?
where are gone the phonologists
'Where have the phonologists gone?'
(c) *Où sont- ils allés les phonologues?
where are- they.NOM gone the phonologists

Although certain aspects of the analysis are grounded in dubious principles (e.g. GREED) or incomplete (see preceding paragraph), the basic point of this chapter is well argued and persuasive.

Chapter 6 is entitled 'French predicate clitics and clause structure'. It deals with the clitic *le* in sentences like (17).

(17) Louis l'est toujours, branché par les armes à feu.
Louis it-is still, turned on by the arms of fire
'Louis is still turned on by firearms.'

There are a number of issues that any analysis of predicate *le* must grapple with. They are, first, the diversity of categories that *le* can pronominalize, illustrated in (18a–e).

(18) Louis l'est toujours,
Louis it-is still
(a) en colère PP
in anger
'angry'
(b) à plaindre CP
to complain
'a poor guy'
(c) gymnast NP
gymnast
'a gymnast'
(d) adulé des foules adjectival participial phrase
admirable to-the masses
'admired by the masses.'
(e) branché par des armes à feu verbal participial phrase
turned on by arms of fire
'turned on by firearms'

Second, *le* seems to be able to pronominalize both a head and an XP. Thus, in (19a), it stands for the AP *fidèle à ses amis* while in (19b), it pronominalizes the bare adjective *fidèle*.

(19) (a) Louis l'est toujours (fidèle à ses amis).
Louis it-is still (faithful to his friends)
(b) Louis l'est à ses amis (fidèle).

The third issue raised by predicate clitics concerns the co-occurrence restrictions holding of clusters with predicate *le*, as illustrated by the following paradigm: (20a) shows that an AP can be cliticized and (20b) that the complement of the predicate adjective can be cliticized. The ungrammatical (20c) demonstrates the impossibility of carrying out both operations simultaneously.

(20) (a) Jean l'est fidèle à ses amis.
Jean it-is faithful to his friends
(b) Jean leur est fidèle.
Jean them.DAT is faithful
'Jean is faithful to them.'
(c)[2] *Jean le leur est.

Consider the last issue first. The restriction illustrated in (20c) holds of the predicate *le*; accusative third person masculine *le* may, indeed must, precede the dative in French:

(21) (a) Jean le leur donne.
Jean it.ACC them.DAT gives
'Jean gives it to them.'
(b) *Jean leur le donne.

The grammaticality of (21a) shows that the sequence *le leur* in (20c) is not phonologically deviant. Indeed, the constraint barring (20c) has nothing to do with constraints on clustering.

Sportiche develops the following idea: suppose that, like other clitics (discussed in chapters 4 and 5; see above), the predicate *le* heads a (functional) projection the Spec of which must house a pro-predicate in LF. On the assumption that the linear order *le leur* in (20c) reflects their hierarchical order in LF, the trace of the dative clitic *leur* will be included in the c-commanding Spec/*le*. This trace thus lacks a c-commanding antecedent (the antecedent ends up in Spec/*leur*, lower than the trace). Interestingly, when the dative clitic is in the first or second person, it precedes the predicate *le*, as in (22): 'double' cliticization of the sort that is ruled out in (21c) dramatically improves. Here, argues Sportiche, the trace buried inside the predicate in Spec/*le* has a c-commanding antecedent in the hierarchically superior Spec/*me*.

(22) ?Jean me l'est, fidèle.
Jean me.DAT it.ACC is faithful
'John is faithful to me.'

[2] There is a crucial typographical error in the book example, (24d) on page 352: the asterisk denoting ungrammaticality is missing.

This analysis is enticing but raises the more general issue of traces embedded within a category which is moved higher than the trace's antecedent. For example, a preposed VP contains a trace of the (VP-internal) subject, under Huang's (1993) analysis – presented by Sportiche in chapter 3 of the book. It is not clear why the logic ruling out (20c) fails to apply in (23).

(23) and [t_i talk about OT] Hugh$_i$ will t_{VP}

A possibility of resolving this dilemma consists of arguing that the VP in (23) may be reconstructed, whereas XP associates to clitics may not. Some support for the non-reconstructability of clitic-associates is provided by Cecchetto (2000), and independently by Aoun & Benmamoun (1998). Cecchetto shows that a (clitic) left-dislocated topic must reconstruct, whence the Condition C violation engendered by (24a), but that the reconstruction site CANNOT be its base position, given the full grammaticality of (24b) with a postverbal (VP-internal) subject. He argues that topics reconstruct to the 'Sportiche position', i.e. to Spec/CliticP.

(24) (a) *L'opera prima di [uno scrittore]$_i$ pro$_i$ la scrive sempre
the work first of a writer (he) it.3FS writes always
volontieri
willingly
'A writer's first piece of work, he always writes willingly.'

(b) L'opera prima di [uno scrittore]$_i$ la scrive sempre lui$_i$.
the work first of a writer it.3FS writes always he

Cecchetto's analysis, if generalizable, might suggest that reconstruction from Spec/CliticP is never possible, explaining why (20c) cannot be salvaged.

The second issue, that is, the apparent cliticizability of both A^0s and APs, is handled straightforwardly by claiming that e.g. (19b) is derived from (19a) by extraposition of the PP *à ses amis*. *Le* in (19b) can be taken to stand for AP, where AP contains a trace of the extraposed PP. But is it not the case that the clitic inside the AP in Spec/*le* will lack a c-commanding antecedent just as in the ungrammatical (20c) discussed above?

The issue of the diversity of categories cliticizable by *le* (see 18) is given a very elegant and thought-provoking solution. Sportiche first argues that the adjectival and participial small clauses are best treated as CPs. He then argues that if *le* can sometimes stand for a CP, it perhaps always stands for one. Surely this is a desirable consequence: *le* should be seen as always pronominalizing the same category? If Sportiche is right, then paradoxically, *le* is not a predicate clitic, since CP is not a predicate. Moreover, if adjunct small clauses cannot be *le*-cliticized, as he shows,

(25) (a) Certains linguistes réfléchissent accroupis.
certain linguists think squatting
'Certain linguists think squatting.'

(b) *Certains linguistes le réfléchissent.

then *le* can be thought of as cliticizing direct object. It is but a short (though admittedly delicate) step to claim that *le* just is a direct object clitic, the categorial difference between CP and DP being irrelevant.

For lack of space, I have not discussed chapters 3, 7 and 8 of the book. All three directly deal with more theoretical issues. Very crudely, the basic thrust of Dominique Sportiche's theoretical work consists of attempts to reduce the number of syntactically relevant configurations or relations, be they between heads and XPs, head and heads or XPs and XPs. Chapter 3 would have benefited from some trimming and editing, as it is long (155 pages) and often repetitive. Chapter 8, an appendix, is – as noted earlier – a GLOW abstract.

Overall, the book would have gained in perspicacity from some editorial work. Sportiche's writing is not always clear and some passages read like drafts.

That no editor looked at the manuscript is, from a capitalist point of view, as comprehensible as it is reprehensible: why engage in such a costly task if you can reap your profits without it? Routledge evidently hopes to compensate for the absence of editorial intervention by a marketing strategy which consists of promoting the author as a LEADING LINGUIST.

Everything in this book is extremely worth reading but the book itself is, in my judgement, entirely dispensable.

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Sanford B. Steever (ed.), *The Dravidian languages* (Routledge Language Family Descriptions). London, New York: Routledge, 1998. Pp. xvii + 436.

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This volume provides an introduction to the Dravidian language family by means of descriptive sketches of 12 Dravidian languages, including three of the four literary languages (Tamil, Kannada and Telugu, but not Malayalam) and the earlier attested stages of two of them (Old Tamil and Old Telugu, but not Old Kanarese, the older form of Kannada). The individual chapters are: Introduction to the Dravidian languages (Sanford B. Steever, 1–39), The Dravidian scripts (William Bright, 40–71), Old Tamil (Thomas Lehmann, 75–99), Modern Tamil (E. Annamalai & S. B. Steever, 100–128), Kannada (Sanford B. Steever, 129–157), Tulu (D. N. S. Bhat, 158–177), Old Telugu (P. Ramanarasimham, 181–201), Telugu (Bh. Krishnamurti, 202–240), Koṇḍa (Bh. Krishnamurti & Brett A. Benham, 241–269), Gonḍi (Sanford B. Steever, 270–297), Kolami (P. S. Subrahmanyam, 301–327), Gadaba (Peri Bhaskararao, 328–355), Malto (Sanford B. Steever, 359–387), and Brahui (Josef Elfenbein, 388–414). The chapters on individual languages are grouped into four parts corresponding to the major genetic divisions of Dravidian: South Dravidian (Old Tamil, Modern Tamil, Kannada, Tulu), South-Central Dravidian (Old Telugu, Telugu, Koṇḍa, Gonḍi), Central Dravidian (Kolami, Gadaba), and North Dravidian (Malto, Brahui). Incidentally, Elfenbein (389) argues against the picturesque assumption that Brahui represents a remnant of a once more widespread distribution of the Dravidian languages prior to the Indo-Aryan expansion, arguing instead that Brahui is a North Dravidian language closely related to Kurux and Malto and that the speakers of Brahui migrated into what is now Pakistan and were Islamized perhaps as recently as 1000 years ago. In addition to these chapters, there is also prefatory material (Contents, v-vi; List of figures, vii; List of tables, viii-x; List of contributors, xi; Preface, xii-xiv; Linguistic conventions, xv; List of abbreviations, xvi-xvii) and a detailed Index (415–436, organized primarily by topics further broken down according to individual language).

The choice of languages for the descriptive sketches covers not only the genetic breadth of Dravidian but also a range of languages in terms of social function, from major literary languages that are also lingue franche for speakers of other languages in their territory to languages like Malto that serve purely oral functions within their communities. As the editor notes in the Preface (xiii), the choice of languages was not always simple. At least 23 modern Dravidian languages are generally distinguished, more than could reasonably have been treated within the format of this volume. For some languages, exclusion follows from the fact that there is no one known to be actively engaged in the study of the language in question, as when the latest major publication on Kūi is Winfield (1928). In some cases, the editor draws attention to recent high-quality grammars that can fill the gap, such as Emeneau (1984) for Toda, one of the South Dravidian languages of the Nilgiris Massif, and Israel (1979) for Kūvi, like Kūi a South-Central Dravidian language spoken in the Khondmal Hills of Orissa. The omission of Malayalam is perhaps to be regretted, since despite its genetic closeness to Tamil, it does provide interesting differences both sociolinguistically (Malayalam is heavily Sanskritized in vocabulary, Tamil, at least in its standard variety, much less so) and structurally, in being the only Dravidian language to have lost subject-verb agreement completely (30), thus providing an interesting testing ground for hypotheses concerning correlations between the presence/absence of agreement and other phenomena; Malayalam has also played an important role in linguistic theory building through such works as Mohanan (1982, 1986), not even mentioned bibliographically in this volume.

Steever's introductory chapter provides a listing and genetic sub-classification of the Dravidian languages, including a useful map of language locations on page 10, followed by an introduction to the comparative-historical study of the Dravidian languages. Many of the topics covered here recur in the treatment of individual languages, ranging from unusual features of Dravidian such as the six phonemically distinct places of articulation for stops in the proto-language (15, retained, if not slightly increased by the marginal addition of distinct front velars in Malayalam, and perhaps increased also in Toda), through characteristic features such as the closed class of verbs (18, with many languages lacking even productive derivational processes for forming new verbs, making use instead of light verb constructions) and the absence of a readily distinguishable word class of adjectives (19), to grammatical features characteristic of many Eurasian SOV languages, such as a reasonably rich case system (20), consistent head-finality (31), and the primary use of nonfinite means to join clauses within the sentence (31–34). Steever notes, however, that all Dravidian languages, and presumably Proto-Dravidian, have some means of incorporating finite material into more complex sentences (34–37). For instance, reported speech, thoughts, etc. can be encoded as a finite clause dependent on a nonfinite form

of the verb 'to say', as when 'I think that Kannan is a good man' is expressed as 'I think saying [Kannan is a good man]' (34). Steever also concludes that the correlative type of relative clause construction, whereby 'put it wherever you want' is expressed as 'where you want, put it there', is indigenous to Dravidian rather than a loan from Indo-Aryan (35). This chapter concludes with a consideration of proposed external genetic affiliations of the Dravidian family (37), concluding on a note of skeptic agnosticism, motivated in part by the fact that 'the reconstruction of Proto-Dravidian is preliminary and fragmentary', which in turn stems in part from the poor state of our knowledge of the less well described languages. The list of references to this chapter could perhaps have been extended bibliographically to include some of the collections of papers on Dravidian languages published in India, and to draw readers' attention to the *International Journal of Dravidian Linguistics* and other journals and collections, such as those on languages of South Asia more generally, that are likely to include work on Dravidian languages.

Bright's chapter on Dravidian writing systems, i.e. those used for Tamil, Malayalam, Kannada and Telugu, discusses the historical development of these scripts from a South Indian branch of the Brahmi script of around 250 BCE, sometimes with reference to likely prototypes in Semitic, in particular in the Phoenician alphabet (40–45); sets out the linguistic principles on which these Dravidian alphabets, like other scripts of South Asia and their Southeast Asian derivatives, are based, including the underlying fine phonetic analysis and the way of indicating vowels by adding modifications to the letter representing the preceding consonant (what is sometimes called an 'alphasyllabic' writing system) (45–49); and gives a detailed presentation of each of the scripts (49–70).

The chapters on the individual languages for the most part follow the same general format, albeit with some variations due to the nature of the language or to the state of work on that language, with sections entitled Background and history, Phonology (and orthography, for the written languages), Morphology and parts of speech, Nominal morphology, Verb morphology, Minor parts of speech (which includes clitics), Syntax, Lexicon, and sometimes others relevant to that particular language, for instance Diglossia in the case of Tamil (125–127). There is also a high degree of parallelism in the treatment of individual topics within each of these major sections, although here, especially for the less well studied languages, there is more variation; for instance, dative subject constructions are discussed explicitly for Old Tamil (89), Modern Tamil (118–119), Kannada (146–147), Telugu (228), Kolami (324), Malto (383), as well as for Proto-Dravidian (29, not listed in the index under 'dative'), but not, as far as I could find, in the case of the other languages. Indeed, the reader not already initiated into Dravidian linguistics will probably be struck by the high degree of similarity among the languages, certainly much more so than in the case of the Indo-European family, and the sensation of déjà vu that will perhaps inevitably

occur in reading later chapters suggests that this is not a book to be enjoyed at a single sitting.

But the Dravidian languages do provide an interesting example of 'diversity within unity', comparable to the kind of microtypology that has been carried out so successfully in recent years, for example, on the Continental West Germanic languages or on dialects spoken in Italy. Allusion has already been made to the difference between languages with and without subject-verb agreement in finite clauses, with Malayalam being the only Dravidian language of the second type, and of the possibility of using this difference between otherwise closely related languages to test claims about correlates of the presence versus absence of verb agreement. But the Dravidian languages take one further, since four South Central languages (Kūi, Kūvi, Pengo, Manḍa) have innovated object-verb agreement (30). Moreover, nonfinite verb forms in most Dravidian languages do not show subject-verb agreement, thus providing a possible test for the relevance of the presence/absence of agreement within a single language; Malto is unusual in having subject-verb agreement for nonfinite verbs, although the latter are still distinct from finite verbs in lacking mood and in being excluded from the main clause of a sentence (377–378). Given the limited scope of this volume, there are inevitably many questions that could have been discussed more fully from a comparative perspective, such as the use of different pronominal and other devices to indicate coreference; fortunately, relevant information on this particular topic can be found in the studies on Dravidian languages in Lust, Wali, Gair & Subbarao (2000).

One area where interesting differences among the Dravidian languages can be pursued involves the structural influence of neighboring Indo-Aryan or, in the case of Brahui, Iranian languages, which is small in the south but can be more far-reaching in the smaller more northerly languages, perhaps reaching a peak in Brahui, which has been subject to prolonged intensive contact with the Iranian language Balochi (388–389). For instance, the Indo-Iranian pattern of finite sentence complementation has been borrowed into Gadaba (35–36, 352), Malto (36, 383), and Brahui (411–412), though with interesting differences: in Gadaba the borrowed complementizer retains the typically Dravidian order, following the complementized clause, which in turn precedes the main clause, whereas in Malto and Brahui the Indo-Iranian pattern with the complementizer before the complementized clause, this latter positioned after the main clause, has been adopted. Brahui has also adopted some Iranian prepositions, although it remains basically post-positional (395–396). As a perhaps extreme example of borrowing, northwestern dialects of Gonḍi have borrowed pronouns from neighboring Indo-Aryan languages, thus maintaining a difference between first person plural inclusive and exclusive (22); in the Muria dialect described in detail in this volume by Steever, this distinction is, incidentally, lost in the pronouns, although pronominal affixes on the verb continue to make it (279). There are

many other more specific phenomena that are of general linguistic interest; I will cite only one, the phenomenon of labial harmony in Gadaba (329–332), whereby a labial element (a labial consonant or a rounded vowel) anywhere in the nucleus or coda of a stem requires use of the vowel *u* rather than *i* in suffixes and epenthetic vowels, so that the imperative of *iḍg-* 'descend' is *iḍig*, but that of *kūrk-* 'nap' is *kūruk*, and the causative of *iḍg-* is *iḍug-p-*; not only does this provide evidence for a natural class including rounded vowels and labial consonants, it also illustrates, in the last example, labial attraction by a labial consonant that is both after and nonadjacent to the site of labialization.

In the Preface (xii), Steever sets out the aim of this volume as being to enable 'the layman or linguist … to satisfy his curiosity about these individual languages', in contrast to earlier handbooks on Dravidian that have been more oriented towards comparative studies and have typically lost sight of the overall structure of the individual languages. The volume succeeds in achieving Steever's aim, while in addition suggesting a number of interesting questions for further investigation.

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