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Robert Burchfield (ed.), *The Cambridge history of the English language*. Vol. V: *English in Britain and Overseas: origins and development*. Cambridge: Cambridge University Press, 1994. Pp. xxiii + 656.

Reviewed by JAMES MILROY, University of Michigan & University of Newcastle upon Tyne

As Richard Hogg points out in the general editor's preface, this volume differs from Volumes I–IV in that it does not primarily give a 'straight-forward historical account' of internal linguistic developments, but an account of separate varieties of English that differ to a greater or lesser extent from what is regarded as the mainstream. The book is divided into two parts. Part I is 'Regional varieties of English in Great Britain and Ireland' and contains chapters on English in Scotland, Wales and Ireland, together with a chapter on the dialects of England since 1776. Part II is 'English Overseas', covering Australia, the Caribbean, New Zealand, South Africa and South Asia. Robert Burchfield's 'Introduction' seems to reflect personal interests as much as it does the contents of the volume, and the account of topics raised within the chapters is rather sketchy. The topic of standard English is treated prominently, although it is not a major concern in the volume as a whole, and space is given to debates about the teaching of standard British English overseas, which are mentioned only briefly in Chapter 10. At times it even appears to be taking issue with comments made by the contributors, and the citations from the chapters (for example, the citation from the Irish English chapter on p. 14) are not always of central interest. The introduction is not a very useful as a guide to the main linguistic questions treated in the volume.

J. Derrick McClure's chapter starts with an informative account of the socio-political history of English in Scotland. Anglo-Saxon appeared in the south-east around 600 A.D., that is, at about the same time as in England, and English therefore has a continuous history in Scotland from the earliest times. The dominance of the English-speaking areas within what became the Scottish kingdom was, however, not assured until much later. As McClure points out (29): at the end of the thirteenth century 'the Celtic tongue was spoken as a first or only language by at least half the population'. The emergence of Scots as a national language dates from the passing of the throne to Lowland families from 1286 onward, after which time the conflict with Gaelic-speaking chiefs continued. The chapter continues with an account of later developments, including the increasing southern English influence in the period 1560–1700.

The second half of the chapter deals mainly with the internal history of Scots in phonology, morphology, syntax and vocabulary, including a number of topics that have been salient recently in historical phonology, such as the Great Vowel Shift in Scots and the Scottish vowel length rule, by which vowel-length in Scots is shown to be distributed allophonically rather than phonemically. An account is also given of aspects of regional and social variation in contemporary Scots, and, quite properly, there is also much in this chapter about the distinctiveness of the Scottish cultural and literary scene. The author has accomplished a very difficult task extremely well. The history of Scots deserves much more than a single chapter in the Cambridge History.

As for Wales (the subject of Alan R. Thomas's chapter), much less can be said about the historical linguistic distinctiveness of Welsh English, as it is more generally an outgrowth of English English, and the most notable feature of this chapter is its excellent sociolinguistic description. It is the history of bilingualism that stands out. In an Act of 1563, the London government supported the translation of the Bible and Divine Service into Welsh. Although its use in religious services is one of the reasons for the survival of Welsh, Thomas (97–98) points out that this religious function isolated the language from the (English-based) political mainstream and had the effect of reinforcing the gulf between the Welsh-speaking peasantry and the Anglicized gentry for two centuries. The various influences that brought about the spread of English into Wales are clearly set out, and the sociolinguistic account makes full use of recent advances in our understanding of language situations of this kind. As for the linguistic features of Welsh English, these are not profoundly different from English English, especially in syntax, and this could be connected with the form that the history of bilingualism took. Although there is substratal carryover from Welsh, it is less, at some levels, than might be expected.

Jeffrey L. Kallen's chapter on Irish English is a fine scholarly piece of work that brings together information from a great variety of historical, social and linguistic studies and deals with it in a careful, well-judged manner. There is dispute about the extent to which English survived in Ireland in the later medieval period, and Kallen (probably rightly) inclines to the view that it survived more vigorously than has been traditionally believed. The recession of Irish Gaelic is judiciously assessed, using census data and the comments of contemporary observers. The distinctive characteristics of Irish English are carefully described, giving full, but critical, attention to the possible substratal effects of Irish, and a clear account is given of the Hiberno-English tense/aspect system, which is of particular interest as it has similarities to developments in other varieties and differs from standard English at a deep-seated level. The special characteristics of Ulster English, which has a background in Scots as well as southern English, and which was the language of the 'Scotch-Irish' settlers in North America, are also given appropriate

attention. This is a particularly good piece of descriptive history, notable for its avoidance of sentimental positions to the effect that English is not really 'native' to Irish people and has only been 'rented' to the Irish (see the citation from P. L. Henry on p. 186). For better or worse, English has been in Ireland for 800 years.

The volume is dedicated to the memory of Ossi Ihalainen, whose death in 1993 is a tragic loss to English dialectology. His chapter on English dialects since 1776 brings together a mass of information (much of it from the nineteenth century) that is not especially well known to present day variationists and which will not otherwise be found in any single source. The author uses Trudgill's (1990) distinction between 'traditional dialects' and 'modern dialects'. There is much discussion of the 'traditional' dialect areas of England (following the pioneering work of Alexander Ellis), and detailed information on divergent phonological and grammatical developments is very usefully brought together. Although it is customary to speak of the rapid recession of traditional dialects, what is more remarkable to a historian is that they survived in such divergent forms for such a long time, and Ihalainen points this out. 'Modern' developments are also discussed. This is an original study that will be a valuable resource for historical dialectologists. Juhani Klemola's assistance at the proofreading stage is acknowledged on p. xx.

Part II covers English Overseas. George W. Turner's chapter on Australian English includes a wide-ranging account of the differences between Australian and British English, and much interesting historical information. Turner notes, among many other things, that /l/ vocalisation and intervocalic /t/ flapping have been noticed. I would have liked to know more about these tendencies, as they are only too likely to be vernacular changes in progress, and research is in progress on at least one of them. Laurie Bauer's account of New Zealand English (Chapter 8) goes rather more deeply into issues arising, the most general of which is the origin of New Zealand English. Despite the general respectability of the earliest British settlers (in contrast to Australia), their speech does not seem to have survived in a distinctive form, but has been overtaken by Australian English, of which New Zealand English is now reasonably described as a variety. This full treatment of New Zealand English is made possible by an upsurge of recent interest in the subject by a number of scholars, including the author himself. This has extended to an interest in Maori English, and Bauer gives an illuminating account of this, together with many other matters that are of great sociolinguistic and historical importance.

Chapter 7, by John A. Holm, on Caribbean English, is notable for its very clear introduction on the nature of pidgin and creole languages. To generalize about the Caribbean is extremely difficult, as there have been so many influences in different areas, and the author gives a wide-ranging account of these different developments. The range of variation between

basilectal creoles and acrolectal varieties, involving the process of decreolization, is fully dealt with, and what can be gleaned from history about substratal and adstratal influences is fully discussed. Although creolists may dispute particular points, this is a highly informative descriptive chapter. It is a pity that it is not accompanied by chapters on other creole situations.

The last two chapters, on South African and South Asian English respectively, are fascinating because of the political situations involved and the complex history of contact between different languages that these varieties have undergone. William Branford's account of South African English is based on extensive research, by the author himself and many others, and the history of lexical borrowing from Afrikaans and African languages is set out in a very sophisticated way. The phonology, as Branford points out, is in many ways similar to Australasian varieties, and it is important to ask why this should be so. The vowel chain-shifts that characterize Southern Hemisphere varieties are very fully set out here, and the question as to how far these are due to contact with other languages, and how far they are internal developments, is also very fully discussed. In addition to being a good descriptive account, this chapter addresses questions of considerable theoretical importance.

Braj B. Kachru's chapter – on South Asian English – is about the Indian sub-continent, and it is a very full and clear treatment of a very complicated subject. It begins with a fascinating historical account of British language policies and their effects, and proceeds to a description of some of the traditional Englishes, such as Babu English, and an assessment of the language contact effects involved in these. The main characteristics of phonology, grammar and lexicon are clearly described, again with assessments of the effects of language contact. Attitudes to English are also carefully assessed, and there is a discussion of the influence of English literature on literature in the indigenous languages. The last part of the chapter returns to politics, noting among other things the continuing importance of English in the sub-continent and problems in educational policies involving English. The complexity of the politics of language stands out very clearly in this excellent contribution.

In assessing a compilation of this kind, it is all too easy to complain that some important areas have been excluded or underemphasized, and some people will have views as to whether modern urban varieties and creole Englishes should have had greater coverage. The editorial task is a formidable one, and editorial decisions will never succeed in pleasing everyone. However, the two parts of the volume are quite divergent, and neither part is as full as it might be. It might have been more appropriate to have a separate volume for English Overseas, and it is a pity that this opportunity has been missed. Burchfield comments (4) that in 1984 there was 'a notable lack of professional scholarship' on African varieties, but this is highly disputable,

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and although the task of selection is difficult, failure to cover more world varieties must be counted as a defect. Work on English-based pidgins and creoles was well advanced in 1984, and there had been very good work on Singapore and other places.

In the historical dimension, there seems to me to be one serious misjudgement involved. This concerns the space allotted to Scots, and to a lesser extent, Hiberno-English. In a history of English the time-depth of Scots, its structural differences from southern English, and its influence on colonial varieties, are all so important that several chapters on Scots, if not a whole volume, would have been appropriate – and very useful as a historical resource for scholars. Middle Scots, Scots dialects and the Scots literary language, for example, require extended treatment in full chapters, as do other topics. This cannot be dismissed by suggesting that there is a lack of ‘professional scholarship’ in this area. A history of English that gives the same space to Scots (and Irish) English as it does to recently established individual colonial varieties is unbalanced – strictly as an academic historical account. It is a pity that it was not possible for the editors and publishers to agree on two separate volumes here – or perhaps to include full chapters on Scots English in some of the earlier volumes. A separate two-volume history of Scots is now in preparation, edited by Charles Jones.

These reservations aside, I have found the task of reviewing this volume to be pleasant and highly illuminating, and it is of course to be appreciated for what it does contain rather than criticized for omissions. The contributors have been selected from the top ranks, and they address many questions of historical linguistic or sociolinguistic importance at a high academic level. The volume as a whole is a distinguished addition to the Cambridge History of English.

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Gennaro Chierchia, *Dynamics of meaning: anaphora, presupposition, and the theory of grammar*. Chicago & London: The University of Chicago Press, 1995. Pp. x + 270.

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Dynamics of meaning, an outstanding work in formal semantics and related fields, presents a version of dynamic semantics equipped with the Logic of Context Change Potentials (CCPs), by which binding properties of indefinites are dealt with systematically. It also provides an account of presupposition projections through Updates, which are retrieved from CCPs by means of a type-lowering operation.

The book consists of four chapters. Chapter 1 begins by illustrating donkey anaphora phenomena. Donkey dependencies involve indefinites which antecede pronouns without c-commanding them; yet there is an accessibility condition: the lowest binder of an indefinite NP c-commands 'plain' donkey pronouns. Though exceptions to the condition are admitted, such exceptional links are sensitive to various aspects of context. This chapter also reviews Discourse Representational Theory and the E-type strategy.

In Chapter 2, Chierchia formulates his dynamic theory to capture existential-quantifier readings (\exists -readings) of donkey sentences. In the Dynamic Binding approach, meaning of a sentence S is identified as its CCP, $\lambda p[\phi \wedge p]$ (abbreviated as $\uparrow\phi$), where ϕ is the standard translation of S ; p is a propositional variable which can be filled by adding information to S . Logical operations on CCPs are defined:

- | | |
|-----------------------------------------------------------------------|-------------------------------------------------------------------------|
| (i) $A \underline{\wedge} B = \lambda p[A(\wedge B(p))]$ | (ii) $\neg A = \uparrow \neg \downarrow A$ |
| (iii) $A \underline{\vee} B = \neg[\neg A \underline{\wedge} \neg B]$ | (iv) $A \supseteq B = \neg A \underline{\vee} [A \underline{\wedge} B]$ |
| (v) $\exists x A = \lambda p \exists x[A(p)]$ | (vi) $\forall x A = \neg \exists x \neg A$ (87) |

Dynamic conjunction substitutes the meaning of B for the variable p in the meaning of A . Dynamic existential quantification allows an existential operator to bind pronouns outside its c-commanding domain. We thus have the equivalence $[\exists x A] \underline{\wedge} B = \exists x[A \underline{\wedge} B]$ (88). It is important to note that dynamic implication is defined to deliver the \exists -reading of donkey sentences.

The sentence

Every farmer who owns a donkey beats it
is associated with the CCP

$\forall x[\lambda p[\text{farmer}(x) \wedge \exists y[\text{donkey}(y) \wedge \text{own}(x,y) \wedge \forall p]]] \supseteq \lambda p[\text{beat}(x,y) \wedge \forall p]]$,

which is proven to be equivalent to
 $\uparrow \forall x[\text{farmer}(x) \wedge \exists y[\text{donkey}(y) \wedge \text{own}(x,y)]] \rightarrow \exists y[\text{donkey}(y) \wedge \text{own}(x,y) \wedge \text{beat}(x,y)]$

'Every farmer who owns a donkey beats one of his donkeys.' (92).

There is a way to define the dynamic implication to yield the universal-quantifier reading (\forall -reading) ('Every farmer who owns a donkey beats every donkey he owns.') as illustrated in Groenendijk & Stokhof (1991). Chierchia, however, does not adopt their definition, and takes an approach that the E-type strategy is responsible for the \forall -reading of 'plain' donkey sentences, for it is independently needed to explain exceptional cases to the accessibility condition. The donkey sentence of our concern has now been associated with the interpretation

$$\forall x[[\text{man}(x) \wedge \exists y[\text{donkey}(y) \wedge \text{own}(x,y)]] \rightarrow \text{beat}(x, f(x))],$$

in which f is a functional variable whose value is contextually specified (116). The relevant function is number-neutral as to its value and assigns to each man the maximal group of donkeys he owns.

Chierchia's dynamic approach also gives an account for (a)symmetric readings of conditional sentences. For example, the following sentence has the subject-asymmetric reading counting donkey-owning farmers.

Usually, if a farmer owns a donkey, he beats it. (67)

Chierchia introduces a rule of Existential Disclosure (\exists -Disclosure), $\lambda\alpha_n A = \lambda u[A \underline{\wedge} \uparrow \alpha_n = u]$ (104), by which indefinites are disclosed to be bound by Q-adverbs when selected as topics. The CCP of

(if) a farmer owns a donkey,

on its subject-asymmetric reading, is roughly stated as

$$\lambda u[\exists x \uparrow [\text{farmer}(x) \wedge \text{own-a-donkey}(x)] \underline{\wedge} \uparrow x = u],$$

which is equivalent to

$$\lambda x \uparrow [\text{farmer}(x) \wedge \text{own-a-donkey}(x)].$$

All NPs are assumed to have uniform denotations as in the theory of Generalized Quantifiers. A dynamic determiner D' is analysed as relations between dynamic properties of type $\langle s, \langle e, cc \rangle \rangle$ (where $cc = \langle \langle s, t \rangle, t \rangle$), Indefinites are defined as

$$\lambda P \lambda Q [P(x) \underline{\wedge} Q(x)]$$

and quantificational determiners as

$$D'(P)(Q) = \uparrow D(\downarrow P)(\downarrow [P \underline{\wedge} Q]), \text{ where } D \text{ is a static determiner,} \\ \downarrow P = \lambda x \downarrow \uparrow P(x) \text{ and } P \underline{\wedge} Q = \wedge \lambda x \downarrow \uparrow [P(x) \underline{\wedge} Q(x)] \text{ (98).}$$

Dynamic Conservativity is then derived:

$$D'(P)(Q) \leftrightarrow D'(P)(P \underline{\wedge} Q) \quad (97).$$

Chapter 3 focuses on several constructions with backward donkey dependencies. In *If it is overcooked, a hamburger usually doesn't taste good* (129), the pronoun is linked backward to *a hamburger* without being c-commanded by it. When we raise *a hamburger* to bind *it*, we have a Weak Crossover violation. Chierchia proposes that left-adjoined *if/when*-clauses are (simply IP adjuncts or) topics linked to an IP-internal position by means of an operator-variable relation; when we have an LF structure of the form, $XP O_k IP$ (where O is an operator), we interpret it as $\lambda x_k [IP](XP)$ (151). The LF representation

[if it_i is overcooked] $_k O_k$ [a hamburger $_i$ usually $_i$ [t_i doesn't taste good] t_k]
 (the Q-adverb is assumed to be in a position locally c-commanded by its restriction, *a hamburger $_i$* and t_k)

is interpreted as

$$\lambda C[\text{Most}'(\wedge \lambda x_i [\uparrow \text{hamburger}(x_i) \underline{\wedge} \vee C](\wedge \lambda x_i \uparrow \text{not-taste-good}(x_i)))] \\ (\wedge \uparrow \text{overcooked}(x_i)),$$

which is reduced to

$$\text{Most}'(\wedge \lambda x_i [\uparrow \text{hamburger}(x_i) \underline{\wedge} \uparrow \text{overcooked}(x_i)](\wedge \lambda x_i \uparrow \text{not-taste-good}(x_i))).$$

The λ -conversion is possible here since formulae are interpreted as functions over assignments in a 'dynamic' setting.

It is reported that no NP in the *if/when*-clause can antecede a pronoun in the subject position of the main clause if there is a dependency going backwards from the main clause to the *if/when*-clause: **When a cat $_i$ spots it $_j$, it $_i$ attacks a mouse $_j$* (131). Adopting Barss' (1986) chain binding, Chierchia explains this constraint in terms of Principle C violation. In the LF representation [When a cat $_i$ spots it $_j$] $_k O_k$ [it $_i$ attacks a mouse $_j$ t_k], a chain \langle [When a cat $_i$ spots it $_j$] $_k, O_k, t_k \rangle$ is formed. The pronoun it_i c-commands t_k , the tail of the chain, and by virtue of that, it_i is qualified as a potential antecedent for material contained in the chain as a whole.

Chierchia next defends 'semantic' reconstruction. It is demonstrated that some left-adjoined *if/when*-clauses do not seem to be moved out from an IP-internal position, but they display reconstruction effects. For example, the focused element in clefts is generally assumed to be base-generated, yet backward anaphora is possible (*It is if he $_i$ considers it $_j$ too difficult that a teacher $_i$ won't adopt a textbook $_j$* (154)) and a Condition C effect is observed (**It is if he $_i$ spots a ship $_j$ that it $_j$ is attacked by a pirate $_i$* (154)).

There is another set of data which are argued to support ‘semantic’ reconstruction via λ -abstraction and Dynamic Binding. Quantificational NPs display a subject/object asymmetry with respect to backward anaphora:

When he_i is tired, no student_i does well.
??When he_i is tired, I interrogate no student_i.

When quantificational NPs are inside VP, they need to be raised to bind the trace linked to an operator. Chierchia suggests that QR, being a static operation, blocks dynamic interpretation (Dynamic Blocking); hence ‘semantic’ reconstruction is not possible.

Chapter 4 first considers how dynamic semantics deals with the projection problem of presuppositions. Complex sentences do not always inherit the presuppositions of their parts. For example, in *Bill likes Mary, and John too likes her* (191), the presupposition associated with the second conjunct (‘besides John, there is someone who likes Mary’) is filtered out, since the first conjunct entails the presupposition.

Chierchia introduces a context update function (for any proposition p ; $\lambda p[c + p]$), which is a partial function from context sets to new context sets. There is a felicity condition for ϕ ; a context set c must satisfy an utterance ϕ ’s presuppositions for ϕ to be interpretable in c . Thus if the proposition p expressed by ϕ is total when restricted to c , a new context set is defined as intersection of the original context set c and p ; otherwise, it is undefined (202). CCPs are then redefined as lifted updates since they map an input context c into all properties of the new context resulting from the utterance ϕ in c , and in a sense they show relations between a context set c and its possible continuations. For any update function A (of type $\langle c, c \rangle$), $\uparrow A$ is defined as $\lambda c \lambda P[\vee P(A(c))]$, where P is of type $\langle s, \langle c, t \rangle \rangle$ (204). Logic of CCPs is then redefined (206–208) to deal with both anaphora and presupposition:

- (i) $\beta \wedge \gamma = \lambda c \lambda P[\beta(\wedge \lambda c'[\gamma(c')(P)])]$ (ii) $\neg \beta = \uparrow \lambda c[c + \neg \downarrow \beta(c)]$
- (iii) $\beta \vee \gamma = \uparrow \lambda c[\downarrow(\neg \beta \supset \gamma)(c) \vee \downarrow(\neg \gamma \supset \beta)(c)]$
- (iv) $\beta \supset \gamma = \neg[\beta \wedge \neg \gamma]$ (v) $\exists x \beta = \lambda c \lambda P \exists x[\beta(c)(P)]$
- (vi) $\forall x \beta = \neg \exists x \neg \beta$ (for any CCP β , $\downarrow \beta = \lambda c \lambda w[\beta(c) (\wedge \lambda a[a(w)])]$).

For example, the definition of negation uses \downarrow , by which we retrieve update functions from CCPs; thus quantifiers in the scope of \downarrow do not anymore bind pronouns in the subsequent discourse. When $\neg \beta$ is computed in a context set c , we evaluate the value of β first. Consequently, $\neg \beta$ inherits presuppositions of β . Implication is internally open, but externally closed, due to the first \neg , and has the same projection pattern as conjunction since negation passes up presuppositions; it inherits presuppositions of both clauses except those in the consequent entailed by the antecedent since we process the antecedent first, then the consequent.

In Chapter 4, Chierchia also proposes that definites are (partial) functions from properties and possibly ‘context supplied parameters’ into the unique object. Chierchia accounts for the ungrammaticality of the sentence below in terms of Weak Crossover: (Every young author will have a new book at the fair) **The book_jⁱ will make every author_i rich* (cf. $\lambda u[\text{author}(x,u) \wedge \text{book}(u)]$) (226).

In the rest of this review, I would like to discuss several issues. First, Chapter 3 discusses two instances of backward dependencies across islands: *if/when*-clauses adjoined to questions (*When it_i is hungry, how dangerous is a tiger_i?* (154)) and *if-then* clauses (*If it_i is hungry, then a cat_i meows* (154)), in which *then* introduces a barrier for extraction. Cinque (1990) discusses a type of constructions (Clitic Left Dislocation), which shows both unbounded dependencies and reconstruction effects. Chierchia suggests that an A-bar bound *pro* such as a clitic is involved in *if/when*-clauses with questions, but as for *if-then* clauses, he proposes an analysis in which *then*, but not an operator, connects an *if*-clause and an IP-internal position. There is a C⁰ head with conditional features CN, which requires an *if*-clause in SPEC CP. *Then* moves via head-movement to give ‘overt’ morphological support for C[+CN]. Thus there is no violation across islands in [_{CP} *if it_i is hungry then_k* [_{IP} *a cat_i meows t_k*]]. Chierchia rejects an idea that there is a null version of *then*, which obviously does not overtly support C[+CN] (besides, there are some data to disfavor such an analysis). However, this leaves us a question as to when we have C[+CN] and when we do not. It seems natural to assume that *then* has a feature to be matched, but Chierchia does not take this position probably because *then* can be used independently of *if*-clauses (*Mary walked in. John then walked out* (58)).

Second, Chapter 3 observes that a quantificational NP in the object position of the consequent cannot bind backward pronouns. VP-internal indefinites, however, do bind such pronouns: *If it_i is well done, I always enjoy a spaghetti western_i* (176). Chierchia explains that indefinites are moved into a position c-commanding a Q-adverb, to be included in the restriction. This movement is not for scoping, but for \exists -Disclosure, so Dynamic Blocking is not applicable. Now consider the sentence: *If he_i considers it_j too difficult, a teacher_i won't adopt a textbook_j* (130). Both indefinites are linked to pronouns in the *if*-clause and thus according to Chierchia, *a textbook* is selected as a topic and raised to an IP-adjunct position. Since *a textbook* is selected as topic, we do not expect the subject asymmetric reading, which does not seem to be true.

My third comment concerns differences in the definition of logical operators in Chapter 4 from that in Chapter 2. Chierchia admits in footnote 11 that the implication defined in Chapter 4 derives \forall -readings of donkey sentences with the definition of the universal quantifier. We have seen that this definition is carefully avoided in Chapter 2. Thus we see some inconsistency (it should be noted though that natural language determiners

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are possibly analyzed as relations between dynamic properties and given a definition, independently of the definition of implication (97–99)). At first sight, the original definition, $\neg\beta \vee [\beta \triangle \gamma]$, could give the right projection pattern; consider that disjunction inherits the presupposition of both disjuncts except in the case in which the negation of one of them entails the presupposition of the other (192). However, we face with a problem when we (re)define disjunction to account for its projection pattern. Chierchia uses the definition of implication to define disjunction, so when we keep the definition of implication in Chapter 2, we get circular definitions.

As a final remark, *Dynamics of meaning* should prove invaluable to researchers and advanced students in the field of linguistics. It offers an excellent introduction to the dynamic approach to natural language semantics. Furthermore, it contributes to the most current research in the dynamic framework, not only by presenting an elegant and sophisticated dynamic theory, but by showing its application to a great variety of linguistic data, including examples newly discovered.

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David Crystal, *The Cambridge encyclopedia of the English language*. Cambridge: Cambridge University Press, 1995. Pp. vii + 489.

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This magnificent book (henceforth *CEEL*) is organised in six parts: The history of English, English vocabulary, English grammar, Spoken and written English, Using English (which is on discourse and varieties), and Learning about English (the slightly forced yoking of acquisition and modern computer studies). Within each part are chapters, twenty-four in all, whose basic unit of organisation is the double-page spread. The typical opening, 43 × 27.5 cm., starts with some introductory text in wide columns, around which are scattered pictures, charts and text boxes of variable width,

many in colour or at least printed on a coloured background. The boxes often take up most of the space. The paper is glossy, and no opening is wholly monochrome. Each double-page spread, chapter and part is claimed to be coherent and self-contained, and readers are explicitly encouraged to dip in where they wish (vi). All parts and chapters begin on left-hand pages; there is therefore no page 1. With some bookish conventions jettisoned in favour of modern (typo)graphic art, the casual effect is not unlike browsing through a computer encyclopedia aimed at children. (Are there plans to turn *CEEL* into a CD-ROM one day?) We are told that sentences never cross a turn-over page (259–260 must fall outside the scope of that *never*), while one uncompleted main-text sentence about Vulgar Latin fails even to cross the central reservation of its opening (8–9), but this is a rare slip in a generally careful production.

Now *Journal of Linguistics* doesn't usually review coffee-table books. What impresses about *CEEL* is that it is so much more. It is certainly not aimed at children. For most topics Crystal's account is lucid, often explicitly based on scholarly authorities, quite detailed (albeit selective), and reliable. A professional anglicist or linguist can read it conventionally from start to finish – I did – and learn a lot, and it can safely be recommended to people outside the field. Indeed undergraduates who stumble across it may well be tempted not to bother with more conventional reference works on, say, the history or varieties of English. Only when the subject-matter is apparently thought to be off-puttingly technical (syntax above all) does Crystal hold back and fob the reader off. A good example from early Modern English is the generous treatment of T–V pronouns, with five blocks of text on *thou* vs. *you*, as against one insubstantial and unsatisfactory column on auxiliary *do* (70–71).

Noteworthy items include an attractively presented map of Scandinavian parish names (25), the difficult etymology of *she* (43), a discussion of the Inkhorn Controversy (61), a useful estimate of L1 and L2 speakers of English worldwide (109), collocations involving *line* (161), a generous discussion of letterforms and the alphabet (256–267), a table of British-American lexical differences with a nifty notation for overlapping usage (309). Much in the last two parts of the book is fresh and interesting.

Small pleasures for me include a photo of Otto Jespersen (195), subtle usage differences among the greetings *good morning*, *good afternoon*, *good evening* and *good night* (286), some spelling novelties like British *renegue*, US *largess* (307), the transatlantic difference in phraseology of *in (the) hospital* (311). I was surprised at the antiquity of *wireless* (185) and *OK* (in a poem, 273), that *boner* could mean 'blunder' (131), and that *aurochs* allegedly has the plural *aurochsen* (200). And I enjoyed the dry humour of several entries.

There are, naturally, things to quibble about. A novice might be confused by a family tree of Germanic which is schematically arranged according to (rough) geographical dispersion for daughter languages, but non-geo-

graphically for Indo-European sisters (6). Though it is instructive to see foreign loan words distributed around a map of the world (126–127), it is probably an anachronism as far as English is concerned to place the Hebrew loan *bar mitzvah* on the modern state of Israel. The text beside the map says that borrowing of foreign words ‘began soon after the Anglo-Saxons arrived’. Up to a point, Lord Copper: the continental ancestors of English had already absorbed such loanwords as *hemp* and *wine*. And à propos, a discussion of wine vocabulary based on a popular introduction to wines (157) should perhaps also have mentioned the linguistic work of Lehrer (e.g. 1975, 1992).

There is some uncertainty about the level appropriate to the audience, for example in decisions about the representation and terminology of sounds. Thus when the rules of plural allomorphy are discussed, speech gets an admirable use of the IPA (200), but writing gets short shrift: ‘The ending is *-es* if there is no silent *-e*, and the noun ends in *-s*, *-z*, *-x*, *-ch*, and *-sh* (all sibilants)’. This is at best compressed, at worst a muddling of the two media. Much earlier we had read of an Old English form ‘*Englisc* (the *sc* spelling representing the sound *sh*)’ (7), which is unashamedly non-technical, and ‘What was it that made 7th-century Anglo-Saxons start pronouncing their vowels more towards the front of their mouths?’ (19), which is bad phonetics. A discussion of Modern English dialects based on work by Trudgill ‘gives an impressionistic transcription using normal spelling conventions’ (324). Punctuation marks intrude in an IPA transcription of part of *Macbeth* (69); they are taken over from Gimson but are quite inappropriate here, since Crystal gives the (modernised) original too. Space sometimes permits dual levels, as in a discussion of letter values (260):

After the Norman Conquest, *g* is found as both a ‘hard’ sound, the velar plosive (*go*), and a ‘soft sound’ (the affricate /*ç*/, used before *e*, *i* and *y*, as in *age*, *gin*, *gym*).

This seems to me a helpful compromise. Another acceptable compromise is to include without comment in a table of consonants all sorts of phonetic and phonemic variation among dialects, though with square and slant brackets carefully distinguished (244–245). Incidentally, *path* doesn’t always form its plural by change of /-θ/ to /-ð/ plus addition of /z/ (200), since some northern British varieties allow /*pæθs*/, cf. alternative plurals of *truth*.

Turning to other historical matters, the claim that the letter *k* ‘is not found in Old English’ (261) is refuted by *kyning* in an Alfredian passage quoted on p. 13. True, *k* was much rarer than *c*. In *Beowulf*, for instance, there are three instances of the spelling *kyning* to perhaps twenty-six of *cyning*. A discussion of early pronouns is confusing, with glosses for OE genitives sometimes given as disjunctive (‘yours’) and sometimes not (‘our’), and the gloss ‘hers’ applied to both the genitive and dative *hire* (21). Meanwhile what is called

‘the old accusative form’ retained in Middle English (44) – *him* and *her*, etc. – is in fact the dative. It is misleading to argue that ‘[t]he use of a suffix to mark the infinitive was lost after the Old English period, and the particle *to* came to be used instead’ (21), firstly because reduced forms of suffix survived into many varieties of Middle English, secondly because Crystal’s ‘instead’ falsely implies a causal relationship. There is no mention of what Tolkien called *AB Language*, so important in the textual, orthographical and morphological history of Middle English, presumably because of its limited importance in later history. A discussion of classical etymologising in Elizabethan English (72) gives only two examples, the *s* added to *island* and the *c* to *scissors*, without pointing out that both – unlike some other respellings of the time – actually depended on false etymologies. A discussion of eighteenth-century spelling regularisation (67) refers only to print, without mentioning that the private manuscript writings of educated people did not regularly conform to the spelling practices of printers until much later; see, for example, Strang (1967), Osselton (1984). And it is plainly untrue that long *s* was always syllable-initial (263): see, for instance, the facsimiles on pp. 72 and 75. As for the # symbol, incidentally, I believe that some Americans refer to it as ‘pound’ rather than ‘hash’ (311).

As a syntactician I am disappointed that certain matters pass by without comment. An unrevealing statement that ‘the normal order of clause elements is reversed ... (verb before subject)’ (39) is all we are told about two clear examples of verb-seconding in Chaucer. In fact the only word order principle mentioned for Middle English – and indeed Old English – is SVO, with outdated and unsatisfactory work by Palmatier (1969) the only scholarly reference (44). Caxton’s curious *ded do shewe* ‘did do show’ (57) is not remarked on. Impersonal verbs would have been better discussed under Old or Middle English: they were not in fact ‘commonplace’ in Renaissance English (70), apart from the no longer productive *me thinks*. Irish *He is gone up* (338) could usefully have been related not just to French usage but to the *be* perfect of earlier English. Variation between perfect auxiliaries had already been noted in *The Canterbury Tales*, after all – though the point had been muffed by misglossing *ben entred* as ‘been entered’ rather than ‘are entered’ (45).

On Modern English, we have some uncertainty of morphosyntactic analysis. Regular verbs ‘appear in four forms’ (204), where ‘base form’ is said to be synonymous with ‘infinitive form’, and ‘general present’ gets no mention (though later ‘base form’ appears to cover finite uses too, p. 212), while ‘-ed form’ covers both ‘past form’ and ‘-ed participle form’. What does ‘form’ mean in all this? And if ‘[t]he irregular forms are the surviving members of the highly developed system of “strong” verb classes found in Old English’, it is unfortunate that many of the examples given in the adjacent box, including the first three (*met*, *took*, *cut*), are either post-Old English, or originally weak verbs, or both.

The verb definitions are unsatisfactory. Lexical and modal verbs are distinguished in notional terms (212), and ‘primary’ verbs (*be, have, do*) can function as either. Then morphosyntactic properties are taken as criterial for the class of auxiliary verbs, including claims such as that negative contraction ‘is never possible with main verbs’, which leaves main verb *be* and sometimes *have* unaccounted for. To say that ‘[t]he primary verbs have nonfinite forms’ is less informative than it might be in relation, say, to auxiliary *do*. Among a ‘complete’ list of eleven inflectional suffixes are contracted negative *n’t*; contracted verbs, e.g. *’re*; and objective pronoun, e.g. *him* (198). It seems to me that the first is right but deserving of discussion, the third at best badly expressed, but the second is absurd: in what sense can a contracted verb be an inflectional ending on a (pro)noun?

A criticism of the traditional definitions of word classes sows unnecessary confusion by discussing *the very man* and *slovenly me* as problems for the adverb class (206). The first elements of *garden party* (211), *currant buns* (222), *cardboard box* (223) are surely premodifying nouns, and Crystal confuses the issue by discussing adjectival properties. An analysis of the grammatical relations involved in compounds (220) begs many questions, perhaps because of space limitations: *living-room* is analysed as Verb + adverbial, *oil well* as Subject + object, *birdcage* as Subject + complement, and so on. Overall the syntactic analysis is generally that of Quirk et al. (1985), so that clause functions are the familiar, sub-Hallidayan SVOCA. This means inter alia that Indirect object is defined in notional terms and can cover a *to*-PP.

Much thought has clearly gone into the selection of information to present, and text and figures are often models of clarity and economy. One small exception is in a table which purports to show that antonyms occur together more often than chance would predict (165). To prove this unsurprising result it is more than sufficient to show, for example, that *high* occurs 11016 times in some corpus, *low* 4195, and both together 293 times as against an expected figure of 30.1, without adding a column to show that the probability of this ratio of observed to expected co-occurrences is 1.14×10^{-182} , a truly meaningless statistic.

Where opinion is expressed it is wry but mild. Nothing controversial is said about South Africa (100), say, or Canada (340–343). Political judgements are no stronger than a phrase like ‘the legacy of British or American imperialism’ (106). The PC reaction against the term *black* in the U.S.A. is mentioned (97, 177), though *black* is used unselfconsciously in a South African context (100). A judicious discussion of a vexed issue ends with the summary that ‘[a]rguments which involve issues of political correctness always are [bitter and long-running]’ (177).

There is a normal scholarly bibliography and a glossary of linguistic terms. Indexing is good, with separate lists for linguistic items, people, and topics. Cross-referencing is patchy. For example, it is stated (108) that English is not

defined legally as an official national language in either the U.K. or U.S.A., with a cross-reference to p. 107 but not to highly relevant discussion of the English Language Amendment (115). An erroneous cross-reference on p. 122 is to itself rather than to p. 208. A discussion of the pragmatics of conversation (420) has no explicit references to scholarly work, though a section on Further Reading (468) gives suggestions. A mention of *graphology* in its everyday sense (394) cross-refers inexplicably to where a different, technical sense of the word is introduced (257).

Stylistically *CEEL* belongs to the popular science genre, and Crystal writes clearly and pleasingly most of the time. The level is not unlike that of McArthur's compilation (1992), but the approach is thematic rather than alphabetical and the presentation vastly different. *CEEL* is in part a more specialised and colourful development of the approach pioneered in Crystal (1987). Sometimes the tone becomes rather chatty, occasionally even allowing small quizzes for the reader (eg 120–122). We must put up with the non-British 'Heseltine protested the cancellation' (379) and even the waffly phrase 'set new parameters for research in poetics' (438) – that increasingly common use of *parameter* which is neither technically precise nor useful plain English. It is astonishing, though, that while *scoring formulae* was appearing in the inside column of a page on sports commentary, the barbaric *formuli* could race past on the outside (387). A dozen or so other misprints and typos, none of them serious, is not excessive for a book of this size and complexity.

There are, then, errors of fact or analysis and inconsistencies of presentation when you look closely. (My misgivings naturally concentrate on my own specialism, the history and syntax of English.) Most deficiencies could be rectified quite easily in a revised printing, a worthwhile effort for a book which will surely sell in large numbers. On balance I stick with my initial judgement. This is a most impressive production.

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Roman Jakobson: essays on the occasion of his seventieth birthday, 11 October 1966, vol 3. (Janua Linguarum series maior 31.) The Hague: Mouton, 1947–1959.

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Martin Haspelmath & Ekkehard König (eds.), *Converbs in cross-linguistic perspective. Structure and meaning of adverbial verb forms – adverbial participles, gerunds* (Empirical Approaches to Language Typology; **13**). Berlin & New York: Mouton de Gruyter, 1995. Pp. x + 565.

Reviewed by DAVIDE RICCA, University of Turin

As the editors state in the preface, this is the first major attempt to characterize a class of adverbial subordinate constructions, the ‘converbs’ (also called ‘adverbial participles’, ‘conjunctive participles’ or ‘gerunds’ in the literature: a useful terminological discussion is included in Haspelmath’s introductory chapter) from a cross-linguistic point of view. Very little, therefore, could be taken for granted, and the book had to face the double task of trying to make generalizations in a little-explored field and provide a wide database for further research. This double task is reflected in the structure of the book, which can be easily split in two parts. The first four contributions are inherently cross-linguistic; the following ten, on the other hand, are cross-linguistic only cumulatively, as each of them tackles the description of converb-like constructions in a single language (with the exception of Johanson’s chapter dealing with the whole Turkic family).

It is obviously impossible to give an account of all the material found in this book. Therefore, it has been necessary to focus on the general approaches found in the first part, referring later to the descriptive one-language contributions only cursorily.

Among the four general contributions, V. Nedjalkov’s chapter, the original Russian version of which was published in 1990, represents one of the first typological works on converbs. It is a clear example of the Russian typological approach, more interested in the sometimes minute organization of data than in looking for correlations or explanatory principles. The starting definition of a converb is ‘a verb form which depends syntactically on another verb form, but is not its syntactic actant’. Converbs are classified according to several independent dimensions: two of them are most often taken into account in the other chapters, namely the semantic and the referential properties. Semantically, V. Nedjalkov suggests a tripartite classification: (i) specialized converbs with stable and well defined meaning

(for example, concession, comparison, purpose, temporal posteriority, etc.); (ii) contextual converbs, with a wide semantic spectrum to be specified by various factors depending on the given utterance; (iii) narrative converbs, which express a succession of events with no explicit semantic link, tend to occur in sequences of two and more, and fulfil a function similar to coordinate structures in familiar European languages, thus exhibiting the highest textual frequencies in the languages which have them. This tripartition is substantially accepted throughout the volume, although Bisang (156) casts some doubt about the possibility of keeping contextual and specialized converbs really separate.

Under the referential properties, a different tripartition is proposed, namely 'same-subject', 'different-subject' and 'varying-subject' converbs, depending on whether they require, exclude or freely allow their subject (overtly expressed or not) to be coreferential with the subject of the main verb. According to V. Nedjalkov, in same-subject converbs the subject is most often left implicit, since its identity with the subject of the main verb makes it immediately recoverable. Judging from the descriptive chapters of the book, however, this picture seems rather oversimplified: many alleged same-subject converbs in fact allow their implicit subject to be coreferential with constituents other than the syntactic subject of the main verb. We will come back to this topic below.

The other general chapter by Haspelmath shares V. Nedjalkov's goals, but only partially his defining categories. Haspelmath starts with an intuitively satisfactory definition: a converb is 'a nonfinite verb form whose main function is to mark adverbial subordination' (3). This is similar to Nedjalkov's, but mentions finiteness as a defining criterion and puts more stress on the functional role of converbs, which beautifully completes the paradigm with 'verbal adverbs' alongside 'verbal adjectives' (i.e. participles) and verbal nouns. Haspelmath himself, however, constructively criticizes three crucial terms in his definition, namely adverbiality, finiteness and subordination. One difficulty with the notion of adverbiality is that it seems to rule out narrative converbs. Another thorny point is related to the critical status of the (co)-predicative adjectives (like *drunk* in *John came home drunk*: are they adverbial or adjectival modifiers?): a clear parallel is found in the participle-converb domain with the so-called 'participia coniuncta' of the classical languages and their equivalents in many modern European languages. These forms behave functionally much like converbs, but formally they coincide with participles used as nominal modifiers and often show agreement features, again typical of nominal modification. Haspelmath does not take an explicit stand on the possible converbal status of these forms, even if he seems to give high diagnostic significance to the absence vs. presence of agreement (19). This makes him depart from Nedjalkov's approach and is somehow surprising considering the functional orientation of both his chapter and the whole book.

Still more critical is the interplay of the notions of subordination and finiteness. The two terms are defined independently: subordinate clauses are viewed as syntactically embedded (several criteria are given and clearly discussed and illustrated), while nonfinite verb forms are defined in terms of morphological marking, as exhibiting neither tense-aspect-mood inflection nor person-number agreement with their arguments. Haspelmath is well aware of the fact that many verb forms do not conform to one of the two poles of finiteness/non-finiteness, but is probably a little optimistic in thinking that they can still be ordered on one single linear scale (5): it is not easy to see how person-number agreement and tense-aspect inflection could be placed on the same scale, since forms exist which show only the former (like the Portuguese 'personal infinitive', mentioned by him) or only the latter (this is the case of participles and infinitives in Ancient Greek). Indeed, the traditional notion of finiteness, unsatisfactory as it may be, took only person-number inflection as criterial.

A third distinction, beyond finiteness and subordination, is needed to distinguish converbs from medial verbs, common in New Guinea: this is the criterion of dependency, defined as the impossibility of a verb form occurring alone in isolated sentences. This is not meant to be coextensive with subordination: medial verbs are dependent, but not subordinate (that is, syntactically embedded). Haspelmath thus comes (29) to an interesting typology of verb forms built on three nested dichotomies: (i) independent (e.g. indicatives) vs. dependent verb forms; (ii) within dependent, non-subordinate (e.g. medial verbs) vs. subordinate; (iii) within subordinate, finite (e.g. subjunctives) vs. non-finite (converbs). The less convincing part of the picture is the nesting of the last dichotomy. With Haspelmath's definition of finiteness, I see no grounds for limiting non-finiteness to subordinate verb forms: for instance, the English Past or the Danish Present, with no person-number inflection whatsoever, should rank rather low on the finiteness scale.

The distinction between converbs and serial verbs (typical of languages like Chinese or Yoruba) is the main concern of Bisang's chapter. He sees both strategies as functionally very similar, with a substantially complementary areal distribution. The difference between the two constructions is a matter of symmetry vs. asymmetry: in a serial sequence all verbs are on the same plane, while the converbal strategy is inherently asymmetrical, requiring the existence of verb forms with reduced inflection (note that in this approach medial verbs could not really be distinguished from converbs).

The main questions about converb semantics are dealt with in König's chapter. Relying mostly on data from European languages, König agrees with V. Nedjalkov's basic semantic classification and focuses on contextual converbs, semantically the most problematic. He convincingly argues that contextual converbs display vagueness of meaning rather than polysemy. He then examines the main semantic labels which can be distinguished among circumstantial relations, aiming at relating many of them within a single

semantic network, by means of shared and distinguishing features. He also argues tentatively that most semantic relations in the domain could be hierarchically ordered in terms of ‘complexity’ or ‘degree of informativeness’ and suggests possible correlations with other ordering criteria (e.g. availability of interrogative words like *when*, *how*, *why*, in many languages limited to the ‘simplest’ relations, and preferred direction of semantic change – arguably from the ‘simpler’ to the ‘more complex’ meanings only). Finally, some factors regulating the interpretation of a contextual converb are discussed: (i) constituent order (basically reducing to principles of syntactic iconicity); (ii) semantic specification via connectives or focus particles (e.g. in English *even* selects a concessive or concessive conditional interpretation of the following *-ing* form, and so does – before the *gerundio* – Italian *pur* ‘even’, incorrectly glossed here as a conjunction, ‘although’); (iii) tense-aspect-modality of the main clause, especially when related with the factual/non-factual opposition; (iv) Aktionsart properties of the converbal predicate; (v) last but not least, world knowledge. Much attention is paid to focusability problems, an issue taken into account in several specific contributions as well.

The ten chapters on single languages give a wide picture of the field from many points of view. Author coverage includes four representatives of Russian typological scholarship as well as Western language specialists and typologists. Language coverage goes from well-known European languages, whose converb inventory reduces to one or two contextual forms (Kortmann on English, Weiss on Russian, de Groot on Hungarian) to representatives of several language families of Central and Northeast Asia typically displaying large inventories of specialized converbs (I. Nedjalkov on Evenki, Tikkanen on Burushaski, Haspelmath on Lezgian, Alpatov & Podlesskaya on Japanese). The Turkic family is particularly well represented, with a general chapter by Johanson (the only one with a partially diachronic orientation) and two contributions on single languages (Bergelson & Kibrik on Tuva and Slobin on Turkish). The South Asian area is not represented, but extensive information on Tamil can be found in Bisang’s chapter and comparisons with South Asian languages are frequent in Tikkanen’s chapter. It makes little sense to list gaps, as an exhaustive or balanced coverage was obviously neither feasible nor intended. At any rate, those interested in widening their database have the chance (really rare in works of this kind) to resort to the rich bibliography by Haspelmath, ordered by both authors and languages.

An issue extensively treated in nearly all chapters is the fascinating problem of which kind of constituents, other than the subject of the main clause, can control the implicit subject of a converb. As for Europe, English and Russian are both particularly interesting in this respect, since the former is considered among the most ‘subject-prominent’ languages, and the latter has a strong normative tradition aimed at ruling out non-subject control. However, both Weiss’s and Kortmann’s data show that non-subject

controllers are far from non-existent, and the strategies to determine the controller reflect a complex interplay of semantic selectional restrictions, pragmatic informational status and world knowledge. Data presented in Haspelmath's introductory chapter from several other European languages confirm this picture: while ruling out the all-syntax reductionist approach to the question, they leave the possibility open for the opposite all-pragmatics reductionism (36).

In languages of Central Asia with larger converb inventories, the importance of syntactic control seems to change radically from language to language. At one end, Lezgian shows the lowest level of syntactic restrictions. A fair amount of non-subject control is reported for Burushaski as well (in Burushaski, despite the ergative dependent marking, a syntactic subject can be defined, since it is head-marked on the verb). On the other hand, I. Nedjalkov for Evenki and Bergelson & Kibrik for Tuva state that the deviations from syntactic control in these languages are minimal. The whole chapter by Bergelson & Kibrik is indeed about switch-reference in Tuva, whose two narrative converbs apparently differ only in being strictly same-subject and different-subject forms. It has to be said, however, that Johanson also mentions Tuva and is more skeptical about its switch-reference mechanism. He proposes an intriguing alternative analysis (331): when a language possesses two narrative converbs, they can be used as a 'hiatus' device, that is, with one marking closer and the other looser connections within the event chain. The switch-reference effect could then be just a secondary correlate, as most breaks in the narrative chain will usually coincide with a change in the first actant.

The narrative organization of discourse in Turkic languages plays a role also in Slobin's analysis, which at the same time introduces an entirely different perspective, namely acquisition. One of the main four converbs in Turkish, *-erek*, is definitely acquired later than the other three: Slobin relates this to its supposedly greater semantic complexity, due both to its contextual character and to the fact that it does not describe a succession of two events, as *-ip* does, but rather depicts the two situations as parts of one event, and therefore undergoes more complex restrictions on the predicates it can link. Speculative as this line of reasoning may appear, it is nevertheless promising in suggesting acquisition data as further, qualitatively different, empirical evidence for corroborating statements about 'simpler' and 'more complex' semantics of circumstantial relations, such as those put forward by König.

Many other common topics and intriguing features of single languages deserve a mention which space constraints cannot allow: e.g. Kortmann's results about a significant difference in meaning distribution between English free adjuncts and absolutes, which would be interesting to verify in other languages with varying-subject converbs; or the features of Hungarian *-va/-ve* form, which set it rather apart from the typical West-European converb (above all, its limited semantic spectrum and its double active/passive

orientation); or the complex position of the two Japanese contextual converbs *-i* and *-te* along the coordination-subordination scale. A lot of information, scattered among different chapters, can also be found on the further grammaticalization paths of converbs (especially adpositions, subordinating conjunctions and periphrastic conjugations).

Among the editors' merits one has to mention the substantial terminological uniformity of the book (perhaps only Johanson's chapter makes use of rather unfamiliar terminology about aspect), as well as the uniformity in glossing criteria, with useful abbreviation lists at the end of each chapter. The book is very well printed, with a few minor misprints; a pity that its high price risks reducing its appeal for most individual researchers, and probably several university libraries as well.

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John A. Hawkins, *A performance theory of order and constituency*. Cambridge: Cambridge University Press, 1994. Pp. xx + 496.

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The thesis of *A performance theory of order and constituency* is that processing constraints do have an impact on the grammar. Hawkins explores this thesis by paying particular attention to word order and constituent structure, showing that many rules, constraints, and properties of the grammar in this realm are best captured through processing explanations. How does processing impact the grammar? Certain structures may be more difficult or complex from a processing viewpoint, and therefore grammars may incorporate rules, constraints, and/or principles which avoid these types of structures. Hawkins argues that the best place to look for processing explanations in the grammar is in universals that are implicational or distributional rather than all or none, and he shows that these types of universals correlate well with performance data that reflects processing ease.

Chapter 1 presents an introduction to Hawkins' approach, laying out his theoretical assumptions and reviewing previous work on the processing/grammar relationship. Chapter 2 gives an overview of how the processing constraints may be revealed in the grammar, and develops a theory of structural complexity that is applied to, among other areas, a performance explanation for Keenan & Comrie's (1977) Accessibility Hierarchy. The core of the book, Chapters 3–5, centers around a processing explanation for word

order. Chapter 3 sets out Hawkins' notion of Early Immediate Constituents (EIC), in which the parser prefers orders that will quickly establish what the immediate constituents of a given phrase are, and exemplifies the predictions that the EIC makes with respect to performance and grammar. It also presents previous theories of word order, both formal and functional. Chapter 4 tests the performance predictions for the EIC, while Chapter 5 tests the grammatical predictions. Both these chapters look at an impressively large range of different orderings for the constituents within a phrase and give data from a number of different languages (English, Hungarian, Rumanian, Turkish, Japanese, Korean, Finnish, Greek). Chapter 6 looks further at how structure is constructed, giving a number of different principles for node construction. The last chapter gives a summary of the book and presents further implications.

Since this book considers a wide range of constructions, let me only highlight how some of the principles are applied. The core of the book centers around word order, and Hawkins' claim is that it is complexity which will determine order, both in performance and in the grammar. An important determinant of word order is the Constituent Recognition Domain for a certain mother node.

Constituent Recognition Domain (CRD)

A CRD for a mother node *M* consists of the terminal and non terminal nodes that must be parsed in order to recognize *M* and all immediate constituents (IC)s of *M*, proceeding from the terminal node that constructs the first IC on the left, to the terminal node that constructs that last IC on the right, including all intervening terminal nodes and the non terminal nodes that they construct. (58–59)

It should be noted that only certain terminal nodes will be able to construct their mother nodes. For example, a noun or determiner will be able to construct an NP, a verb a VP, etc., but a noun will not be able to construct a PP. These nodes are important in determining CRDs not only because they construct the *M* that the CRD is defined for, but they will also construct the nodes that are the ICs for *M*. (This principle of Mother Node Construction is further discussed in Chapter 6.)

Different orderings will give domains of different sizes. CRD sizes are calculated on the basis of IC to non IC ratios, giving the following principle of early immediate constituents:

Early Immediate Constituents (EIC): The human parser prefers linear orders that maximize the IC to non IC ratios of constituent recognition domains. (77)

For example, in terms of performance, in general the EIC predicts that if a number of different orders are allowed, those orders that have high IC/non-IC ratios will be preferred, or if there is a performance based rearrangement

of the basic order for a particular phrase, the rearrangement will improve the EIC ratio. Heavy NP Shift in English is an example of the latter, in which an NP that should be adjacent to the verb is postposed to the right of a PP when the NP is particularly large:

- (1) I gave a large book filled with pages to Lisa.
- (2) I gave to Lisa a large book filled with pages.

The CRD for the VP is larger in (1) than in (2) because it spans all the structure starting from *gave*, which constructs VP and V (the mother node and its first IC) to the preposition *to*, which constructs the PP (the last IC of VP). On the other hand, the CRD for the VP in (2) spans the structure from *gave* to the article *a*, which constructs the last IC of the VP, with most of the material that the NP dominates excluded from the CRD by definition. Thus, the EIC predicts that when the NP exceeds the PP, the NP should order to the right of the PP. Hawkins shows on the basis of textual frequency counts that when an NP exceeds a PP by at least 4 words, the preferred position for the NP will be to the right of the PP; the preference for the NP PP order when the length of an NP exceeds that of a PP by 1–3 words despite the lower CRD for the rearranged order is taken to be indicative of a grammaticized basic order for the VP.

In terms of the EIC grammatical predictions, in general, the basic word orders for a particular language will be those that have the best IC/non-IC ratios, or when there is a grammaticized rearrangement of word order, that rearrangement will increase the EIC ratio over that given by the basic order. The EIC explains the familiar ‘headedness’ parameter whereby most major categories within a language tend to be either ‘head initial’ or ‘head final’, because these types of orders will give the best EIC ratios. In the two orders $[_{VP} Y[_{ZP} Z XP]]$ $[_{VP}[_{ZP} XP Z] Y]$, the CRD for each will only span the structure starting and ending with the two head positions (Y and Z). Note that the initial XP in a head final language will not count as part of the CRD, given the above definition of a CRD, since this category does not construct the first IC of YP; it is only when Z is reached that the first IC of YP is created. Languages which deviate from this pattern are predicted to be less frequent since their CRDs will be less optimal; the CRD for the non optimal $[_{VP} Y[_{ZP} XP Z]]$ will span the entire structure from Y to Z, including XP. Hawkins shows that these predictions are substantiated in cross linguistic surveys of word order from Hawkins (1983) and Dryer (1992) which look at the grammaticized orders for $\{_{VP} V \{_{PP} P NP\}\}$. Those languages with $[_{VP} V[_{PP} P NP]]$ and $[_{VP}[_{PP} NP P] V]$ are most frequent, with $[_{VP} V[_{PP} NP P]]$ and $[_{VP}[_{PP} P NP] V]$ less frequent. The EIC also predicts that of the last two non optimal orders, the former should appear more frequently than the latter since its EIC ratio in this case is better, and this also turns out to be the case.

The above can only give a small taste of how Hawkins develops his thesis, since as mentioned above the entire book considers a much larger range of

languages and different structures and word orders. And, thankfully, the core of the book (Chapters 3–5), which introduces the EIC and tests this principle by calculating EIC ratios, textual frequency percentages and typological distribution percentages for a whole host of different orderings and rearrangements under different possible structural analyses, is remarkably clear and readable; it would have been easy to get bogged down in the numbers and discussion of alternative calculations here. Since this part of the book dealing with the EIC presents such a clear, unified and detailed whole, and represents the majority of the discussion, the other two chapters besides the introduction and conclusion (Chapters 2 and 6), do not feel as well integrated into the book as they ought to, although they clearly are related to developing Hawkins' overall thesis.

While Hawkins does an excellent job in developing and supporting his EIC principle by looking at such a wide range of orders and languages, showing in each case how the EIC makes the correction prediction, the performance underpinnings of this principle are much less strongly developed. The EIC essentially states that the parser prefers orders in which all the ICs of a particular mother node are recognized as quickly as possible, but it remains unclear why exactly this should be the case. Several questions come to mind here. What type of parser is being assumed here? What are the properties of this parser that make it more efficient to know as quickly as possible what the ICs of a particular phrase are? What are the problems that are encountered by the parser, when building the structure for a VP (for example) if it first parses a long NP before then recognizing that there is also a PP in this VP? Also, as Hawkins points out, the EIC would be beneficial for recognition on the hearer's part but less is said about the speaker. If certain orderings are driven by performance considerations, do speakers calculate EIC ratios on line if faced with a number of different possible ordering alternatives? Do the benefits of recognizing ICs as quickly as possible outweigh the costs to the speaker of calculating EIC ratios on line? The psycholinguistic and performance grounding of this principle needs further elaboration.

A performance account for such phenomena as Heavy NP shift and extraposition is intriguing and seems to be on the right track, but the application of the EIC to some other phenomena is less satisfying. These all center around reordering phenomena in which pronouns seem to have a restricted distribution: Particle Shift (3), Dative (4), Inversion (5).

- (3) (a) John looked the number up./John looked up the number.
- (b) John looked it up./*John looked up it.
- (4) (a) John gave a book to Bill./John gave Bill a book.
- (b) John gave it to Bill./?? John gave Bill it.
- (5) (a) A baby carriage rolled down the street./Down the street rolled a baby carriage.
- (b) It rolled down the street./*Down the street rolled it.

In these cases, it appears that the sentence is ungrammatical when a pronoun appears as the rightmost element in a sentence; since the pronoun is always a single word category, the EIC would predict that it should occur as close to the verb as possible in a head initial language like English, hence it appears that the EIC predicts this ungrammaticality. Hawkins also presents textual frequency counts which show support for an EIC explanation for the orderings of NP around a particle. However, some of this discussion is based on underlying orders or analyses that may be challenged; Particle Shift is based on Emonds' (1976) consideration of V NP Part as the basic order, but other researchers assume a different order (see, for example, Johnson (1991)). Also, the analysis of Inversion rests on the assumption that the postverbal PP is topicalized with the subject and verb then reordered, but many analyses of Inversion consider the postverbal PP to occupy the subject position and the postverbal NP to occupy its base (d-structure) position (Hoekstra & Mulder 1990, Levin & Rappaport Hovav 1995). In addition, Inversion and Dative Shift are also lexically governed, in that not all verbs allow these rearrangements; this is quite different from phenomena such as Extraposition, Heavy NP shift or the ordering of two PPs within a VP which are not subject to these types of constraints. The phenomena in (3)-(5) seem to group together in their restricted pronoun distribution, and interestingly enough there are specific semantic/pragmatic accounts for their ordering (see Diesing & Jelinek (1995) for Particle Shift, Ertshick-Shir (1979) for Dative Movement and Birner (1994) for Inversion). It would be interesting to compare how these explanations stand up to the EIC. While Hawkins does give an overall comparison of the EIC and certain global pragmatic explanations for word order (Givón's (1983, 1988) Task Urgency Theory and the 'given' before 'new' theory of the Prague School) by investigating the orderings of multiple PPs in English VPs and multiple NPs in Hungarian and German NP PP rearrangement, showing how the EIC makes better predications, it would be interesting to look at each of the above constructions separately and compare the proposed pragmatic explanations to the EIC. It may turn out that the EIC can better explain the placement of heavy NPs or the ordering of two PPs within a VP, but the proposed semantic/pragmatic explanations are better for Particle Shift, Inversion and Dative Shift.

But this latter criticism only points the way for deeper investigation and does not seriously detract from the book as a whole; this is highly stimulating and impressive work that presents a clearly articulated theory of word order supported by much cross-linguistic data. It should provide the springboard for a great deal of future research in this area.

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Christian Lehmann, *Thoughts on grammaticalization*. LINCOM Studies in Theoretical Linguistics 1. LINCOM EUROPA: Munich, 1995. Pp. xii + 192.

Reviewed by ELIZABETH CLOSS TRAUOGOTT, Stanford University

In 1982 a working paper by Christian Lehmann called ‘Thoughts on grammaticalization: a programmatic sketch, Vol. I’ was issued as Volume 48 of the *Arbeiten des Kölner Universalienprojekts*. The Cologne Working Paper series was a major contribution to the study of universals of language, but was not easy to obtain, at least in the U.S., where work on grammaticalization was beginning to burgeon. A 1985 article summarizing the main findings and hypotheses published in *Lingue e Stile* had wider circulation. But it was not until the revised reprint of the original work paper was published by LINCOM EUROPA in 1995 that Lehmann’s groundbreaking and foundational work came to be widely available. The version has been corrected and references to Lehmann’s relevant later writings have been added, in lieu of the originally planned second volume which would have extended the study from structural properties of grammaticalization (hereafter GR) to issues in semantics and language comparison (typologies and universals), as well as historical reconstruction and linguistic evolution. The reprint is extremely welcome. At the same time, as Lehmann says in the

preface to the 1995 edition, ‘this publication is slightly anachronistic’ (x). It seems anachronistic in part because it has played a major role in the development of grammaticalization theory – later works such as Heine & Reh (1984), Heine, Claudi & Hünemeyer (1991), Traugott & Heine (1991), Hopper & Traugott (1993), Pagliuca (1994) among others all owe a significant debt to it. But mainly it seems anachronistic because the field of linguistics has changed enormously since the early eighties.

The book builds on earlier work that goes back in the eighteenth century to Condillac, in the nineteenth century to Humboldt and Gabelentz, and in the twentieth to Meillet, Kuryłowicz, Jakobson, Greenberg and others, and was the first major attempt to develop a theory and methodology to account for the phenomenon characterized by Meillet (1958[1912]: 131) as *le passage d’un mot autonome au rôle d’élément grammatical* ‘the passage of an autonomous word into the role of grammatical element’, for example, the Swahili root *-taka* ‘want’ > *-ta-* ‘future marker’. Lehmann points out that GR processes involve not just lexical items (which he calls ‘lexemes’) but also morphemes and ‘whole constructions’ (viii). In this he presages the recent shift in work on GR to a focus on constructions (e.g. Bybee, Perkins & Pagliuca (1994: 4) say that the starting point of the study of GR must be ‘the observation that grammatical morphemes develop gradually out of...combinations of lexical morphemes with lexical or grammatical morphemes’; see also Pagliuca (1994: Introduction), Traugott (in press)). This shift opens up possibilities for links between GR theory and connectionism, construction grammar, head driven phrase structure grammar and other models of language which focus on recurrent and only locally differentiated patterns in language. However, Lehmann’s insight about the role of constructions in GR is not systematically followed through, and the focus is primarily on lexemes.

Of course no lexical item (or construction) is required to grammaticalize. The prediction is, however, that grammatical material will typically not become lexical. Lehmann goes so far as to deny that any ‘cogent examples of degrammaticalization have been found’ (19), that is, of more grammatical material becoming less grammatical. Like any strong theory, this is an important hypothesis because it is testable. However, the empirical evidence is that the claim cannot be as strong as Lehmann proposes (see Joseph & Janda 1994, among others, for some counterexamples).

Lehmann brings together a cross-linguistic array of evidence for GR paths (he calls them ‘channels’). These include such paths as (simplified):

- (i) for verbal categories: full verb > serial verb > aspect marker > tense marker (37),
- (ii) for first and second person pronominal categories: noun of personal or social relation > honorific pronoun > pronoun > personal agreement affix (e.g. Old Japanese *kimi* ‘lord’ > ‘you (hon.)’ > ‘thou’); or for

third person pronouns: deictic particle + noun > demonstrative > anaphoric pronoun > 3rd person pronoun > agreement marker > category marker (e.g. object marker) (55) – interesting here is the difference in the source despite the similarity in the final category,
 (iii) for nominal categories: adposition > case marker (112).

Channels like this are diagrammed along vector paths of the type (55):

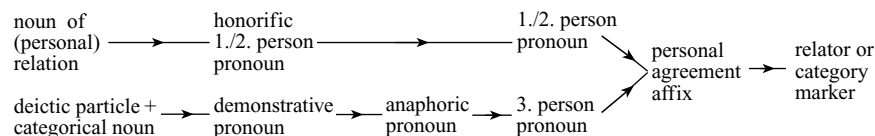


Figure 1
 Sample grammaticalization channels of pronominal elements

Such displays have become staples of GR. As cross-linguistic templates they are invaluable, since they serve as strong empirical hypotheses. For individual language studies it is important to attach not only attested examples from texts but also approximate dates, a discipline rarely practised in works on GR. Texts are occasionally cited by Lehmann, but not dates or even centuries. Recent access to computerized data bases for some languages (unfortunately mainly English and Indo-European languages) is beginning to enable us to be far more rigorous with respect to dating and data (see Rissanen, Kytö & Palander-Collin 1993).

Even with an adequate data base, a major question to be addressed for any theory of GR is what is meant by ‘grammar’. Lehmann construes it strictly as syntax, morphology and morphophonemics. He presents the following provisional model which combines several approaches to gradual change, including Givón’s (1979) GR path from discourse > syntax > morphology > morphophonemics > zero, and Zirmunskij’s (1966) cline of analyticity from isolating > analytic, etc. (13):

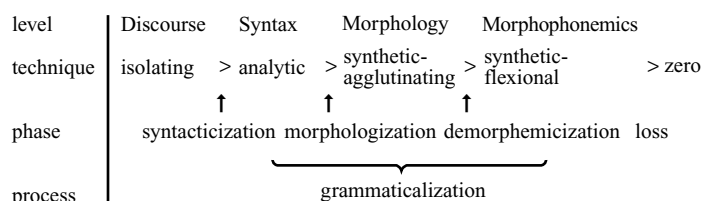


Figure 2
 The phases of grammaticalization

Lehmann follows this model with the remark: ‘Thus we assume that grammaticalization starts from a free collocation of potentially uninflected lexical words in discourse’ which is ‘converted into a syntactic construction

by syntacticization' (13), a concept directly derived from Givón (1979). One of Givón's major contributions to GR theory is his focus on discourse and pragmatics as motivating factors in change. Probably more influential than any single statement about GR other than Meillet's, Givón's proposed GR path attempted to demonstrate similarities between a variety of linguistic phenomena of disparate sorts, such as topic > subject, serial verb > case marker, demonstrative > relativizer, and also to explore possible parallels between language change and the assumption that loose, largely independent configurations give way to tighter ones in child language acquisition and the development of creoles. Since its publication, Givón's hypothesis has been challenged on several fronts (see Slobin (1994) on the lack of real parallels between child language acquisition and language change, Harris & Campbell (1995) on problems with the hypothesis of loose constructions (parataxis) giving rise to tighter ones (hypotaxis) at the clausal level).

In building on Givón's proposal, Lehmann compounds the problems with it. Indeed it is here that the book seems most anachronistic. Excluding from grammar such discourse-related syntactic structures as topic and focus constructions (structures that now have a place in any theory of syntax), Lehmann envisions stages of language use where certain words were 'subject to no syntactic rule'. He gives as an example the use of the three deictic pronouns of Archaic Latin: *hic* (1st person), *iste* (2nd person), *ille* (3rd person) (14), and goes on to claim that when *ille* began to assume anaphoric functions it began to be syntacticized (and grammaticalized). According to Lehmann it is only partially grammaticalized in Italian since the latter is a pro-drop language, as in *vende* 'he sells', but it is grammaticalized in French, which requires a subject marker, as in *il vend*. No proposal of a 'default' word order is made that would subject the pronouns to syntactic rules from the very beginning and motivate the rise of the anaphoric functions. In similar vein, later in the book he comments that a dislocated topic 'is becoming increasingly frequent in substandard [sic] French', as in *Jean, je l'ai vu hier* 'John, I saw him yesterday'. This dislocated NP is said to have 'no syntactic relation' between itself and the 'following clause or anything in it'. Lehmann concludes that: '[o]ne may therefore say that we are here at a level where syntax does not yet govern, where the discourse is structured only by the rules of functional sentence perspective' (113). Or yet again: 'topic and focus, as they appear in left-dislocation and clefting, are completely free and wild, as it were, since they transcend the bounds of the simple sentence' (119). From the perspective of current linguistics (or even very early models of generative grammar, where cleft constructions are concerned), such statements entirely ignore the fact that material (the NP) already available in the syntax and constrained by syntactic rules has been used to serve the discourse function of re-introducing a topic in a highly constrained syntactic way that requires a 'trace' *t*- without which the construction is ungrammatical (Lambrecht 1981). Syntax governed in the past, before the new

left-dislocated topic began to be used frequently, and syntax still governs (but across adjoined as well as conjoined material, see Kortmann (1991)), and if it is giving rise to an agreement marker, this is all happening within the constraints of syntactic structures that are being used for discourse purposes, not of 'wild' discourse independent of syntax.

In Chapter 4 Lehmann proposes a set of six correlated 'parameters' (164), three of them 'paradigmatic', i.e. concerned with distinctness from other signs, three of them 'syntagmatic', i.e. concerned with the sequence of signs. The paradigmatic parameters are: (i) integrity (degree of phonological or semantic substance), (ii) paradigmaticity (degree of cohesion within a paradigm), (iii) paradigmatic variability (degree of 'freedom with which the language user chooses a sign') (137). The greater the degree of GR, the greater the degree of integrity, paradigmaticity, and the smaller the degree of paradigmatic variability ('obligatorification' is the awkward name given to this process). The syntagmatic parameters are: (iv) degree of structural scope (the size of the construction), (v) bondedness (the degree of cohesion with another sign), and (vi) syntagmatic variability (the degree to which a sign 'can be shifted around in its context') (158). The greater the degree of GR, the smaller the structural scope, and the options for permutation, and the greater the cohesion or bonding.

The parameters are meant to characterize unidirectional 'theoretical construct[s]' (25) which '[s]trictly speaking... jointly identify... the autonomy, or conversely, the grammaticality of a sign' (124). They serve two purposes. On the one hand they are parameters along which historically unrelated but functionally related categories can be cross-linguistically displayed, e.g. existence and possession. They can also be used to assess the degree of diachronic grammaticalization of a particular lexical item or construction. In Lehmann's view, 'grammaticalization as a process consists in a correlative increase or decrease – as the case may be – of all the six parameters taken together' (124). One of the most interesting parts of the book discusses the degree of correlation among the parameters (164–171); for example, the 'European-style relative pronoun' is said to be strongly grammaticalized according to all the parameters except structural scope (170); and sandhi may operate across sentence as well as word and morpheme boundaries. Being able to specify with respect to a particular item in a particular language where it may fall at a certain point in time on a parameter (or set of correlated parameters) has the potential of being a powerful tool in historical and typological work. However, attractive though such a strong and restrictive theory as that of the parameters is, there are problems with it. Owing to limitations of space I will focus on only two.

Unfortunately the cross-linguistic and the form-specific approaches are not always consistently kept apart or even correlated. Lehmann begins by suggesting a terminological distinction between 'grammaticalization scales' on the one hand, and 'grammaticalization channels' on the other (25). Scales

are said to be ‘theoretical construct[s] along which functionally similar signs are ordered’, ‘panchronic’, and basically ‘onomasiological’. By contrast, channels are ‘frequently recurring route[s] which signs with a given function may take’, ‘diachronic’, and one might add semasiological. As we have seen, GR as diachronic process involves correlative relationships between the scales/parameters, and so scales and channels should be closely linked. They should not, however ‘be used interchangeably’ (25). Such interchange can lead to confusion and misleading analyses, particularly when combined with the assumption that scope always decreases in GR. For example, in discussing the GR scale of verbal nouns (gerunds), Lehmann cites (64):

- (1) (a) John’s constantly reading magazines,
 (b) John’s constant reading of magazines,
 (c) *the (constantly) reading magazines,
 (d) the (constant) reading of magazines.

He goes on to say: ‘we have two stages of our grammaticalization scale embodied in the English POSS-ing construction. At the latter stage, the nominalized verb has assumed all the relevant features of a noun; *-ing*-nominalizations are even pluralizable’ (64). Lehmann uses the term ‘scale’, so perhaps he means to refer to a synchronic display. But he also uses the term ‘stage’, which is a diachronic term, and in any case the examples are clearly historically related and are candidates for display on a GR channel. Greater degrees of GR should be correlated with increasingly recent dates, so one ought to be able to conclude that nominal gerunds as in (1d) are more recent than verbal gerunds as in (1a). However, the opposite is true: only nominal forms existed in Old English of the 9th century; verbal forms did not appear until the fourteenth century (see, for example, Tajima 1985).

Lehmann assumes that the type in (1a) is earlier (less grammatical) than (1d) because the ‘structural scope’ parameter (parameter (iv)) predicts that a construction with wider syntactic scope (like (1a)) is less grammatical than one with narrower, more condensed scope (like (1d)). This particular parameter is extremely problematic and should probably be excluded from a theory of GR. All examples of the recruitment of a new preposition to connective status are counterexamples (see further Traugott (forthcoming)).

Another problem arises in connection with integrity (parameter (i)). One alleged example of loss of integrity is ‘desemanticization’, otherwise known as ‘bleaching’: ‘Grammaticalization rips off the lexical features until only the grammatical features are left. Consequently, the relationality of an item is normally conserved while most of the original features are lost in grammaticalization’ (129). Preservation of relationality is crucial to semantic change in GR, but as has been widely shown (see Hopper & Traugott 1993, Bybee, Perkins & Pagliuca 1994), if there is semantic weakening there is also pragmatic strengthening. Furthermore, old meanings are not ‘ripped off’, otherwise they would not influence and constrain later ones, e.g. not being

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modal in origin, 'future' *be going to/be gonna* is available in *if*-clauses (**If you will acquit X, If you're going to acquit X*).

I have been able to touch on only a few of the many hypotheses posed in Lehmann's very rich book. It covers a wide field of issues and of languages. Even within the narrow confines of 'grammar' as Lehmann defines it, there is a vast array of data to consider, and Lehmann introduces it with great erudition and perceptiveness. The central task of the book is to highlight the gradual nature of language change, and to begin to develop a theory that accounts for the systematicity and dynamism found everywhere in language. Lehmann has taken important steps in this direction. If some of the steps in this, which was once called 'A programmatic sketch', have proved mistaken, nevertheless we would not know that they were so without the clarity of the exposition and the many empirically testable hypotheses with which we are presented. This is an important contribution to an understanding of language as a dynamic system, and is essential reading for any work on local morphosyntactic differences viewed typologically across languages, diachronically across times, or even synchronically within a single language.

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Frans Plank (ed.) *Double case: agreement by Suffixaufnahme*. New York: Oxford University Press, 1995. Pp. xvi + 500.

Reviewed by BARRY J. BLAKE, La Trobe University

The book begins with a perceptive, erudite prologue (110 pp.) from the editor, in which he traces the discovery of Suffixaufnahme in various languages and discusses its interpretation. The term SUFFIXAUFNAHME was coined by Finck (1867–1910), who noted the phenomenon in Old Georgian. Indeed the volume derives from a conference called in his honour, the Franz Nikolaus Finck Memorial Symposium, held in Konstanz, 21–23 September 1991. In its narrow sense Suffixaufnahme refers to an attribute bearing not only its own case, usually genitive, but concordial case marking for the relationship borne by the head. The following example is from Urartian (51).

- (1) Urartian (Hurrian-Urartian)
 Țaldi-i-ne-ni alsuiši-ni
 Țaldi-GEN-ART.SG-INS greatness-INS
 ‘through the greatness of Țaldi’

Plank writes that ‘Suffixaufnahme’ is best left untranslated, since its closest equivalent in English, ‘suffix resumption’, would suggest precedence, reusing a suffix used previously (98).

The prologue also contains a taxonomy of the possible ways of marking a ‘primary’ and ‘secondary’ nominal, and covers topics such as Aufnahme of categories other than case (number, class/gender), Aufnahme of cases other than the genitive, Aufnahme of prefix or tone and Aufnahme of free markers.

The body of the book contains seven sections. Five are devoted to areas where Suffixaufnahme has been reported, one is devoted to Indo-European, which has dubious claims for inclusion (pace Payne), and one is devoted to diachrony.

Section II on the ancient near-east contains two papers on Hurrian, Gernot Wilhelm’s ‘Suffixaufnahme in Hurrian and Urartian’ and Ilse

Wegner's 'Suffixaufnahme in Hurrian: normal cases and special cases'. Urartian and Hurrian are related. They are also typologically similar, both being highly agglutinative. An example from Urartian was given as (1) above.

Section III, the Caucasus, begins with Winfried Boeder's 'Suffixaufnahme in Kartvelian' which deals mainly with Old Georgian. In this language there is a contrast between examples like (2) (163) with Suffixaufnahme and ones like (3) (164) without.

- (2) sameupo-*jsa*-man *ma*-n *ḳac*-man
kingdom-GEN-ERG ART-ERG man-ERG
'the man of the kingdom'
- (3) *venaq*-is *mokmed*-sa *ma*-s
vineyard-GEN laborer-DAT ART-DAT
'the dresser of his vineyard'

Boeder argues that the noun phrase has a two-level structure with the head and its dependent genitive forming an inner constituent. Agreement extends to the immediate constituents of an NP (determiners, adjectives) but not to the genitive. This is what we see in (3). In (2), on the other hand, the genitive has been raised to become an immediate constituent of the whole NP. Suffixaufnahme now occurs as part of the manifestation of agreement. Part of the evidence for the proposed constituency is the position of the article, which occupies the second (Wackernagel) position within the noun phrase (166).

In 'Direct-oblique agreement of attributes in Daghestanian' Aleksandr Kibrik demonstrates that some North-East Caucasian languages have two forms of genitive, the direct genitive being used when the head is nominative and the oblique genitive being used when the head is in any of the oblique cases. The following examples are from Bezhta (220),

- (4) (a) *abo*-s *is*
father-GEN^{Det} brother (NOM)
'father's brother'
- (b) *abo*-*la* *is*-*t'i*-*l*
father-GEN^{Obi} brother-OBL-DAT
'to father's brother'

The alternation in the genitive is reminiscent of Suffixaufnahme in that the genitive, while marking the dependent within the noun phrase, is sensitive to the relation borne by the head.

Olga Ju. Boguslavskaya compares 'Genitives and adjectives as attributes in Daghestanian'.

Section IV on Indo-European contains three papers. Francisco Villar's paper 'Indo-European o-stems and Feminine stems in -ī' is not about

Suffixaufnahme, but about a phenomenon that comes close, namely, the reinterpretation of a dependent genitive as a nominative head. Villar claims that an Indo-European genitive *-ī* became a marker of feminine derivatives from the dropping of the word for ‘female’ in expressions of the pattern ‘the female of the sheep’, ‘the female of the wolf’, etc. In Latin *regīna* ‘queen’ is made up of *reg-* ‘king’, *-ī*, the putative Indo-European genitive turned derivational marker, *-n* a further derivational marker, and *-a* the nominative. Villar mentions a type where the inflection directly follows *-ī*, a type closer to Suffixaufnahme, but he does not exemplify it.

In ‘Slavonic’s closest approach to Suffixaufnahme: the possessive adjective’ Grev Corbett points out that the possessive adjective is widely used in Slavonic languages where other languages would use the genitive. In Upper Sorbian, for instance, (6) would be preferred to (5) (266),

- (5) ?kniha Jan-a
 book Jan-GEN.SG
 ‘Jan’s book’
- (6) Jan-ow-a knih-a
 Jan-POSS-NOM.SG.FEM book-NOM.SG.FEM
 ‘Jan’s book’

If the suffix glossed ‘poss(essive)’ in (6) is derivational then there is no Suffixaufnahme, but if it is inflectional there is. Corbett lists some of the arguments. Trubetzkoy effectively took the possessive to be inflectional because it is fully productive. Löttsch also took it to be inflectional, since the possessive adjective could control a relative pronoun as in (7) (273).

- (7) slyšetaj Wićazowy hlós, kotryž je zastupił
 [they] hear Wićaz’s voice, who is gone=in
 ‘They hear Wićaz’s voice, who has gone in.’

A third argument is based on the fact that the possessive can attach to a phrase rather than just a word as in (8), also from Upper Sorbian (275).

- (8) moj-eho muž-ow-a sotr-a
 my-GEN.SG.MASC husband-POSS-NOM.SG.FEM sister-NOM.SG.FEM
 ‘my husband’s sister’

In favour of a derivational analysis Corbett notes that the possessive adjective behaves like an adjective syntactically in that it precedes its head as in (6), whereas an inflectional genitive follows its head (5). The possessive adjective also takes distinctively adjectival morphology. A third argument in Upper Sorbian is that a few nouns such as *abbé* ‘priest’ are indeclinable, but form possessive adjectives.

Corbett notes that since the possessive is not clearly inflectional there is no Suffixaufnahme, but he is inclined to see the possessive as blurring the line between inflection and derivation. For me the possessive is more obviously

derivational since I discount productivity as necessarily implying inflection and I am mindful of derivational processes with phrasal scope. On the former point one can cite morphological processes changing transitive verbs to intransitive in languages like Dyirbal or from agent-subject to patient subject in languages like Indonesian (*meng-* and *di-*). Here we have processes that are fully or almost fully productive which change sub-class. On the second point, derivation with phrasal scope, there is *-ed* in *long-legged*, *turtle necked*, etc., *-ist* in *Grand Finalist*, and *-er* in *do-gooder*.

In ‘Inflecting postpositions in Indic and Kashmiri’ John Payne describes the postposition *ka* ‘of’ in Hindi, which inflects for the case, number and gender of the head of the whole construction (283),

- (9) (a) *Rānī kā bhāī*
 Rani of=DCT.SG.MASC brother=DCT.SG.MASC
 ‘Rani’s brother’ (direct)
- (b) *Rānī ke bhāī*
 Rani of=OBL.SG.MASC brother=OBL.SG.MASC
 ‘Rani’s brother’ (oblique)

In (9a) the phrase *Rānī kā* ‘Rani’s’ simultaneously contains a genitive marker (the postposition *kā* itself) and a marker of the whole construction, the *-ā* inflection of *kā* showing concord with the nominative case of the head noun *bhāī*. In (9b) the genitive-marking postposition has the form *ke*, showing concord with *bhāī*, which is in the oblique case (the nominative and oblique are syncretised in the masculine singular) (285). Payne appears to take *kā/ke/kī* to exhibit Suffixaufnahme, but two types of case marking are involved, inflectional and postpositional. *Kā* is from Sanskrit *kṛta*, the past participle of the verb *kṛ-* ‘to do’ (297). The concord, unusual in adpositions, is a retention of a property common enough in participles.

Section V on Chukchi-Kamchatkan contains only one paper, Maria Koptjevskaya-Tamm’s ‘Possessive and relational forms in Chukchi’. In Chukchi attributes bearing either the possessive or the relational case (the latter mainly with inanimates) may or may not display case and number agreement with the head (compare (10a) and (b)). A third possibility is that the attribute be incorporated (10c) (309).

- (10) (a) *Rultə-n-ine-k tumg-ək*
 Rultyn-SG-POSS-LOC friend-LOC
- (b) *Rultə-n-in tumg-ək*
 Rultyn-SG-POSS friend-LOC
- (c) *Rultə-n-ine-tumg-ək*
 Rultyn-SG-POSS-friend-LOC
 ‘at Rultyn’s friend’

The possessive and relational appear to be inflectional cases, but their retention in incorporation (10c) is more characteristic of derivation.

Section VI on Chushitic contains one paper, ‘Genitival agreement in

Awngi: variation on an Afroasiatic theme' by Robert Hetzron. In Awngi genitival nouns show obligatory agreement in number, gender and case with the following head noun (326).

- (11) wolijí-w-des aqí-w-des ɲán-des
 old-GEN^{Masc}-ABL man-GEN^{Masc}-ABL house_{Masc}-ABL
 'from the old man's house'

Hetzron suggests that the genitive may have once been a deictic agreeing with the following noun. It was reinterpreted as a genitive but retained the agreement (331).

The Australian section contains four papers. The first by Fritz Schweiger 'Suffixaufnahme and related case marking patterns in Australian languages' contains a useful survey of 50 descriptions of Australian languages. About half the languages surveyed exhibit Suffixaufnahme, some only with pronouns.

Peter Austin, in his 'Double case marking in Kanyara and Mantharta languages, Western Australia' distinguishes three types of double case marking: derivational (where a case form is used as a stem for further case marking), adnominal (genitive) and referential. The referential type of double case can occur where a locally case-marked nominal giving spatial or temporal information takes core case marking linking it to an argument.

- (12) juma-ngku ngatha-nha nhanya-nyja maya-ngka-nguru-lu
 child-ERG I-ACC see-PAST house-LOC-ABLI-ERG
 'The child watched me from the house'
- (13) ngatha ngarnka-nyja-rna kupuju-parnti-nha
 I=ERG big-CAUS-PAST child-ABL-ACC
 'I raised (him) from a child'

Alan Dench's 'Suffixaufnahme and apparent ellipsis in Martuthunira' consists of arguments to show that double case marking cannot be explained away by taking the inner adnominal case marking to be derivational.

The highlight of the Australian section is Nick Evans' 'Multiple case in Kayardild: anti-iconic suffix ordering and the diachronic filter'. Kayardild has spectacular case marking. Evans claims that it has four levels: adnominal, relational, modal and complementising. Adnominal and relational case is familiar. Modal case suffixes appear on most non-subject NPs and are marked outside adnominal or relational cases. Modal cases mark modality, tense and aspect. In (14) the modal ablative marks past tense, though this is also marked on the verb (400),

- (14) ngada yalawu-jarra yakuri-na thabuju-karra-nguni-na
 I catch-PAST fish-M.ABL brother-GEN-INS-M.ABL
 mijil-nguni-na
 net-INS-M.ABL
 'I caught (the) fish with brother's net.'

Complementising case can be found on all the words in a complement clause or on all the words of an independent clause. Compare (15) with (14) above (407).

- (15) maku-ntha yalawu-jarra-ntha yakuri-naa-ntha
 woman-C.OBL catch-PAST-C.OBL fish-M.ABL-C.OBL
 thabuju-karra-nguni-naa-ntha mijil-nguni-naa-nth
 brother-GEN-INS-M.ABL-C.OBL net-INS-M.ABL-C.OBL
 ‘The woman caught the fish with brother’s net.’

The use of complementising case on all the words in (15) arises historically from the ellipsis of a main clause, what Evans calls *INSUBORDINATION*. The case marking that previously signalled the relation of the subordinate clause to the main clause has come to signal a kind of modality. In (15) the complementising oblique signals a statement based on inference about a past event (407).

It seems to me that ‘modal case’ and ‘complementising case’ in independent clauses are not cases, though obviously the categories derive from cases. They do not signal the relationship of dependent nouns to their heads, or even of dependent verbs to their heads (Blake 1994: 109). Nevertheless the stacking of up to four layers of marking in examples like (15) is spectacular.

The main point of Evans’ paper is to show how anti-iconic ordering of case marking arose with the participial construction. In this construction the associating oblique marks the relationship of dependents to the nominalised participial verb as in (16). But note that the words in the participial clause bear a modal ablative by concord with *niwan-jina* in the main clause, a modal ablative determined by the tense/mood of the main clause (412). Note further that the associating oblique, which arises in the lower clause, lies outside the modal ablative arising in the higher clause.

- (16) ngada kurri-jarra niwan-jina [kurdama-n-kina
 ISG = NOM see-PAST him-M.ABL [drink-NOMIN-M.ABL
 nguku-naa-ntha] wuruman-urru-naa-nth
 water-M.ABL-A.OBL] billycan-ASS-M.ABL-A.OBL
 ‘I saw him drinking the water in the billycan.’

Evans shows how this anti-iconic ordering arose diachronically. He claims that the participial construction evolved after the morphological structure of words had become rigid. The iconic order required where a participial clause inherited a modal case was impossible, so an anti-iconic order was adopted (423).

The section on Diachrony (VIII) contains one paper ‘Binder-Anaphors and the diachrony of case displacement’ by Anthony Aristar in which the author seeks to show that double case marking on genitives arises as a side-

effect of the generation of new genitival marking by appositional pronouns (434) (also mentioned in Hetzron's article (331)). In Awngi the genitives not only agree in case with their heads but also in number and gender. Aristar shows by comparative reconstruction that the agreeing genitives derive from forms essentially identical to the Awngi presentative pronouns (435f).

- | | | | | | |
|------|-----|----------------------------|--------------------------------------|--------|------|
| (17) | (a) | aqi-w | du:ri | * -ku | ku |
| | | man-GEN ^{Masc.Sg} | rooster (MASC.SG) | | |
| | (b) | aqi-t | du:ra | * -ti | ti |
| | | man-GEN ^{Fem.Sg} | hen (FEM.SG) | | |
| | (c) | aqi-k ^w | du:r-ka | * -kun | kuni |
| | | man-GEN ^{Pl} | chicken-PL | | |
| | | | 'the man's rooster / hen / chickens' | | |

Since the genitives derive from pronouns, it is not surprising that they display agreement.

Aristar also shows that in Gumbaynggir, a double case marking language of New South Wales, the genitive contains a relative marker *-(a)ndi*. In Dyirbal, also a double case marking language, a ligative suffix *-ndji(n)* must be used when a genitive takes further case marking. Aristar suggests that the ligative seems to be related to the Gumbaynggir relative *-(a)ndi*, so that in both languages an anaphoric element underlies double case marking. Aristar quotes Dixon (1969) as a source of the data; he might have added that this paper is also the source of the idea that the forms in the two languages are related.

The book ends with an Epilogue (IX) consisting of Edith Moravcsik's paper 'Summing up Suffixaufnahme' in which she puts forward a typology of Suffixaufnahme. Suggested universals include the following:

If Suffixaufnahme occurs with the head present, it also occurs with the head missing (469).

If a nominal possessor carries external case, so does the pronominal one (470).

If a language has Suffixaufnahme, then adjectives agree with their heads in the same category (474).

The last generalisation would appear to need some modification since some Suffixaufnahme languages, certainly in Australia, lack an adjective word class.

As Plank points out in the preface, Suffixaufnahme, though seemingly marginal, touches on central theoretical issues, on issues of case and agreement, on the question of inflection versus derivation, on questions of attribution and apposition and depth or flatness of syntax. Plank deserves our thanks for putting together a solid, readable reference on the topic.

REVIEWS

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