REVIEWS

Alexandra Y. Aikhenvald & R. M. W. Dixon (eds.), *Studies in evidentiality* (Typological Studies in Language **54**). Amsterdam & Philadelphia, PA: John Benjamins, 2003. Pp. xiv + 345.

Reviewed by ZYGMUNT FRAJZYNGIER, University of Colorado

Studies in evidentiality consists of revised versions of 14 papers presented at the workshop on Evidentiality held at the Research Centre for Linguistic Typology at La Trobe University, Bandoora (Australia), in 2001. All except the first chapter, by Alexandra Aikhenvald, and the last chapter, by Brian Joseph, are case studies of evidentiality in specific languages, most of them based on first-hand research, most often using natural language data rather than elicited sentences.

Alexandra Y. Aikhenvald's 'Evidentiality in typological perspective' is a revised version of a position paper made available to participants before the workshop. Since it provided the major themes and in some cases the organizational frame for the other participants, it will be useful to review some of the most important points of Aikhenvald's chapter first. The term EVIDENTIALITY in Aikhenvald's understanding must meet two criteria: (i) 'stating the existence of a source of evidence for some information; this includes stating that there is some evidence, and also specifying what type of evidence there is' (1); and (ii) '[t]he nature of the evidence must be specified for every statement' (1). These criteria are followed by the assertion that '[e]videntiality is a category in its own right, and not a subcategory of epistemic or some other modality, or tense-aspect' (1). The two criteria appear to be well-defined theoretical and methodological guidelines in determining the function of a form as evidential. They seem, however, to be too narrow, even for the participants of the workshop. Several studies in the volume provide evidence that the coding of the evidential function is not obligatory, and that in some languages evidentiality is indeed a part of the epistemic modality domain. The discrepancy between aprioristic definitions and facts encountered in natural languages raises an important methodological question about how to proceed in a linguistic typology which takes a function as a starting point. This question is briefly addressed only in the final chapter, by Joseph.

Aikhenvald proposes a typology of evidential systems from the point of view of the types of evidential functions coded, e.g. visual, auditory, hearsay.

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She states that the typology is based on an examination of 500 languages, but there is no information about how the typology was obtained. In addition, she examines extensions of evidential markers, correlation of evidentiality with other grammatical categories, grammaticalization of evidential markers, cultural attitudes in the use of evidential markers, and misconceptions regarding evidentiality. In this last section, Aikhenvald discusses a few approaches to evidentiality which differ from the one she has assumed.

The rest of this review focuses on the content and the most interesting elements of the remaining chapters, and on the type of evidence brought forth by various contributors.

Pilar M. Valenzuela's chapter, 'Evidentiality in Shipibo-Konibo, with a comparative overview of the category in Panoan', is based on Valenzuela's own field notes, including elicited data, and on fragments of texts in previous publications. Shipibo-Konibo, a Panoan language from the Peruvian Amazon, has a direct evidential marker, two reportative markers, an inferential marker, and a speculative marker. The evidence for the function of these markers consists of translations of examples in which these markers occur in the actual speech context. Although not every statement in Shipibo-Konibo has to have an evidential marker (contrary to Aikhenvald's postulate), the evidentiality of statements which are unmarked for evidentiality, according to Valenzuela, can be computed from the use of evidentials in the preceding discourse.

Randy J. LaPolla's chapter, 'Evidentiality in Qiang', deals with a Tibeto-Burman language spoken in Tibet. The language codes three evidential functions, visual, inferred/mirative, and reported. The unmarked form of the verb can code the visual evidential. The visual evidential can also be overtly marked. There is no explicit discussion in LaPolla's chapter of when the unmarked form of the verb and when the overt marking of the visual evidential are used. The inferential can appear together with the hearsay or visual marker; hence it would appear that the three markers really code different domains. The semantic functions of various markers are supported by translations of examples with inferential markers and the description of contexts in which the examples are used. Most interestingly, the visual evidence for the third-person actor is coded by the first-person-actor marker added to the verb. Such coding results in the meaning 'X did Y, I saw it'.

Willem J. de Reuse's chapter, 'Evidentiality in Western Apache (Athabascan)', is his second study of the category in that language. The evidential system consists of experiential (non-eyewitness); inferential (mirative, non-mirative, and physical); and quotative, consisting of two particles, the second of which also codes functions which are not quotative. Notable is the absence of a visual evidential marker. There is one mysterious evidential called 'past deferred realization'. The function of this marker is illustrated through examples in which it is used and, to this reader, it remains quite

opaque. The evidence for the proposed functions consists of translations of examples, some with a commentary about the circumstances of their use.

Sally McLendon's chapter, 'Evidentials in Eastern Pomo with a comparative survey of the category in other Pomoan languages', deals with languages spoken in Northern California. Eastern Pomo codes four categories of evidentials: non-visual sensory; logical inferential; hearsay or reportative; and direct knowledge. The evidence for the proposed functions is based not only on translations but also on the properties of grammatical systems, such as evidence that the non-visual sensory cannot be used with the third-person subject. Some Pomoan languages have a richer system of evidentials than Eastern Pomo.

Alexandra Aikhenvald's other chapter in this volume, 'Evidentiality in Tariana', deals with a North Arawakan language spoken in the Vaupés River basin of Brazil, which meets Aikhenvald's requirement for the category 'evidentiality' in that every sentence has to indicate how the speaker acquired the information. Tariana's evidential system includes: visual; non-visual 'sensory'; inferred 'generic', inferred 'specific'; and reported. The evidence for the proposed semantic functions of the evidential consists of translations of and commentary on sentences containing evidential markers. The evidential markers in Tariana may have a modal function, as illustrated by the fact that various evidentials can be used with the proposition 'X is called Y'. This type of proposition cannot have a visual source, and yet a visual evidential is used to affirm the speaker's certainty of the statement's truth.

R. M. W. Dixon contributes two case studies to the present volume. The first one is 'Evidentiality in Jarawara', an Arawán language of Southern Amazonia, and the second is his study of Mỹky with Monserrat. Jarawara has a two-way distinction, between eyewitness and non-eyewitness evidentiality, each co-occurring with the immediate past, recent past, and far past markers. In addition, Jarawara has a reported suffix. The markers of evidentiality in Jarawara are not obligatory. The evidence for the functions of various forms consists of translations of and commentary on various examples.

The title of Victor A. Friedman's chapter, 'Evidentiality in the Balkans with special attention to Macedonian and Albanian', is quite similar to that of his paper in Chafe & Nichols' (1986) volume, which was entitled 'Evidentiality in the Balkans: Bulgarian, Macedonian, and Albanian'. The present chapter, however, is a much more elaborate piece of scholarship. The Balkan languages which have the evidential category do not really code the source of the information, but rather the degree of knowledge, as was outlined in Friedman (1986). In the present chapter, Friedman provides not only a description of evidential strategies in Macedonian and Bulgarian, but also an excellent account of historical changes which led to the grammaticalization of these strategies. In both languages, the tense and aspectual systems provide the main means to code evidentials. Friedman's evidence for the proposed meanings of evidential strategies consists of translations of

examples from natural discourse, and a discussion of the circumstances of their use.

Elena Maslova's chapter, 'Evidentiality in Yukaghir', is based on data in published descriptions of Yukaghir languages, corpora of the two varieties of Yukaghir (Kolyma and Tundra), and data from Maslova's own field notes. Yukaghir codes a distinction between witnessed and non-witnessed events. The witnessed category is unmarked, the non-witnessed category is marked. The form which codes non-witnessed events has been extended to code deferred evidence, i.e. evidence which became available only after the event. This form also codes hypothetical modality.

Ruth Monserrat & R. M. W. Dixon's chapter, 'Evidentiality in Mỹky' (first vowel nasal), deals with a language isolate spoken in the state of Mato Grosso in Brazil. The brief report (four and a half pages), written by Dixon, is based on Monserrat's (2000) description of Mỹky. The system of evidentiality includes the distinction between visual/non-visual (coded by different subject pronouns), and reported or inferred (which includes speculative). It appears that the two systems cannot be combined.

Viacheslav Chirikba's chapter, 'Evidential category and evidential strategy in Abkhaz', discusses a grammatical category which was observed by Von Uslar as early as 1887 and which has drawn considerable attention in the literature ever since. The term 'evidential category' refers to the use of verbal inflection, and the term 'evidential strategy' refers to the use of a quotative particle and the verb 'to say'. The inflection on the verb codes the inferential category which comprises unwitnessed events, 'commentative' and mirative. The 'commentative' function involves either focusing on some elements of the event or providing background to the event. Chirikba provides an extensive discussion of the interaction of the inferential form with tense, aspect, and mood in Abkhaz. The quotative particle serves to quote reported speech and hearsay information. The argumentation for all proposed functions consists of translations of examples where the forms coding evidentiality occur. Chirikba concludes his chapter with a discussion of the function 'distancing', which he claims to be a common feature of many evidential functions, and a discussion of the spread of the evidential category in the Caucasus.

Lars Johanson's chapter, 'Evidentiality in Turkic', provides a summary of the evidential category in Turkic languages along the lines suggested in the introductory chapter. He begins, however, with a most interesting claim, that all Turkic languages have the means of expressing 'indirectivity', i.e. presentation of an event with reference to its reception by a conscious subject. The source of information is not criterial for indirectivity. Johanson argues that the general assumption about Turkic languages that the unmarked case signals 'direct experience' or 'visual evidence' is incorrect. Indirectives are coded in Turkic languages by inflectional markers added to verbs in various tenses and aspects or by copula particles. Johanson provides a review of

the types of evidential systems found in various Turkic languages, an excellent review of various functional subdomains of evidentiality, and a review of the interaction of evidential markers with other grammatical categories and with usage in discourse. He concludes his study with the review of the widespread borrowing of evidentiality into non-Turkic languages of contact such as Bulgarian, Macedonian, Albanian, Kurdish, Western Armenian, Georgian, Tajik, and Eastern Finno-Ugric. In this respect there is an open issue emerging from the reading of Johanson's chapter: under what conditions does a language lose a category and under what conditions does a language borrow a category? Karaim, a Turkic language, is said to have lost the evidential category under the influence of Slavic languages. And yet many languages have borrowed evidentiality under the influence of Turkic languages.

Michael Fortescue's chapter, 'Evidentiality in West Greenlandic', is interesting because in that language the marking of the category of evidentiality is 'scattered' (Aikhenvald's term) across different grammatical forms: sentential affixes participating in the coding of epistemic modality, non-sentential affixes, the quotative enclitic, the quotative particle, and demonstratives. Most important, the evidentiality coding in West Greenlandic is not obligatory.

Brian D. Joseph's chapter, 'Evidentials', subtitled 'Summation, questions, prospects', addresses several questions raised in the volume which he perceives to be important: semantics (of evidentials); category status; diffusability; origin; methodology; and the application of the insights gained from the chapters for the reconstruction of Indo-European. He concludes his chapter by listing questions for further study. With respect to semantics, Joseph, trying to find a common denominator for functions coded by markers referred to as evidentials, proposes that they all involve the speaker's taking a stance with regard to information sources. A number of chapters in the volume do not support that common denominator. With respect to the categoriality of evidentials, Joseph argues for his notion of 'constellation' instead of category, whereby several elements share at least one function. However, he does not explain the theoretical, methodological, or heuristic advantages of such an approach.

The main value of the volume is that it enriches our knowledge of the means of coding the speaker's attitude toward the information provided, be it with respect to the sources of knowledge or to the reality of the event. The volume complements the studies of evidentiality published in Chafe & Nichols (1986). The main themes in both volumes are similar: the functions, the sources of the markers, interaction with other categories, and most important, the cross-linguistic approach. Given the fact that the present volume contains mostly studies of different languages, it constitutes a most useful companion for scholars studying speakers' attitudes toward the sources of their knowledge and toward the propositions they produce.

REFERENCES

Chafe, Wallace & Nichols, Johanna (eds.) (1986). *Evidentiality: the linguistic coding of epistemology*. Norwood, NJ: Ablex.

Friedman, Victor A. (1986). Evidentiality in the Balkans: Bulgarian, Macedonian, and Albanian. In Chafe & Nichols (eds.), 168–187.

Monserrat, Ruth (2000). *A língua da povo Mỹky*. Ph.D. Dissertation, Universidade Federal do Rio de Janeiro.

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Michael Brody, *Towards an elegant syntax*. London: Routledge, 2003. Pp. viii + 309.

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For close to a decade now, Michael Brody's publications have influenced linguistic theory to a considerable extent. *Towards an elegant syntax* (*TES*) is the best testimony to that influence, as it retraces Brody's trajectory as a leader in syntactic theorizing. The book is a collection of essays written from 1981 to the present. Although the papers from the earliest era are fascinating in their own right and develop themes which are amplified in the most recent essays collected in this volume, I have chosen to focus exclusively on essays which most explicitly advocate the development of an elegant syntax.

It stands to reason that I cannot even begin to do justice to the richness and subtlety of Brody's arguments within the confines of this review. I merely hope that the following remarks will convince readers that Brody's work is extremely rewarding and deserves careful study.

The search for theoretical elegance is well-known in more established areas of scientific inquiry such as physics, where giants like Dirac claimed that a theory with mathematical beauty is more likely to prove correct than one which fits some experiments, but is ugly. Even Copernicus defended his theory as 'pleasing to the mind' (see Holton 1988: 15). The minimalist program in linguistic theory develops the same methodological thema (where 'thema' is used here in Holton's sense). With the exception of Noam Chomsky, perhaps no one has advocated the strict minimalist position more than Brody.

Brody's work is mainly known as the representational alternative to the largely derivational character of minimalist analyses (see especially Brody 1995; see also essay 10 of *TES*). But it would be much too narrow a

characterization of Brody's work to view it as one side of the 'derivational-representational' debate. Brody's work is best seen as a continual evaluation and re-evaluation of the tools used in linguistic theory, a constant attempt to refine the theory in the direction of beauty, elegance, simplicity, and naturalness. A sense of the process of re-evaluation and refinement can easily be gotten from even a cursory reading of *TES*, thanks to the excellent thematic (as opposed to merely chronological) arrangement of the essays. *TES* is divided into four parts. Part I ('Principles and parameters') consists of early essays, written during the Government-Binding era, focusing on issues of indexing, chains, and empty categories. Part II ('Beyond principles and parameters') reviews Chomsky's 1986 framework, elaborates the SINGLE-OUTPUT SYNTAX model, and critically examines the nature of the theta-criterion. Part III ('Towards an elegant syntax') and part IV ('Aspects of mirror theory') best illustrate Brody's relentless refinement of linguistic theory.

In pursuing elegance, Brody has formulated hypotheses (all recorded in *TES*) which have become important features of and guidelines for minimalist research (irrespective of the 'derivational-representational' issue). Let me cite the most salient ones:
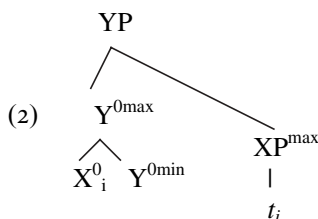
1. The progressive elimination of explicit economizing strategies, the avoidance of (even local) comparisons of derivations/representations, in favor of a system which generates the optimal ('most economical') option and makes room for no other. (In this respect, it is worth noting that much of the criticism (e.g. Lappin, Levine & Johnson 2000; Pinker & Jackendoff, in press) directed at minimalist research concentrates on an aspect of the theory that has long been superseded. It is indeed striking that the notion of 'economy' hardly ever appears in recent minimalist papers.)
2. The development of a bare checking theory, a more constrained notion of syntactic features and their distributions. (Witness the progressive replacement of interpretable/uninterpretable features in favor of valued/unvalued features.)
3. 'Single-Output Syntax': the elimination of the covert, 'post-Spell-Out' component of grammar, in favor of a model where overt and covert processes are interleaved.
4. The central role of non-movement processes such as Agree (valuation at a distance).

Brody's refinement of linguistic theory is perhaps clearest in his elaboration of Mirror Theory. Contrary to much current work (witness Epstein's 1999 work on asymmetric c-command and Kayne's 1994 antisymmetry hypothesis), Brody makes here the (all-important, and, in my view, correct) assumption that the existence of asymmetries constitutes a departure from the null hypothesis, and as such, asymmetries are in need of explanation
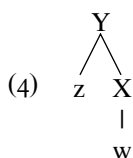
(or else they ought to be removed from the theory). The null hypothesis here is symmetry, which physicists in particular view as the quantification of beauty/elegance. The essence of Mirror Theory is very simple; indeed, so simple that – as with any great idea – one wonders why it took so long for the hypothesis to emerge within the generative paradigm. Brody claims that the minimal (head)-maximal (projection) distinction is redundant, and leads to well-known problems in the context of head-movement. Think about this: heads select their complements. Thus, Y is already selecting X when it takes XP as its sister (X and XP share all features, under projection). Moving X to Y (head-movement) just re-creates the sister relation already available under merge (Y, XP). This redundancy can be eliminated if we collapse the $X°$–XP distinction (Brody's notion of 'Telescope'):

(1)
$$\left.\begin{array}{c} XP^{max} \\ | \\ X^{0min} \end{array}\right\} = X$$

Once (1) is assumed, representations like (2) (with head-movement) reduce to the much more compact (3).

(2)

$$
\begin{array}{c}
YP \\
\diagup \quad \diagdown \\
Y^{0max} \qquad \qquad \\
\diagup\diagdown \qquad XP^{max} \\
X^{0}_{i} \quad Y^{0min} \qquad | \\
\qquad \qquad t_i
\end{array}
$$

(3)
$$\begin{array}{c} Y \\ | \\ X \end{array}$$

Dependents ('specifiers') of Y(P) or X(P), if any, will be represented as (4).

(4)
$$
\begin{array}{c}
Y \\
\diagup\diagdown \\
z \quad X \\
| \\
w
\end{array}
$$

The notion of 'Mirror' emerges as soon as (1) is assumed. Basically, (1) allows us to view traditional head–complement relations as (inverted, top-down) spec–head relations. Not only does this reduce the inventory of possible syntactic relations, it also derives the locality condition known as 'anti-locality', which prohibits movement of the complement of $X°$

to the specifier of the (projection of the) same element, X(P). If head–complement relations are (inverted) spec–head relations, complements are already specifiers before movement, and no new spec–head relation should be created.

This provides but one small example of the power of the type of reductionist work in which Brody is an expert. I urge the reader to turn to *TES*. Rich, subtle, insightful and clearly written, it is sure to provide the source for major developments in linguistic theory. Above all, it provides a model for minimalist research, one which I can only hope will be imitated by many.

REFERENCES

Brody, Michael (1995). *Lexico-logical form*. Cambridge, MA: MIT Press.
Chomsky, Noam (1986). *Knowledge of language*. New York: Praeger.
Epstein, Samuel D. (1999). Un-principled syntax: the derivation of syntactic relations. In Epstein, Samuel D. & Hornstein, Norbert (eds.), *Working minimalism*. Cambridge, MA: MIT Press. 317–345.
Holton, Gerald (1988). *Thematic origins of scientific thought* (Revised edition). Cambridge, MA: Harvard University Press.
Kayne, Richard S. (1994). *The antisymmetry of syntax*. Cambridge, MA: MIT Press.
Lappin, Shalom, Levine, Robert & Johnson, David (2000). The structure of unscientific revolutions. *Natural Language & Linguistic Theory* **18**. 665–671.
Pinker, Steven & Jackendoff, Ray (in press). The faculty of language: What's special about it? *Cognition*.

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Michael Clyne, *Dynamics of language contact: English and immigrant languages*. Cambridge: Cambridge University Press, 2003. Pp. xv + 282.

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Michael Clyne's latest book – a sequel to *Community languages: the Australian experience* (1991) – gives an overview of (socio-)linguistic aspects of language contact between English and a range of community languages spoken in Australia. As the author has collected and analysed data from different immigrant communities over the past forty years, he has a unique overview of language contact in Australia. Because all groups share the Australian context, Clyne can compare the degree of language shift between

language communities (which hardly any researcher is able to do), the code-switching patterns that exist in different groups, and the extent to which different languages have undergone influence from English or have influenced English. The core data come from plurilinguals whose language(s) are related to English, i.e. Dutch-English and German-English bilinguals, and German-Dutch-English trilinguals. Typologically different languages are also being studied in data sets that were either made available by other researchers or were collected by Clyne and his team. The results of language contact between Hungarian-German-English, Croatian-English, Vietnamese-English and Turkish-English are thus being compared to those of bilinguals or trilinguals of the core data set and to Spanish-Italian-English trilinguals.

In the introduction to the volume, Clyne points out that 'Language contact is a multidimensional, multidisciplinary field in which interrelationships hold the key to the understanding of how and why people use language/s the way they do' (1). This is why Clyne chose to study language contact in Australia from a wide range of perspectives, integrating sociological, phonetic/phonological, morphological, syntactic, semantic and psycholinguistic analyses in one volume. Again very few, if any, researchers have the ability to switch paradigms as easily as Clyne and one of the great merits of the book is therefore that the author has succeeded in bringing all these approaches together.

In Chapter 1, Clyne gives an overview of the impressive data set which he has collected over the past forty years, sometimes together with his students, and discusses the sociolinguistic background of the different ethnolinguistic groups.

Chapter 2 addresses macrosociological issues, with a focus on language shift (LS) patterns in the different groups. According to Clyne there is no evidence that it is a differential in language distance which is responsible for the variation in language shift. The period of residence and cultural similarity are more important predictors of degree of LS. Most importantly, Clyne notes that LS is inevitable in the Australian immigrant context (31), but individual factors (exogamy, gender, generation, age, socio-economic mobility and English proficiency) as well as group factors (community size, cultural distance, religion, premigration experience and situation in the homeland) and general factors (such as time and place) all have an influence on the process of shift. In the Australian context, LS is often complete within three generations, except for the German language enclaves dating back to the mid-nineteenth century. Clyne discusses different theoretical approaches towards LS near the end of this chapter, and points to the way in which each can explain aspects of the LS process in Australia.

Chapter 3 sketches different code-switching (CS) models and introduces some new concepts. Clyne takes the view that CS should not be isolated from semantic and phonological contact phenomena which co-exist and interact

with lexical and syntactic ones (73). The term CS, which some researchers use as the umbrella term for all language contact phenomena, has become so polysemous and unclear that it is necessary to find more precise terms. Clyne uses the term TRANSFERENCE as the umbrella term for different language contact phenomena. Transference can take place at all levels of analysis: lexical, semantic, phonetic/phonological, prosodic, tonemic, graphemic, morphological and syntactic. This very broad definition is reminiscent of Weinreich's concept of TRANSFER. As is well-known, Weinreich (1964: 1) defines transfer as 'those instances of deviation from the norms of either language which occur in the speech of bilinguals as a result of their familiarity with more than one language, i.e. as a result of language contact'. Clyne, however, uses the term transfer in a more restricted sense as an 'instance of transference, where the form, feature or construction has been taken over by the speaker from another language, whatever the motives or explanation for this. "Transference" is thus the process and a "transfer" the product' (76). The notion CONVERGENCE is also used in a way that differs slightly from general usage. Languages which become more similar to each other are said to be converging, but this process does not result in complete overlap between languages at either the syntactic or the phonological level. The term phonological transference is reserved for situations where one language adopts another phoneme or deletes a phoneme. Phonological convergence results in partial similarity between languages in, for example, compromise forms such as [ɔf] which is a blend of English *of* and German *auf*. Similarly, when English syntactic patterns are only partly adopted in German or Dutch, this is a case of syntactic convergence, rather than syntactic transference. Finally, the term TRANSVERSION is introduced to refer to what other researchers have termed intra- and interclausal switching. The advantage of this term is that it expresses the idea of 'crossing over' to the other language, rather than alternating between languages. Fortunately, Clyne explains how the new terminology can be mapped onto terms used by other researchers: transversion covers what Muysken (2000) has labelled CONGRUENT LEXICALISATION and ALTERNATION, whereas lexical transference would probably correspond to INSERTIONAL CODE-MIXING. Insertions can, however, also function as facilitators (192), as will be shown below in more detail. Clyne recognizes that some researchers would probably consider the introduction of new terms as superfluous and distracting and invites them to substitute 'code-switching' (although one should be aware that this is used in a more restrictive sense).

Before embarking on an analysis of the dynamics of convergence and transference in the Australian data in chapter 4, Clyne sketches other approaches to language CS and contact-induced change. One of the important points made here is that many immigrant languages do not survive long enough for massive structural change to take place (95). As Clyne pointed out in chapter 2, LS is often complete in three generations (except for

German spoken in some enclaves). Thus, contact-induced changes have no chance to survive into the fourth generation.

In chapter 4, Clyne discusses examples of convergence and transference in more detail. The analysis of trilingual transference – adoption in the third language of a pattern shared by two languages – is particularly fascinating. In the discussion of syntactic convergence in Dutch, one wonders whether the phenomenon described here as SVO generalization would be better described as V2 phenomena in subordinate clauses: in *dat ik heb de auto gewassen* 'that I have the car washed' the inflected verb appears in second position, and the object precedes the main verb. Therefore OV patterns are being maintained in these data. Other examples of syntactic convergence can be found in, for example, the way the plural is allocated to Dutch and German nouns. Dutch-English bilinguals tend to overgeneralize the -*s* plural to the majority of nouns, whereas Dutch-English-German trilinguals and German-English bilinguals use different strategies based on non-standard German or Dutch plural suffixes.

The notion of DIVERGENCE is used in this book in a way that differs from general usage, to refer to instances where speakers integrate English elements into the structure of their community language, by assigning a Dutch or German gender to an English noun or by inflecting English verb forms according to regular or irregular verb paradigms. In these cases, speakers do not make their languages more similar by introducing elements of structure from one language into another (i.e. convergence) but maintain features and patterns in the community language. It is very interesting to see that speakers belonging to different social networks use different integration strategies: the more a transfer is associated with a close network, the more it is likely to be highly integrated. For example, *swamp* becomes *Schwamm* [ʃwam] in one German enclave and *swamp* [swɔmp] in another enclave.

While most researchers in the field have developed syntactic constraints on CS, Clyne introduces the concept of facilitation (chapter 5), which he prefers to the concept of constraints. The focus is on the way intraclausal transversion may be facilitated by lexical and structural overlap and convergence. The author distinguishes different facilitation principles. One of these principles states that lexical items which can be identified as being part of more than one language may facilitate a transversion from one language to another. Bilingual homophones such as *tennis* and proper nouns which are used in all the languages of the speakers may have this function. In previous work (1967), Clyne used the term TRIGGER for these items. Generally, transversion follows the trigger-word (consequential facilitation), as in (1), where the bilingual homophone *smal* 'small' (Dutch 'narrow') leads to a transversion to Dutch.

(1) and we reckoned Holland was too *smal* VOOR ONS.
     and we reckoned Holland was too narrow/small for us

In other instances, transversion precedes and anticipates the trigger-word (anticipational facilitation), as in (2), where *states* triggers the transversion from Croatian to English as we can see in the use of *all the*.

(2)   htila bi malo   vidit od ALL THE *states*
      I would like to see   all the states (Hlavac 2000)

In this chapter, all instances of transversion are printed in small capitals whereas trigger words are in italics, which is very helpful for the reader.

As Clyne points out, this approach is better able to deal with code-switching between related languages than Myers-Scotton's models (1993 and later work), because it is not possible to differentiate between a matrix and an embedded language in many of these utterances (174).

Clyne also illustrates how tonal facilitation operates in Vietnamese-English code-switching (Vu 1981). This is a line of very original research which has hardly been developed since its inception. Finally, as Clyne has pointed out in earlier work, syntactic overlap (often due to syntactic trans-ference) can facilitate transversion.

Chapter 6 focuses on the dynamics of plurilingual processing. Clyne presents a model of speech production which is largely based on Levelt (1989), but which allows for the possibility of transversion, convergence and facilitation, which in the author's view present a challenge to existing pro-cessing models. The problem resides in the fact that Levelt's model is based on three different processing components with no feedback between them. This makes it difficult to see how transversion can be facilitated by trigger-words if information about lexical items then needs to be available at the pre-phonological stage. Clyne recognizes that far more experimentation is needed to test the validity of his new model, which is beyond the scope of the current book.

Chapter 7 addresses the dynamics of cultural values in contact discourse. In bilingual discourse, particular ways of addressing people in relation to culture-specific norms of politeness may be transferred from one language to another. This can be seen in the decline of the distinction between pro-nouns of power and solidarity in Dutch, German and Croatian as spoken in Australia, or in the differential maintenance of modal particles which are typical for each culture.

The final chapter gives an interesting summary comparison of the language contact phenomena of different language dyads and triads, and evaluates the role of cultural differences, typological differences, and gener-ational and other sociolinguistic factors on the outcome of language contact. Clyne comes to the conclusion that trilingual transversion and convergence phenomena are similar to bilingual ones, but more complex. According to the author, trilinguals tend to take more trouble to avoid certain types of convergence and transference.

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It is clear that this is a highly interesting and very readable book, which offers a wealth of intriguing examples of language contact and some very lucid analyses. Once the reader has adjusted to the new terminology, it becomes evident that it works well for the current data sets. As the author's approach is intentionally broad, it is unavoidable that individual phenomena are not always treated in great depth, and not all the literature on the topics could be included in the discussion on, for instance, gender allocation and plural formation. Another minor point which could be criticized is the occasional error in the interpretation of Dutch sentences. In chapter 4 in example (63), the form *heb* 'have' occurs in combination with a third person singular form, which is interpreted as evidence for the development of zero-form conjugations in Dutch. While this may well be the case for other verbs, the form *hij heb* 'he has' occurs frequently in non-standard Dutch. Another point which would need further analysis is the interaction between different phenomena. While it is claimed on page 114 that 'multiple transference is the result of transversion', on page 157 'lexical and syntactic transference co-operate to facilitate grammatical word order', and on page 162 it is lexical items which facilitate transversion. While the examples are helpful, it remains somewhat unclear to the reader what facilitates what. This issue is important if one wishes to participate in a discussion on the processing of code-switching. It is not clear how feedback between different components of a processing model can be achieved, but this issue is beyond the scope of this book. All in all, however, the book offers a very impressive overview of language contact in Australia and it can be expected to be on the bibliographies of studies of language contact for many years to come.

REFERENCES

Clyne, M. G. (1967). *Transference and triggering: observations on the language assimilation of postwar German-speaking migrants in Australia*. The Hague: Martinus Nijhoff.
Clyne, M. G. (1991). *Community languages: the Australian experience*. Cambridge: Cambridge University Press.
Hlavac, J. (2000). *Croatian in Melbourne: lexicon, switching and morpho-syntactic features in the speech of second-generation bilinguals*. Ph.D. thesis, Monash University.
Levelt, W. J. (1989). *Speaking: from intention to articulation*. Cambridge, MA: MIT Press.
Muysken, P. (2000). *Bilingual speech: a typology of code-mixing*. Cambridge: Cambridge University Press.
Myers-Scotton, C. (1993). *Duelling languages: grammatical structure in codeswitching*. Oxford: Oxford University Press.
Vu, T. P. (1981). *The acoustic and perceptual nature of tone in Vietnamese*. Ph.D. thesis, Australian National University.
Weinreich, U. (1953) *Languages in contact: findings and problems*. New York: The Linguistic Circle of New York. (Reprinted 1964 The Hague: Mouton.)

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Martine Coene & Yves D'hulst (eds.), *From NP to DP*, vol. I: *The syntax and semantics of noun phrases*. Amsterdam: John Benjamins, 2002. Pp. vi + 359. *From NP to DP*, vol. II: *The expression of possession in noun phrases*. Amsterdam: John Benjamins, 2002. Pp. viii + 291.

Reviewed by ERIC MATHIEU, University of Ottawa

This collection of papers on the syntax and semantics of noun phrases comes in two parts. The first volume deals with the internal syntax of DPs, the syntax and semantics of bare nouns and indefinites, and the expression of measurement in the noun phrase. The second volume concentrates on the expression of possession within the nominal domain. Although the literature on NPs and DPs is already vast, the two volumes manage to achieve a novel and interesting take on the structure and interpretation of the nominal layers.

The first volume contains thirteen chapters and begins with a comprehensive introduction by the editors. The introduction is split into two main sections. In the first, a very useful theoretical background about NPs and DPs is provided, and in the second, entitled 'Case studies', all the papers included in the book are summarized.

Paul Boucher's 'Determiner phrases in Old and Modern French' is the first chapter of the volume. It argues that the erosion of case together with the well-known phenomenon of the increasing use of Latin deictic pronouns with NPs in Old French provoked a reanalysis of KaseP as DP, with demonstratives in Spec-DP, and articles in D^0. The idea is that Old French was a Det-drop language: it could express definiteness without the need for an overt article. When case morphology was lost, an overt element became necessary. The Latin demonstrative was used (since Old French did not have any determiners); the demonstrative then came to be reanalysed as an article. An interesting parallel is made between the loss of pro-drop and the loss of Det-drop through the loss of case marking, stressing further the well-known parallelism between the clause and the noun phrase.

Next, Rose-Marie Déchaine & Martina Wiltschko, in 'On pro-nouns and other pronouns', make the very interesting claim that the notion 'pronoun' is not a primitive. They distinguish between three types of pro-forms: pro-DP, pro-φP, and pro-NP. Pro-DPs are independent pronouns with a morpho-syntactically complex structure. Pro-φPs do not have the syntax of determiners or that of nouns but are simply the spell-out of phi-features. Finally, pro-NPs have the same syntax as lexical nouns.

In 'Modification in the Balkan nominal expression: an account of the (A)NA: AN(*A) order contrast', Mila Dimitrova-Vulchanova argues that

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the N-movement approach to word order variation in the DP is problematic. It cannot account for differences in interpretation between pre- and post-nominal modifiers in languages that allow for both, nor can it account for the so-called 'mirror'-order of postnominal adjectives in French with respect to their prenominal English equivalents. The author gives an alternative account that relies on Bouchard's (1998) compositional merger account and bases her analysis on Bulgarian, Romanian and Albanian.

Petra Sleeman's chapter is entitled 'Subnominal empty categories as subordinate topics'. It argues against a syntactic account of the well-known subject–object asymmetries that relate to empty nouns. Instead, it is claimed that an explanation of the relevant facts is best found in the pragmatic/semantic component of the grammar. The asymmetries are said to follow from a constraint on the assignment of information structure to the output of the syntactic component. This constraint blocks the natural assignment of subordinate f-structure to DPs in object position, unless the empty noun can be licensed as a (subordinate) topic by lexical or syntactic topic markers. The proposal, in a nutshell, is thus that an empty noun can receive its interpretation from a noun in the context only on condition that the empty noun is a topic.

Alexander Grosu's chapter is entitled '"Transparent" free relatives as a special instance of "standard" free relatives'. While so-called transparent free relatives are often treated separately from standard free relatives, Grosu makes the interesting proposal that free relatives are in fact very much like their standard counterparts. The view defended by Grosu is that free relatives are simply a subclass of standard relatives. They differ from standard relatives in that they are characterized by an equative-specificational small clause whose subject is bound by the *wh*-element which is present in the structure.

The next chapter is 'Resolving number ambiguities in Sakha: evidence for the Determiner Phrase as a processing domain', by Edith Kaan & Nadezhda Vinokurova. The authors propose that the DP is a separate domain for processing, and the results of their work may be taken to suggest that DP is a phase in the sense of Chomsky (2001) – however, the question of whether or not DP is a phase is hotly debated and the claim is certainly not part of mainstream phase theory. Kaan & Vinokurova concentrate on the singular and plural interpretation of possessees in NPs expressing possession in Sakha. In order to explain the preference for the singular interpretation in otherwise ambiguous possession structures in this language, they posit the Extended Semantic Cost Principle, according to which revision is difficult if the decision is semantically interpreted, that is, when the DP is closed off. DP is thus a processing domain: once parsed, its referent is established and the syntactic structure is no longer accessible.

'Weak indefinites' is Greg Carlson's contribution to the volume. This chapter attempts to derive semantically the well-known partition between

the VP domain and the IP domain (Diesing 1992): bare plurals are interpreted existentially in the VP while bare plurals are interpreted generically in the IP. Carlson concentrates on nominal incorporation structures as described by Van Geenhoven (1998) and others, and argues that these give rise to a denotation which is within the denotation-type of verbs themselves and which is qualitatively different from the denotation-type of sentences. As a result of the lattice structure of eventualities, which they preserve, and their ability to be defined without reference to context (they are predicates), weak indefinites are the only argument types that do not need to be moved out of the VP. Carlson accounts for the fact that there is existential closure at the VP level (as argued by Diesing) by arguing that the existential quantifier is a consequence of the projection of eventualities into the domain of propositions. In short, narrow-scope indefinites, including (most notably) incorporated indefinites, are interpreted below the existential quantifier that binds the event variable.

In 'Predicate-argument mismatches and the Adjectival Theory of indefinites', Fred Landman compares two theories of arguments and predicates: the Montague-Partee approach, within which predicate interpretations are derived from argument interpretations, and the so-called Adjectival Theory of indefinites, within which the opposite is argued, namely that argument interpretations derive from predicate interpretations. Landman argues that there are problems with both approaches, since a more complex operation is needed, one that integrates maximalization effects for scopal and non-scopal readings of arguments of relations. It is argued that predicates are formally DPs, rather than NPs, whilst at the same time they have a set interpretation, illustrating a particular mismatch between syntax and semantics.

In his chapter 'Determiner nouns: a parametric mapping theory', Giuseppe Longobardi compares bare nominals in Italian and English. He argues that Italian bare nominals can only be bound quantificational expressions (interpreted as either existentials or generics) whereas English bare nouns are potentially ambiguous between a referential and a quantificational interpretation. This semantic parametrization is extended to the syntax of object-referring nouns and more specifically to that of proper names. In Romance languages, such object-referring nouns are obligatorily preceded by either an expletive article or an adjective. However, the situation in English is different. Relating the two types of determinerless nominals (bare common nouns and bare proper nouns), Longobardi proposes a cross-linguistic typological generalization which states that proper nouns may occur without a phonetically filled D if and only if generic nouns may freely do so.

In 'A Russellian interpretation of measure nouns', Almerindo E. Ojeda argues that measure nouns are interpreted as sets of metrically equivalent entities. The approach is Russellian in that just like Russell, who took *five*

to denote the set of entities which number five, it is argued that, say, *pint* denotes the set of entities which measure a pint. The proposal relies heavily on a model-theoretic approach to semantics. The model M has a metric domain D, consisting of a set of elements which are measurable, and of isometries, i.e. subsets with the same measurement. Isometries can be closed off under the operation of discrete addition of M as a function which assigns, to each nonempty set of pairwise disjoint elements of M, the smallest upper bound for that set.

In 'Generalizing over quantitative and qualitative constructions', Jenny Doetjes & Johan Rooryck deal with *N of N* constructions in French. The authors put forward a descriptive generalization regarding agreement in both quantificational and qualificational constructions. These constructions exhibit two agreement patterns depending on the way the quantifier/qualifier is interpreted with respect to the quantified/qualified noun. When the quantifier/qualifier has a 'pure degree' interpretation, external agreement is triggered by the quantified/qualified noun. By contrast, a comparative interpretation involves external agreement triggered by the quantifier/qualifier.

Doetjes & Rooryck derive this generalization by postulating two different syntactic structures, for comparative quantificational/qualificational constructions on the one hand, and for 'pure degree' quantificational/qualificational constructions on the other. The former involve predicate inversion and the structure of a relative clause while the latter involve a DP structure without predicate inversion but utilizing an adverbial EvalP.

In 'On three types of movement within the Dutch nominal domain', Norbert Corver strengthens further the parallelism between the clausal domain and the nominal domain. He argues that the nominal domain may involve head, A- and A′-movements. The kind of *N van een N* Dutch constructions which Corver studied in earlier work involve predicate inversion of the A-displacement type. *Drie meter zijde* 'three metres of silk' constructions involve predicate movement of the head movement type while abstract constructions of the type *drie dagen vakantie* 'three days of vacation' involve A′-movement type (a predicative XP raises to Spec-DP).

Melita Stavrou, in 'Semi-lexical nouns, classifiers, and the interpretation(s) of the pseudopartitive construction', deals with the kind of quantitative constructions expressing pure degree that were the topic of Doetjes & Rooryck's chapter. The idea proposed by Stavrou is that pseudo-partitive constructions are a single nominal projection with a single referent. The quantifying nominal element is semantically and syntactically similar to simple quantifiers, behaving like a QP in the extended nominal structure. The quantifying element is semi-lexical, heading its own category and selecting a lexical NP as its complement. The conclusion is that grammatical categories include semi-functional categories alongside functional and lexical ones.

This closes the summary of the contributions from the first volume. It is now time to turn to the second opus.

The second volume contains nine chapters, divided into three main sections: (i) Typology of possessors (two chapters); (ii) The internal syntax of possessor phrases (three chapters); (iii) External syntax (four chapters). Like volume I, volume II begins with a comprehensive introduction by the editors, this time concentrating on NPs and possession. A note tells us that the volume has its roots in the 'From NP to DP' conference held in Antwerp in February 2000. Curiously, no reference to that conference appears in the introduction to the first volume, although it seems that the chapters that make it up were also part of that conference.

Volume II begins with a contribution by Tabea Ihsane. In 'A typology of possessive modifiers', she argues that three types of possessive modifiers, namely determiner, adjectival and pronominal, should be distinguished. She further suggests that all are generated in Spec-NP and are licensed in an AgrPossP, and that they may display a weak and strong form. Determiner possessives move from Agr-PossP to DP, either as heads or as maximal projections, to check a [+def] feature. Their presence in DP accounts for the impossibility of them co-occurring with articles and for the definiteness of the DP which they occur in. The existence of a strong paradigm allows some determiner possessives to be coordinated, emphasized and modified, three characteristics of strong elements.

In 'The possessive via associate anaphor', Georges Kleiber accounts for the behaviour of nouns which are used in conjunction with a possessive adjective. Kleiber proposes that whether or not a possessive adjective is possible with a given noun depends on the type of lexical relations established between the corresponding noun and the adjective, as well as on the ontological status of the entities involved, i.e. their position in an ontological dependence hierarchy: human > animals > concrete objects > events > properties.

In 'From DPs to NPs: a bare phrase structure account of genitives', Carmen Dobrovie-Sorin accounts for the constraint which synthetic genitives of category DP impose on the determiner of the head noun. Her proposal is that a synthetic DP-genitive occupies the specifier of NP and is interpreted as the argument of a function which yields the individual denoted by the maximal (extended) projection of the head N. This rule of composition, she argues, excludes all determiners other than a definite article.

In 'Determiner-possessor relation in the Bulgarian DP', Lilia Schürcks & Dieter Wunderlich argue that short possessive forms in DP-internal structures in Bulgarian select a host which has the categorial characteristic [+def]. If these forms appear DP-externally, such a restriction does not hold. The authors suggest that both the placement of the definite article and the placement of VP-clitics follow from the same principle. The authors put forward a lexical analysis, which they claim has the advantage of successfully dealing with the phenomenon at hand.

In 'On the asymmetrical but regular properties of French possessive DPs', Anne Zribi-Hertz argues that the regular asymmetry which characterizes Standard French possessive DPs arises not from the (phonological) fact that subject pronouns are realized as clitics in that language, but from a general syntactic contrast between subject arguments and subject inflection. She further suggests that a key contrast between personal morphemes and lexical DPs is that the former may be used to spell out inflectional features, whereas the latter may not.

In 'Some notes on the structure of alienable and inalienable possessors', Artemis Alexiadou discusses semantic, syntactic and morphological differences between alienable and inalienable possessor constructions across languages, with particular reference to Greek. She argues that these differences are the reflex of different underlying representations for the two types of possessor relations.

In 'Inalienable possession and the interpretation of determiners', Jacqueline Guéron again takes up issues which she addressed in earlier work. She maintains that inalienable possession is Binding, but now defines Binding as a relation between formal features rather than between syntactic constituents. She maintains her earlier view that the difference between French and English with respect to the construal of inalienable possession is a function of the grammatical status of the determiner in the body part DP. In this contribution, Guéron proposes that while *the* is a determiner in English, *le/la/les* is not a determiner in French. Finally, it is argued that in both French and English, inalienable possession reduces to anaphoric feature binding in certain cases and to pronominal feature binding in others.

In 'The external possessor construction in West Flemish', Liliane Haegeman argues against adopting a movement analysis in which a left-branch possessor is extracted from a doubling possessor construction, since such a movement operation would violate standard constraints on A′-movement in West Flemish. Haegeman proposes instead that the external possessor is related to the possessum by construal with a resumptive pronoun, and she further discusses the interpretive consequences of the resumptive pronoun analysis.

In 'Grammaticalization and external possessor structures in Romance and Germanic languages', Béatrice Lamiroy discusses inalienable possessive dative constructions. These constructions involve the expression of the possessor by a non-lexical (non-argumental) dative. Lamiroy shows that there are several restrictions on the presence of the possessive dative, but these restrictions vary depending on the language (Spanish is a very permissive language, whereas English is not). The author relates these differences via a process of grammaticalization. First, there is a competition between dative and nominative. This competition is resolved in favour of the nominative. The claim is that datives are intermediate structures (between nominative

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and accusative). This is meant to explain why possessive datives co-occur with middle passives so easily.

I was very excited at the prospect of receiving and reading this two-volume study of NPs and DPs, and I was not disappointed. The chapters are excellent. Although some entries are not entirely novel, in that the work presented has been published elsewhere or is a reworking/restatement of previous efforts, many articles are both new and challenging. The editors have done a great job. The introductions are excellent, as already observed at the outset. It must be noted, however, that the theoretical section of the introduction in the first volume ends rather abruptly. No conclusion, summary or link to the second section, that of the case studies, is given, suggesting that something may be missing. But to continue with the praises, the language index and the subject index were compiled with great care. In sum, I heartily recommend these two volumes to anyone who is interested in the nominal domain.

REFERENCES

Bouchard, D. (1998). The distribution and interpretation of adjectives in French. *Probus* **10**. 139–183.
Chomsky, N. (2001). Derivation by phase. In Kenstowicz, M. (ed.), *Ken Hale: a life in language*. Cambridge, MA: MIT Press. 1–52.
Diesing, M. (1992). *Indefinites*. Cambridge, MA: MIT Press.
Van Geenhoven, V. (1998). *Semantic incorporation and indefinite descriptions: semantic and syntactic aspects of noun incorporation in West Greenlandic*. Stanford: CSLI Publications.

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Norbert Corver & Henk van Riemsdijk (eds.), *Semi-lexical categories* (Studies in Generative Grammar **59**). Berlin: Mouton de Gruyter, 2001. Pp. viii + 556.

Reviewed by PHOEVOS PANAGIOTIDIS, Cyprus College

This volume is a collection of papers on elements in grammar that appear to display the behaviour of both lexical and functional categories. The postulation of such entities goes back to Emonds (1985) and van Riemsdijk (1998), the latter having coined the term 'semi-lexical'.

The book is organised into four thematic parts. The first part focuses on the status of semi-lexical categories in the theory of grammar, as well

as their position within syntactic projections. Although these questions re-emerge in the ensuing three sections, these parts are organised to bring together contributions on semi-lexicality in the nominal, verbal and adpositional domains, respectively.

Each chapter reflects a different viewpoint on the topic, and the chapters survey a number of languages. Four of the viewpoints taken in the volume, by no means antagonistic to each other, are particularly noteworthy. The contributions by Joseph Emonds, Hubert Haider, and Joan Rafel each propose a special projection status for semi-lexical items. The chapters by Tanmoy Bhattacharya, Elisabeth Löbel, and Ludmila Veselovská explore how semi-lexical categories tightly combine with lexical and functional items in particular languages. Carson T. Schütze, Miriam Butt & Wilhelm Geuder, Anna Cardinaletti & Giuliana Giusti, Tjerk Hagemeijer, Kristin M. Eide & Tor A. Åfarli, and Jochen Zeller all probe into the feature content of semi-lexical heads, generally proposing either that (a) they are impoverished lexical heads, or (b) they are lexical heads inserted under functional nodes. Finally, Susan M. Powers, in 'Children's semi-lexical heads', argues persuasively and excitingly for the pivotal role of semi-lexical items in first language acquisition.

As is inevitable in virtually any collection, some chapters appear more interesting or promising (in the sense that they potentially inaugurate exciting lines of research) than others. Instead of reviewing them individually, I will discuss the challenges posed and the paths opened up by the volume as a whole – in other words the invigorating way of doing syntax which it seems to be (re-)introducing. More specifically, I will focus on two topics: what we do when we do syntax, and what we take as axiomatic when we do syntax.

It should be evident that the bulk of syntactic research should and indeed does revolve around hierarchical structures and the (non-)locality of dependencies within such hierarchical structures. This much amounts to stating the obvious. At the same time, though, it needs to be noted that a disproportionately small (though not necessarily small in absolute numbers) amount of syntactic work is concerned with the nature (i.e. the precise feature specification) of exactly those elements which build hierarchical structures and form (non-)local dependencies with each other. This is undesirable, in the very clear sense that it compromises the value of part of the work done in syntax. To give an informal example: if we do not really understand the feature make-up of epithets (expressions such as *the jerk*, *the sod*, *the idiot* – or more colourful ones), this hardly helps us either to understand their peculiar binding properties (Lasnik 1991) or, a fortiori, to evaluate competing binding theories on the basis of their behaviour. Similarly, the complete reliance by many syntacticians, until very recently, on Chomsky's [±N] [±V] model of categorial features (from his 1970 paper 'Remarks on nominalization' – thus, more than thirty years ago, in such a

fast-changing field!) has led to shortcomings and misunderstandings which I will not debate or analyse here.

In this respect, *Semi-lexical categories* makes a profoundly topical as well as a lasting contribution to the field, and it should play a significant role in taking forward the debate on features in syntax to match our highly sophisticated theories of their structures and dependencies. Another significant aspect of the volume is the fact that chapters have been carefully selected by the editors so as to offer coherent and methodologically parsimonious solutions to the problem of semi-lexicality (instead, for instance, of stipulating [$\pm$ semi-lexical] features and the like), while relating the feature content of semi-lexical categories to their phrase structure status. Hence, in his chapter 'The flat structure economy of semi-lexical heads', Emonds argues that semi-lexical heads induce ternary-branching structures; Haider, in 'Heads and selection', argues that only semi-lexical elements can appear in a head-last projection; Cardinaletti & Giusti, in 'Semi-lexical motion verbs in Romance and Germanic', and Hagemeijer, in 'Underspecification in serial verb constructions', argue that semi-lexical elements are the key to understanding clause union and serial verbs respectively; and Zeller, in 'Lexical particles, semi-lexical postpositions', argues that they give rise to the difference between verbal particles and adpositional projections. In the above and other instances, understanding the feature content of X enables us to explain or motivate X's position in phrase structure or its establishing of particular dependencies.

The second major offering of the volume is less dramatic but perhaps equally important: (re-)opening the dialogue on some better-studied but not always fully understood matters. An example is the notoriously elusive copula. While Schütze, in 'Semantically empty lexical heads as last resorts', takes the verb *to be* as the minimally specified, last-resort V item in English, inserted as an 'elsewhere' solution, Löbel, in 'Classifiers and semi-lexicality: functional and semantic selection', argues extensively that copulas are representative of a class of verbs that take non-participant arguments, such as the verb *weigh* in *The car weighs 976 kilos*. The argumentation in both chapters is detailed and, in parts, compelling – on the one hand partly dispelling any illusions that matters like this have been settled long ago, on the other hand opening up stimulating new ways of looking at these issues.

Another example of the challenges which the volume has in store for its readers is the careful (although cryptic in parts) analysis in Emonds' chapter which distinguishes between [$X_{lexical}$ [$X_{lexical}$ YP]] structures and [$X_{semi-lexical}$ $X_{lexical}$ YP] ones. His defence of the by-now almost unmentionable possibility of ternary-branching structures has in this instance such a high explanatory value that those disagreeing with such an analysis must look hard to find an alternative which captures the facts at least as well as Emonds does. In short, research into semi-lexicality stimulates scrutiny of issues which previously seemed to have been more or less resolved.

The book is not all debate, though. Chapters such as those by Bhattacharya, Löbel, Veselovská, Butt & Geuder, Cardinaletti & Giusti, and Hagemeijer offer valuable insights into the workings of semi-lexical categories in less extensively studied languages such as Bengali, Vietnamese, Czech, Urdu, Southern Italian varieties (with emphasis on the Sicilian variety of Marsalese) and São-Tomense (a Portuguese-based creole). As well as providing detailed descriptions of semi-lexical categories in the aforementioned languages, these insights include examination of the systematic differences which semi-lexical categories have vis-à-vis their functional and lexical 'siblings'. In other words, considerable ground is covered in the volume towards identifying semi-lexical elements and discussing their feature content as well as their phrase structure behaviour.

As a minor point of criticism, I would like to point out that some of the topics introduced in the enlightening editors' summary, 'Semi-lexical categories', which serves as the volume's introduction, are not in fact subsequently taken up for further analysis. Two examples are the workings of semi-lexical nouns in Direct Partitive constructions (7–9) – such as the Dutch *een fles wijn* ('a bottle [of] wine') – and the relevance of the CATEGORIAL feature content of semi-lexical categories in deciding their structural behaviour within their 'Extended Projection'. Perhaps this could have been solved by soliciting chapters on such topics for the volume; alternatively, older work on them, such as van Riemsdijk (1998), could have been reprinted here.

In conclusion, I believe *Semi-lexical categories* to significantly advance our understanding of how the feature content of lexical items triggers or interacts with their syntactic behaviour. Moreover, the authors contributing to the volume carry this task out in an essentially minimalist fashion, as they clearly and precisely identify semi-lexical categories and their properties, and then proceed to attempt to reduce their nature and behaviour to that of better-studied entities and phenomena.

REFERENCES

Chomsky, N. (1970). Remarks on nominalization. In Jacobs, R. and Rosenbaum, P. (eds.), *Readings in English transformational grammar*. Waltham, MA: Blaisdell. 184–221.
Emonds, J. (1985). *A unified theory of syntactic categories*. Dordrecht: Foris.
Lasnik, H. (1991). On the necessity of binding conditions. In Freidin, R. (ed.), *Principles and parameters in comparative grammar*. Cambridge, MA: MIT Press. 7–28.
van Riemsdijk, Henk (1998). Categorial feature magnetism: the endo-centricity and distribution of projections. *Journal of Comparative Germanic Linguistics* **2**. 1–48.

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Maria Teresa Guasti, *Language acquisition: the growth of grammar*. Cambridge, MA: MIT Press, 2003. Pp. xiv+474.

Reviewed by TERESA PARODI, University of Cambridge

As the title promises, this book illustrates how grammar grows, from birth to age 5–6. The study focusses on several aspects: the acquisition of speech and the lexicon, the emergence of syntax, the development of null subjects, *wh*-movement, NP-movement, the binding principles, and some aspects of quantification and control. The book also examines cases of language impairment which indicate a dissociation between language and other cognitive abilities.

Written within the generative framework, the book subscribes to an innateness account of acquisition. The role of innateness is discussed mainly in the initial chapters (chapter 1, 'Basic concepts', chapter 2, 'First steps into language', and chapter 3, 'Acquisition of the lexicon'), in which concepts such as the logical problem of language acquisition and poverty of stimulus are introduced. The notion of learning as a selective, rather than an instructive, process should explain how children learn to identify (and solve) issues of ambiguity and constraints on form and meaning which distribution cannot reveal. In the acquisition of speech, a selective process enables learners to choose from the phonological systems available in human languages in general, and encodes in Universal Grammar (UG) the one instantiated in the input. Perceptual sensitivity for human languages in general is thus narrowed by experience.

Faced with the task of acquiring the lexicon, the child can use different types of cues to segment words from the speech string, to associate meanings and words, and to establish a link between lexicon and syntax. Guasti presents evidence that non-language-specific statistical information is helpful in the identification of word boundaries. This statistical procedure, however, cannot cover all aspects of lexical acquisition. For example, in the case of negative polarity items, distribution and meaning are not in a one-to-one correspondence. While a 'word-to-world' mapping procedure can be used to associate meanings with words, the meaning and distribution of negative polarity items depend on their semantic properties. This in turn is taken as evidence of the need for a language-specific and biologically determined mechanism, i.e. UG, for language acquisition to be possible.

With respect to the acquisition of syntax, Guasti adopts the full competence hypothesis for initial developmental stages, dealt with mainly in chapters 4, 'The emergence of syntax', and 5, 'Null subjects in early languages'. The former is devoted to the structure of early clauses, and

Guasti presents crosslinguistic evidence on functional categories, the distribution of verbs with respect to negation, and initial constituents in V2 languages as a basis for the discussion of early finite clauses. A further step in the presentation of early syntax is subject agreement. The question here is to what extent children see agreement as a linear or a structural relation and how they deal with the relevant morphological and semantic factors. The chapter finishes with a discussion of what could be called 'lack of agreement', the often-observed use of infinitives in root clauses. Guasti adopts the truncation analysis proposed by Rizzi (1993/1994), who assumes that all clauses, including declarative clauses, are CPs, even in non-V2 languages. While this always applies to adult grammars, it holds optionally in child grammars: some clauses are CPs but functional projections can be truncated below CP. This results in root clauses which are AGRPs, TPs or VPs.

The discussion of root infinitives leads naturally to the topic of null subjects in chapter 5. An excellent presentation of the syntactic issues pertaining to null subjects is accurately and clearly related to facts of acquisition. Crosslinguistic evidence shows that null subjects are not due to parameter missetting, since they show language-specific properties. Guasti then adopts the truncation analysis followed for root infinitives as an explanation for null subjects, as suggested by Haegeman (1995) for Dutch. Guasti completes the picture by presenting performance accounts of null subjects, which attribute them to processing problems. In Guasti's view, performance models by themselves cannot account for null subjects; it is, however, possible that processing demands favour some grammatical options rather than others.

While chapters 4 and 5 specifically deal with the initial syntax, chapters 6–10 take a developmental perspective covering the development from initial to advanced stages in the acquisition of *wh-* and NP-movement, binding, quantification and control.

Chapter 6, 'Acquisition of *wh*-movement', describes the development of question formation, taking into account the parameters which apply to the overt movement of the *wh*-operator on the one hand, and to the movement of the verb from I to C on the other. The reader is offered examples of acquisitional data from various languages which illustrate the different parametric options. Specific difficulties children have, for example, with negative questions and with so-called medial *wh*-questions add to the picture of the developmental route towards adultlike question formation. The acquisition of relative clauses concludes the presentation of *wh*-movement. Central points here are the acquisition of the rule of recursion, which is used in adult relative clause formation (and yields relative clauses with gaps), and the use of resumptive pronouns based on Ā-binding at LF. Aspects of *wh*-movement believed to be innate are acquired quickly.

In chapter 7, 'Acquisition of NP-movement', a brief summary of passives in general constitutes the background for the presentation of passives in child grammar. Guasti discusses actional and non-actional passives, as well as

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adjectival versus verbal passives, taking into account their meaning and form (initial passives express change of state and do not often include *by*-phrases). Borer & Wexler (1987) offer a maturational account of early passives, according to which children's problems with passives can be attributed to their inability to form A-chains. This ability is claimed to mature at around 5–6 years of age. Guasti argues against this view, offering evidence of children's ability to form A-chains, manifest in their treatment of unaccusative and unergative verbs. A remaining problem is the fact that children fail to understand actional and non-actional passives when the *by*-phrase is present. According to Guasti this could indicate a problem with theta-role transmission from the passive morphology to the *by*-phrase, and in this particular instance a maturational explanation could be considered.

Guasti discusses the binding principles in chapter 8, 'Acquisition of the binding principles'. The discussion reviews each of the principles and their acquisition with references to crosslinguistic evidence on comprehension and production. Processing limitations are mentioned as a source of mistakes, especially in the interpretation of non-reflexive pronouns.

Children's problems with universal quantification (chapter 9, 'Aspects of the acquisition of quantification') can be viewed from a linguistic and a non-linguistic perspective. The former is represented by Philip (1995), and states basically that children make mistakes because their linguistic knowledge differs from that of adults. Guasti sides with the alternative analysis by Crain et al. (1996), who claim that children's errors are due to infelicitous pragmatic conditions in the experiments carried out. Under suitable pragmatic conditions, children display the same syntactic and semantic knowledge as adults.

'The acquisition of control' is the title of chapter 10. Children produce control structures by age 3–4 years, but their interpretation of PRO is less restricted than the adult one. Children go through different stages in the acquisition of control structures. According to Wexler (1992) and Broihier & Wexler (1995), the development observed is based on maturation. In contrast, following the lexical-syntactic integration hypothesis, Guasti points out that it is children's need to acquire knowledge of the lexical properties of verbs that might be at the root of their different grammars of control.

The last chapter, chapter 11, 'Dissociation between language and other cognitive abilities', focusses on Specific Language Impairment and Williams Syndrome. These cases, in which either language or some other cognitive function is impaired, but not all at the same time, provide evidence for a dissociation which in turn indicates that 'language is not a manifestation of a general cognitive capacity' (404). Again, the reader encounters very clear and well-illustrated argumentation.

The book would have benefited from a closing, general chapter recapitulating the main line of thought, as a counterpart to the introductory chapter, which acquaints the reader with the questions to be simply addressed and their background. As it is, the book just stops after chapter 11.

What, then, are the main assumptions informing the whole work? Guasti supports innateness (chapters 1–3) over purely associative models; she adopts the full-structure hypothesis for early syntax (chapters 4 and 5) against structure-building or maturational models. A truncation account is chosen to explain root infinitives, null subjects and particulars of *wh*-movement. In line with the full-structure hypothesis, deviations from the adult syntax are attributed to non-linguistic issues, such as processing in the case of children's mistakes with pronoun interpretation (chapter 8), or to difficulties in integrating lexicon and syntax, as in the case of control structures (chapter 10). Finally, she argues for the modularity of the language faculty.

A drawback in my view is that the arguments are not always backed up by quantitative information, a drawback carried over, at least in part, from the sources used (e.g. Radford 1990). The lack of quantification occasionally weakens the argument. A case in point is the chapter on early syntax (chapter 4): the choice of the full-structure account rather than a structure-building account as representative of early syntax, and the discussion of the characteristics of early production, are based only on examples, which convey an impression but do not provide a complete picture. Without quantification, it is impossible to tell what the examples represent or what the development might have been. Other chapters, such as those on *wh*- and NP-movement, do include quantitative information.

These shortcomings notwithstanding, the book offers an excellent overview of the growth of grammar. The author's aim – to be of use both to graduate students and to researchers – is clearly fulfilled. Each of the chapters 2–10 includes background information on the domain in question, followed by the presentation and discussion of the specific acquisitional issues related to it. This in turn leads to discussion of how the problem or domain has been accounted for so far. Several alternative analyses are offered. There are intermediate summaries of each section as well as a general summary at the end of each chapter. Suggestions for further reading, key words and study questions prove to be extremely useful. The reader also finds a glossary at the end of the book. The book reads very well and is very clearly presented, managing to make accessible a great deal of the recent research in the field.

REFERENCES

Borer, H. & Wexler, K. (1987). The maturation of syntax. In Roeper, T. & Williams, E. (eds.), *Parameter setting*. Dordrecht: Reidel. 123–172.
Broihier, K. & Wexler, K. (1995). Children's acquisition of control in temporal adjuncts. In Schütze, C. T., Ganger, J. B. & Broihier, K. (eds.), *Papers on language processing and acquisition* (MIT Working Papers in Linguistics 26). Cambridge, MA: MITWPL. 193–220.
Crain, S., Thornton, R., Boster, C., Conway, L., Lillo-Martin, D. & Woodams, E. (1996). Quantification without qualification. *Language Acquisition* 5. 83–153.
Haegeman, L. (1995). Root infinitives and initial root null subjects in early Dutch. In Koster, C. & Wijnen, F. (eds.), *Proceedings of Groningen Assembly on Language Acquisition*. Groningen: Groningen University. 83–153.

REVIEWS

Principles and Parameters framework and its GB predecessors. Chapter 2, which is primarily concerned with NP-anaphora, also devotes some attention to syntactic approaches within Optimality Theory, and chapter 3 surveys syntactic and semantic approaches to VP-ellipsis. Huang provides data from a broad range of languages which bear on these accounts, and surveys various revisions and alternatives which have been proposed to deal with such data. The discussion of control theory is especially useful. However, while the facts Huang cites provide challenges to these accounts, his critique does not warrant the conclusion that 'a purely syntactic approach can never be conceptually and empirically adequate to account for anaphora' (130) or that semantic analyses are 'inadequate in accounting for binding and control in a range of languages' (172). Huang's criticisms mistakenly assume that these theories make direct predictions about specific morphological forms (for instance, that reflexives are necessarily 'anaphors' in the technical binding theory sense) and that a given form will be associated with the same features, and thus subject to the same conditions, in all languages. Chapter 3 also contains a detailed and interesting discussion of logophoricity, along with a comparison of long-distance reflexives in East Asian languages with logophoric pronouns in African languages. Huang proposes a unified account of the two within Discourse Representation Theory and provides support for earlier claims about the connection between long-distance reflexives and logophoric pronouns.

Chapter 4, 'Pragmatic approaches to anaphora', outlines a revised neo-Gricean pragmatic theory of anaphora, based on Steven Levinson's principles Q (say as much as you can), I (say as little as necessary) and M (be brief, avoid prolixity). It would have been helpful to provide more motivation for the neo-Gricean approach and how it is an improvement over Grice's original formulation, as well as discussion of how its predictions and basic assumptions compare to those of other pragmatic accounts, such as Relevance Theory. Huang shows how interaction of the Q, I and M principles with various assumptions, e.g. the semantic content hierarchy (full NP > pronoun > zero) and the disjoint reference presumption (co-arguments of a predicate are intended to be disjoint, unless reflexive), can explain the distribution and interpretation of various anaphoric forms. The account is interesting, but not sufficiently explicit to be very convincing. Unlike grammatical constraints, the various assumptions which interact with the neo-Gricean principles are at best tendencies, and implicatures resulting from this interaction, like all implicatures, should be cancellable. Yet many of the facts Huang attempts to predict with this theory are absolute. An adequate account of anaphoric phenomena should distinguish cases in which a given interpretation is necessary (e.g. non-coreference in *She saw her*) from ones where it is simply preferred (e.g. coreference in *She said she was leaving*). But as far as I can tell, the revised neo-Gricean account is incapable of making such distinctions, let alone explaining why they exist.

Huang is also not explicit about how pragmatics interacts with syntax and semantics, and thus fails to show how syntax, semantics and pragmatics are interconnected in determining anaphoric processes, and the precise way in which this interaction varies depending on his proposed typology of 'syntactic vs. pragmatic languages', an idea rooted in earlier work by Givón. It is also unclear how this typology would account for the putative counter-examples to binding and control theories, especially since some of these come from presumably 'syntactic' languages like English, German, Danish and Icelandic, which do not have properties such as 'massive zero anaphora', associated with 'pragmatic languages' (262).

This chapter also offers a cursory overview of other non-syntactic analyses of anaphora, but with no discussion of how the underlying assumptions and predictions or the range of phenomena covered by these accounts compare with the neo-Gricean approach. In some cases, the theories are trivialized or misrepresented. For example, Huang says that the main merit of Kempson's (1988) proposal is that it 'provides additional evidence that the interpretation of anaphora is basically a semantic/pragmatic, as opposed to a syntactic, process' and 'cannot be adequately dealt with by a syntax-driven model such as Chomsky's principles-and-parameters theory/minimalist programme' (248). But Kempson's work was intended as a complement, not an alternative, to grammar-based approaches, and these in turn were not intended to account for all instances of how anaphoric expressions are interpreted. Other inaccuracies include the characterization of different senses of focus in a footnote to the discussion of the topic–focus model of bridging cross-reference. Huang states that 'on the one hand, linguistically focused elements are in general a result of focal attention, and on the other the element that is linguistically focused tends to enter the activated memory of both the speaker and the addressee' (250, fn. 15), an observation he attributes to Gundel et al. (1993), among others. What Gundel et al. actually say is that 'elements tend to be linguistically focused because the speaker wants to bring them into the focus of attention' and 'the referent of a linguistically focused element is likely to be in focus in subsequent utterances in a discourse' (1993: 279, fn. 10). The distinction between merely activating something and bringing it into focus is especially crucial here. It is also difficult sometimes to distinguish between Huang's ideas and those of the authors he discusses. Page numbers and/or direct quotes would have been helpful in such cases.

Chapter 5, 'Switch reference and discourse anaphora', covers the phenomena of switch reference (marking coreference/non-coreference between NPs in a dependent and independent clause in the same sentence) and discourse anaphora (anaphoric expressions not restricted to finding antecedents in the same sentence). The chapter offers a detailed and informative survey of switch reference systems and compares switch reference with logophoricity and other forms of reference tracking. Huang compares

a binding theory account of switch reference with an account in terms of semantic properties, concluding that the latter is more adequate. He also briefly sketches how a neo-Gricean approach might handle some aspects of switch reference. The second part of the chapter addresses the question of speakers' choice of different anaphoric forms in a discourse. Huang discusses three approaches to this question, called the 'topic continuity model', the 'hierarchical structure model' and 'the cognitive model'. He provides detailed overviews of the first two, pointing out major insights as well as some shortcomings (for example, the form of an anaphoric expression cannot be predicted solely in terms of linear distance between that expression and its antecedent, as posited in the topic continuity model). But the discussion of the cognitive model (actually a number of distinct models which share the property of relating referring forms to cognitive states) is less thorough and also inaccurate in a number of places. For example, Huang's observation that full NPs may be used for activated referents is not problematic for the Givenness Hierarchy model of Gundel et al. (1993), which, unlike other cognitive models, does not predict a simple one-to-one mapping between form and cognitive status. This theory predicts constraints on reference form based on the cognitive status overtly signalled by certain lexical items, the minimal status a referent must have in order for the form to be used appropriately. Since the statuses overtly signaled by different determiners (e.g. 'familiar' and 'uniquely identifiable') are all entailed by the status 'activated', the prediction is that full NPs CAN be used for activated referents. The Givenness Hierarchy model also explains the distribution and interpretation of other forms, for example *it* vs. *this/that* and definite article vs. demonstrative determiner, which are unrelated to correlation between activation of the referent and relative length/attenuation of the referring form. There is also a serious error in Huang's statement that each status on the Givenness Hierarchy 'entails and is entailed by all lower statuses, but not vice versa' (315). The 'is entailed by' part obviously doesn't belong here, as it would render the statuses equivalent.

The final section of chapter 5 discusses how the referential forms used in conversation conform to the Q, I and M principles, and how these principles apply in referential repair. There is no discussion of how the neo-Gricean approach compares with the Gricean and Relevance-theoretic pragmatic principles which are integrated into the cognitive theories of Ariel (1990) or Gundel et al. (1993). The chapter ends with the statement that 'the inter-action and division of labor between the cognitive and pragmatic constraints are not well understood and need to be further studied' (329).

A major criticism of this book is that it tries to do too much, and it isn't always clear what the questions are. The list of accomplishments provided in chapter 6, 'Conclusion', is probably overstated. Readers who are not already biased against the Chomskian program are unlikely to agree that the book has demonstrated the inadequacy of current semantic, syntactic

and discourse approaches to anaphora, that it has 'forced a radical rethink of some of the current claims about the nature of grammatical rules and the way in which they interact with pragmatic principles' (331) or that it has bearing on the plausibility of the innateness hypothesis. None of the approaches discussed in this book attempt to account for all aspects of anaphora, because anaphora is not a unitary phenomenon. It is a convenient descriptive label for a diverse set of phenomena, including many which are not discussed in this book, but which happen to share the property of involving some sort of referential/interpretive dependence between two or more elements in a sentence or discourse.

There is little question, however, that this book is a valuable reference source for anyone interested in the fascinating topic of anaphoric relations among elements in a sentence or discourse, and the linguistic and non-linguistic principles and constraints which determine their distribution and interpretation. Readers will come away with a better understanding of the various approaches to anaphoric phenomena in the literature, as well as a deeper appreciation for the richness and complexity of anaphoric systems in the world's languages.

REFERENCES

Ariel, M. (1990). *Accessing noun phrase antecedents*. London: Routledge.
Gundel, J. K. (1980). Zero NP-anaphora in Russian: a case of topic-prominence. In Kreiman, J. & Ojeda, A. E. (eds.), *Proceedings from the Parasession on Pronouns and Anaphora*. Chicago, IL: Chicago Linguistic Society. 139–146.
Gundel, J. K., Hedberg, N. & Zacharski, R. (1993). Cognitive status and the form of referring expressions in discourse. *Language* **69**. 274–307.
Kempson, R. (1988). Logical form: the grammar-cognition interface. *Journal of Linguistics* **24**. 393–431.

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Renate Musan provides a uniform compositional semantics for German perfect constructions and their interaction with temporal adverbials. The

book is aimed at an audience of semanticists with a specific interest in the semantics of tense and temporal adverbials in German. It is based on Musan's *Habilitationsschrift*, written in German, and a series of articles published between 1998 and 2003. Because of this background, her work has been discussed in the literature to some degree already (cf. von Stechow 2002, Löbner 2002). We include some of their remarks in this review, in order to broaden the scope of the discussion.

Chapter 1 establishes that Musan follows the neo-Reichenbachian system developed by Klein (1994), in which Tense is a relation between the utterance time (TU) and the tense time (TT, to be compared to Reichenbach's reference time, Klein's topic time). Imperfective/perfective/restrictive perfective aspect relates the situation time (TS) to TT. The notion of ASPECT TIME is added to the three different times already mentioned to refer to the time located by the aspect of a clause relative to the tense time. At the syntax-semantics interface, AspP, which takes VP as its complement, is the complement of TP in simple tense clauses.

Chapter 2 spells out the semantics of the German present perfect in a compositional way. The construction consists of the following morphosyntactic elements: verb stem + past participle + auxiliary *haben* 'have' or *sein* 'be' + present tense. In some cases, the present perfect clearly expresses completedness, as in (1a); in others, like (1b), it doesn't.

(1) (a) Er hat schon gegessen.
        he has already eaten
        = He has finished his meal.
    (b) (Ralf hat vorhin Martin getroffen.)
        Ralf has earlier-today Martin met
        Martin hat Kopfweh gehabt.
        Martin has headache had
        = Headache may or may not be over at TU.

However, Musan does not want to adopt an ambiguity analysis, as defended by Klein (2000), for instance. Instead, she assumes that the past participle expresses anteriority and claims that the present tense is a standard, present tense. According to Musan, the perfect construction as a whole is stative. The natural consequence of this view is that aspect locates the post-state introduced by the perfect, so that PerfP is the complement of AspP. Thus, all perfect constructions crucially involve three times, namely tense time, aspect time and participle time (the situation time of the embedded VP). The nature of the post-state varies with the Aktionsart of the VP. With achievements and accomplishments, the post-state starts only after the completed VP-situation; see (1a). With activities and states, the post-state starts after the first truth interval of the situation, so the post-state can intersect with the participle time; see (1b).

Chapter 3 deals with different readings of German perfect constructions. These include the relation between present perfect and past tenses, present relevance, perfect of result, the puzzle of Einstein and Princeton (concerning the different implicatures of 'Einstein hat Princeton besucht' vs. 'Einstein has visited Princeton'), switches from stage-level to individual-level predicates and vice versa, and universal and experiential perfect. The claim is that the uniform, but highly underspecified, semantics developed in chapter 2, in combination with a number of powerful pragmatic principles, explains a wide range of data which other frameworks would have to resolve by appealing to an ambiguous semantics of the perfect.

Chapter 4 provides an overview of the types of temporal adverbials taken into account: quantificational adverbials, position adverbials and duration adverbials. In chapter 5, Musan explains how temporal adverbials are interpreted at the tense level, the aspect level and the participle level. The claim that temporal adverbials can affect the participle level accounts for sentences like (2), in which the positional time adverbial specifies the situation time of the VP that is embedded in the perfect construction:

(2) Gestern ist Lola gerannt.
    yesterday has Lola run
    'Lola ran yesterday.'

Chapter 6 extends the analysis to sentences involving *immer* 'always' and *seit drei Stunden* 'for three hours', which are often used to motivate an 'extended now' analysis of the present perfect (cf. Rathert 2003). In German, both simple present, (3a), and present perfect, (3b), are compatible with *seit*-adverbials:

(3) (a) Maria wartet seit langem auf Hans.
       Maria waits since long on Hans
       = Maria has been waiting for Hans for a long time.
   (b) Maria hat seit langem auf Hans gewartet.
       Maria has since long on Hans waited
       = Maria has been waiting for Hans for a long time.

Seit-adverbials get an interpretation in terms of 'up-to-TT'. Given that the 'extended now' is introduced by the temporal adverbial, it doesn't need to be included in the semantics of the perfect. In combination with simple tenses, a *seit*-adverbial specifies the aspect time. Musan claims that *seit* can also specify the aspect time of the clause, as in (4), where the capitals indicate stress:

(4) Maria HAT seit gestern auf Hans gewartet.
    Maria has since yesterday on Hans waited
    = Maria is in a post-state of waiting for Hans since yesterday.
    Claimed implicature: Maria stopped waiting for Hans yesterday.

The account of *seit*-adverbials is extended to other temporal adverbials (e.g. *bis* 'until', *in* 'in'), and, in chapter 7, to temporal subordinate clauses introduced by *als* (past-time-oriented 'when'), *bevor* 'before' and *nachdem* 'after'. Again, we observe that the relations between the different times (tense time, aspect time, participle time) play a role in different interpretations of perfect constructions in the subordinate or main clause. *Als* is past-oriented, so Musan assumes that it can only be combined with tenses in the subclause that can express past meanings. This includes the present perfect:

(5) Maria ist spazieren gegangen, als Hans geschlafen hat.
    Maria has walking gone   when Hans slept   has

Chapter 8 gives a survey of possible underlying and surface syntactic positions of time adverbials. Musan assumes that German temporal adverbials, just like NPs, can undergo scrambling, which is triggered by topic-hood: definite temporal adverbials appear to the left, indefinite ones to the right of the quantificational adverbial of the particular level to which they apply semantically. Scrambling does not change the semantic function of these adverbials, though, since neither scrambled nor non-scrambled temporal adverbials in the Mittelfeld are ambiguous, but always apply to one particular level only.

Finally, chapter 9 summarizes the results of the book.

The strong points of this book emerge from the fact that Renate Musan aims at a systematic account of the interaction between perfect constructions and temporal adverbials. She provides a wide range of examples, and tries to give an account that captures the multitude of different readings in a precise way. She addresses relevant issues that have played a role in the general discussion of the perfect (e.g. the relation with the simple past, the so-called present perfect puzzle with Einstein visiting Princeton, and the interaction with 'since'-adverbials). But, at times, her strong points collapse into weaknesses. Because her semantics is so neatly underspecified, it is often difficult to figure out which pragmatic principle we need in order to obtain the quite specific reading in a particular context. Although the pragmatic principles are listed and discussed, there is no overall pragmatic theory tying them all together.

Musan insists that her theory of the perfect involves three different times as a natural consequence of the compositional semantics. But in many contexts it is hard to actually distinguish three readings. Usually, the interpretation that focusses on the participle time is easy to detect (e.g. (2) above). Other readings arise when either the tense time or the aspect time is topicalized (e.g. (3a) above), but the distinction between these two is often hard to see. Cases where Musan claims the distinction is relevant (e.g. (4) above) are not accepted by all native speakers (including von Stechow (2002) and the German native speaker co-author of this review). In general, Musan assigns tense focus to examples that involve stress on the auxiliary, but this reading seems controversial (to von Stechow (2002) and ourselves).

Part of the problem is that Musan's theory of Aktionsart is not well worked out. We think that *seit* and *bis* require durative (atelic) VPs, but Musan accepts many examples with telic VPs that are somehow COERCED into atelic readings. Musan also assumes that the post-state of atelic predicates can start as soon as the VP situation has started, a claim which we find hard to motivate. The combination of this view with the appeal to coercion tends to blur the picture, for the different times are heavily overlapping at this point. Musan insists that three distinct times are involved in the semantics of perfect constructions, but other theories (e.g. von Stechow 2002) treat the perfect on a par with other aspectual operators, such as perfective/imperfective, and therefore reduce the number of relevant time intervals to two. Many of the data problems can thus be considered a by-product of Musan's powerful theory, which predicts many distinct temporal representations; however, on the one hand, these are not always clearly distinguished and, on the other hand, they are not always actually found.

In evaluating the book, it is quite striking that chapters 2, 3 and 6 really cover Musan's core theory. A lot of interesting issues receive quite short shrift in other chapters. For instance, the core discourse contribution of temporal subordinate clauses, as discussed by Hinrichs (1986), is dismissed by Musan as incompatible with her analysis. Unfortunately, Musan herself does not have anything to say about the discourse contribution of temporal adverbials or the perfect construction. In view of Löbner's (2002) observations that the present perfect in German is in the process of taking over the role of the simple past in narrative discourse contexts, it would have been highly desirable to include such a discussion. Löbner claims that a uniform semantics for (German) present perfect constructions as a (straightforward) present + perfect leads to problems in contexts which indicate past tense reference, including temporal subordinate clauses (as in (5) above) and narrative discourse. Of course, Musan always allows the participle time to be the topic time of the perfect construction, but it remains to be seen how this view can be implemented at the discourse level. Furthermore, it is clear that the participle time cannot be the topic time in English present perfect constructions. English counterparts of sentences like (1b), (2) and (5) are either not acceptable or do not give rise to the same interpretation. Of course, Musan did not set out to develop a cross-linguistic analysis, but it is somewhat unexpected that such a broad and general semantic and pragmatic theory would work so well for German, but does not extend to a closely related language like English. But apart from a very short discussion of the contrast between English and German in the case of the Einstein example, we do not learn how much of the theory that Musan develops for the German perfect is universal, and how much of it is language-specific.

In sum, Musan's book is rich in empirical facts, and provides an in-depth analysis. At times, however, the reader feels overloaded by the powerful analytical framework developed. Moreover, there is no overall agreement on

judgements, so the facts are still unclear to some degree. Musan's ideas will probably be heavily debated in the literature, because the distribution of labour between syntax, semantics and pragmatics which she defends is not uncontroversial. Clearly, other perspectives on the same data are possible, and notwithstanding the large number of examples discussed, there will be other data that we need to take into account. However, the book as a whole will certainly stand as an important point of reference for future studies of the German perfect.

REFERENCES

Hinrichs, E. (1986). Temporal anaphora in discourses of English. *Linguistics & Philosophy* **9**. 63–82.
Kaufmann, I. & Stiebels, B. (eds.) (2002). *More than words: a Festschrift for Dieter Wunderlich*. Berlin: Akademie Verlag.
Klein, W. (1994). *Time in language*. London: Routledge.
Klein, W. (2000). An analysis of the German Perfekt. *Language* **76**. 358–382.
Löbner, S. (2002). Is the German Perfekt a perfect perfect? In Kaufmann & Stiebels (eds.), 369–391.
Rathert, M. (2003). *Textures of time: the interplay of the perfect durative adverbs and Extended-Now-adverbs in German and English*. Ph.D. dissertation, University of Tübingen.
von Stechow, A. (2002). German *seit* 'since' and the ambiguity of the German perfect. In Kaufmann & Stiebels (eds.), 393–432.

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Mitsuhiko Ota, *The development of prosodic structure in early words* (Language Acquisition and Language Disorders **34**). Amsterdam & Philadelphia, PA: John Benjamins, 2003. Pp. xi + 222.

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This monograph is a slightly modified version of the author's dissertation (Georgetown University, 1999). It investigates the acquisition of word-internal prosodic structure from the viewpoint of current phonological theory, focusing on longitudinal data from three children acquiring Japanese. The study subscribes to the so-called restriction-based prosodic theory of phonological acquisition: it demonstrates the relevance of prosodic principles and domains in phonological development and shows that a model

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of prosodic acquisition can be successfully built within the framework of Optimality Theory (OT). This investigation into the relevance of prosodic domains in phonological development is in itself an important contribution to the literature on phonological acquisition; it has the added value of examining data from a language that departs typologically from other studies which have been undertaken in this area.

Chapter 1 presents the main goals of the study and the main research questions investigated. Chapter 2 provides a useful introduction for the reader: it includes the theoretical background on prosodic phonology and OT, as well as a review of recent studies on early word production, together with an analysis of the adult prosodic phonology of Japanese. Chapter 3 describes the methodology used to collect the data, which comes from longitudinal recordings of spontaneous production by three Japanese children between the ages of 1;0 and 2;6. Chapters 4–7 are the core of the book. They concentrate on the development of syllable structure in Japanese (chapters 4 and 5) and on the development of prosodic word structure (chapters 6 and 7). Chapters 5 and 7 analyze the stages of acquisition of syllable structure and prosodic word structure within the OT framework. Finally, chapter 8 spells out the advantages of using OT in explaining developmental paths of prosodic structure, together with a summary of the main results presented in the book and directions for future research.

In recent years there has been a noticeable trend towards incorporating the findings of linguistic theory into models of language acquisition. Ota's book is situated in this line of research and explores the predictive power of OT with respect to the paths which the universal constraints follow in language acquisition. OT assumes that a language-particular phonological system consists of a universal set of phonological constraints which are hierarchically ordered. This constraint hierarchy will select the optimal or harmonic surface outputs in the language (i.e. the candidates which satisfy the highest-ranking constraints). In this framework, phonological acquisition is conceived of as a gradual re-ranking of universal constraints which become less and less prominent: the hypothesis is that universally unmarked constraints will appear in early stages of acquisition and will progressively be demoted as the child learns the target grammar. Following this line of research, Ota shows that OT is especially well-suited to examining the facts of phonological development, given the universal nature of the constraints and the properties of constraint re-ranking. The book provides crucial evidence that the form of early words in Japanese reflects children's internal knowledge about phonological markedness relationships in language.

One of the key issues tackled in Ota's book is the importance of prosodic structure in early acquisition. Recent research on phonological acquisition has shown convincingly that early prosodic word production across different languages is largely guided by prosodic conditions and that children's word productions conform to consistent size and rhythmic patterns (cf. Fikkert

1994, Demuth & Fee 1995, Pater 1997, Lleó & Demuth 1999, among others). For example, at an initial stage of development, children's productions are minimally a binary foot (or a 'minimal word') which tends to conform to a trochaic stress pattern (see Demuth & Fee 1995, Salidis & Johnson 1997). Similarly, at later stages (around the age of 2 years), children's words are maximally bisyllabic (Fikkert 1994, Pater 1997, etc.). In my view, Ota's work represents a strong contribution to this line of research.

Ota's investigation reveals strong templatic effects in the data. Indeed, prosodic units act as a kind of template for segmental material in Japanese early word productions. In OT terms, the lack of faithfulness between input and output can be explained by higher-ranked constraints on the well-formedness of syllable and foot structure. On the one hand, Ota reports a bimoraic minimal size restriction on truncated outputs (a bimoraic mini-mality requirement) which is often enforced by compensatory lengthening strategies. These results are interpreted by the author as evidence for the important role of moraic structure in early acquisition: while deletion of coda consonants triggers compensatory lengthening, this does not happen with loss of onset consonants. On the other hand, patterns of truncation demonstrate the prevalence of disyllabic outputs. In Ota's words, 'early Japanese words are minimally bimoraic and maximally bisyllabic' (186). The minimality effects (bimoraic minimality) and the maximality effects (bi-syllabic maximality) which are found in the data reveal the importance of foot structure in early phonological acquisition.

This book contains a thorough and complete analysis of early phono-logical segment and syllable truncation which takes into account a variety of potentially influencing factors. For example, in chapter 6 the reader finds a very accurate account of syllable deletion. Ota analyzes the effect of within-word position (word-initial, word-medial and word-final) on syllable de-letion in combination with the prominence factor, that is, whether the syllable is accented or not. Even though crosslinguistic studies on the deletion of syllables report that word-final syllables are produced before word-medial syllables, Ota observes that when these two factors are studied in com-bination, final syllables are more likely to be deleted only when they are unaccented. Thus, within-word position does not affect the deletion of accented syllables, as no differences are found between omission rates of initial and final accented syllables (151). This result reveals the method-ological importance of taking into account both prosodic prominence (pitch accent, stress) and morphological prominence (word-initial and word-final positions) in the licensing of syllables in early acquisition. It is indeed ex-pected that the perceptibility of stressed (and accented) syllables – since these are the head of a foot – will lead to their licensing segmental material earlier than do other syllables. As Ota contends, 'unaccented syllables are more prone to deletion than accented ones when the target word is longer than two syllables' (150).

Finally, a very interesting topic addressed by Ota's book is the importance of language-particular statistical properties of the input in shaping children's early words. In chapter 4, Ota observes that Japanese children acquire simple codas quite late (at around 1;10 or 1;11) in comparison to English-speaking children, who acquire codas before 1;8. Ota suggests that 'constraint re-ranking requires a certain amount of exposure to the relevant structure, and that the relatively low frequency of codas in Japanese delays the timing of their development' (189). Indeed, this line of research has become very productive in recent years and new evidence seems to indicate that language learners are sensitive to the properties of the input, and additionally that language-specific prosodic evidence is also reflected in children's early word shapes (Demuth 2003). For example, early prosodic word production in French is characterized by an extended period of development during which half of the words consist of a binary foot and the other half, subminimal CV forms (e.g. *peigne* ['pɛ] 'comb', *madame* ['dɑ] 'lady', *pomme* ['pɔ] 'apple', *chausson* ['tʃɔ̃] 'slipper'). This violation of the minimality constraint is indeed attributed to language-particular evidence from French, which is characterized by relatively few codas and high frequency of subminimal words of the CV type (see Demuth 2003). 'Minimal' words tend to coincide cross-linguistically with words which are minimally a binary foot (that is, words which contain minimally a syllable with two moras).

In my view, this book constitutes a strong contribution to the field of phonological acquisition. Detailed developmental studies of the acquisition of prosodic phonology in particular languages are a valuable contribution to the effort of describing the development of language phonology. This work represents a key analysis in the study of phonological acquisition, and adds to the recent crosslinguistic work undertaken for other languages. Readers who follow issues in prosodic phonology will recognize Ota's monograph as one of the latest additions to a group of works published over the past decade which analyze the interactions between phonological acquisition and prosody. In sum, I am sure this book will provide scholars, teachers, students and readers with valuable insights which will spark further interest in the field of phonological acquisition.

REFERENCES

Demuth, K. (2003). The status of feet in early acquisition. In Solé, M. J., Recasens, D. & Romero, J. (eds.), *Proceedings of the XVth International Congress of Phonetic Sciences* (vol. 1). Barcelona: Futurgraphic. 151–154.
Demuth, K. & Fee, J. E. (1995). Minimal words in early phonological development. Ms. Brown University & Dalhousie University.
Fikkert, P. (1994). *On the acquisition of prosodic structure*. Dordrecht: Institute of Generative Linguistics.
Lleó, C. & Demuth, K. (1999). Prosodic constraints on the emergence of grammatical morphemes: crosslinguistic evidence from Germanic and Romance languages. In Greenhill, A., Littlefield, H. & Tano, C. (eds.), *Proceedings of the 23rd Annual Boston University Conference on Language Development*. Somerville, MA: Cascadilla Press. 407–418.

Pater, J. (1997). Minimal violation and phonological development. *Language Acquisition* **6**. 201–253.

Salidis, J. & Johnson, J. S. (1997). The production of minimal words: a longitudinal case study of phonological development. *Language Acquisition* **6**. 1–36.

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Ingo Plag, *Word-formation in English* (Cambridge Textbooks in Linguistics). Cambridge: Cambridge University Press, 2003. Pp. xiv + 240.

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This book is intended primarily for undergraduate students with little or no background in linguistics. It provides an overall view of the field of word-formation. The discussion of theoretical issues is accompanied by neat examples and problem sets from English.

The book consists of seven chapters. Chapter 1 explains fundamental morphological concepts. Since it is very concise, it can be supplemented by material from general morphology coursebooks (such as Bauer 1988 or Haspelmath 2002) if, for instance, the teacher chooses to introduce a more fine-grained typology of morphemes and morphological processes.

Having defined morphemes as the smallest meaningful units, in chapter 1, Plag looks in the next chapter at problems involved in applying such a definition. Attention is paid, among other things, to extended exponence, subtractive morphology, conversion, and Latinate prefix–stem verbs in English.

Chapter 3 provides a clear summary of current research on morphological productivity. The issues discussed here include the phenomenon of blocking, the storage and access of morphologically complex words in the mental lexicon, and the importance of low-frequency words (especially hapax legomena) in assessing the productivity of affixes.

Chapter 4 is a sketch of English affixes. Although the presentation is very brief, Plag identifies the most relevant restrictions on the attachment of each English suffix and selected prefixes. He also indicates instances of affix polysemy and identifies limitations on expletive infixation in English. This chapter can be regarded as a good starting point for a student or a researcher who plans to investigate a particular affixation process in English.

Chapter 5 deals with conversion and with processes in which the shape of the derivative is determined jointly by prosodic and morphological

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information. Plag argues that such processes (including expletive infixation, truncation and blending in English) do not fall outside the realm of rule-based morphology since they must comply with systematic prosodic restrictions.

Chapter 6 discusses the internal structure, the types and the characteristics of English compounds. Differences between word-structure rules and sentence-structure rules are highlighted.

Plag takes care to be theory-neutral throughout the greater part of the book and tries not to confuse the reader by juxtaposing alternative analyses of the same data. However, he does express his theoretical preferences in chapter 7. There he looks at affix ordering in English. Having presented the assumptions of Lexical Phonology, as well as investigations into selectional restrictions on English suffixes carried out by, among others, Nigel Fabb, Plag himself and Jennifer Hay, he suggests that recourse to psycholinguistics may provide a better insight into possible base–affix and affix–affix combinations. He also discusses the choice between word-based and morpheme-based approaches to morphology. He concludes that a theory which both recognizes morphemes as independent entities and sets up word-formation rules may appear to be less elegant than the alternative, theoretically parsimonious approaches, yet it seems to better capture morphological facts.

There are some specific theoretical points where one might disagree with the author. For instance, Plag argues (67) that type-blocking should be abandoned, since putatively rival affixes (e.g. -*ness* and -*ity*) always exhibit slightly different shades of meaning. He also states (83) that prosodic words constitute the domain of syllabification. These conclusions, drawn on the basis of analyses of morphologically complex words in English, could be harder to defend in cross-linguistic research (e.g. in the light of data from Slavonic languages).

What I found particularly fascinating in this book, in comparison with Bauer (1983) and several other morphology textbooks, is the provision of explicit guidelines concerning the use of available research tools in morphology. Such guidelines are indispensable for anyone who intends to embark upon a research project in word-formation. Plag shows how morphological hypothesis can be tested by using large dictionaries and electronic corpora, or by running experiments with native speakers. He discusses methodological problems involved in corpus-based research on English word-formation. He rightly emphasizes the importance of semantic analyses in morphological investigation. Such analyses are helpful in selecting the most appropriate bracketing of complex forms (e.g. *unaffordable*), in determining whether particular words are morphologically complex (e.g. *report* vs. *replay*), or in testing whether two or more words contain the same affix (e.g. *unzip*, *unease*, *unhappy*). Among other advantages of the textbook, one could mention a good presentation of prosodic morphology and a helpful introduction to psycholinguistic aspects of morphology. Moreover, there is

a comprehensive bibliography, which includes many of the most recent morphological monographs and papers. Plag's book will thus be useful to both students and researchers who wish to update their knowledge of word-formation.

Last but not least, the text is reader-friendly. Each chapter contains a summary, a list of suggested additional readings, and two types of exercises: basic-level and advanced-level ones. Answers to the simpler exercises are provided at the end of the book. In the case of advanced exercises, no model answers are given but some ways of tackling the problems are suggested. The book closes with a list of references and several useful indexes.

With its lucid and coherent presentation of a range of morphological issues, this is an excellent up-to-date textbook for a course on English word-formation.

REFERENCES

Bauer, L. (1983). *English word-formation*. Cambridge: Cambridge University Press.
Bauer, L. (1988). *Introducing linguistic morphology*. Edinburgh: Edinburgh University Press.
Haspelmath, M. (2002). *Understanding morphology*. London: Arnold.

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Ian Roberts & Anna Roussou, *Syntactic change: a minimalist approach to grammaticalization* (Cambridge Studies in Linguistics **100**). Cambridge: Cambridge University Press, 2003. Pp. xi + 275.

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Although the process known as grammaticalization has received extensive treatment in historical linguistic work over the last decade, most of its proponents work in broadly functional or cognitive frameworks, and formal grammaticalization accounts are few and far between. The gradual nature of the process seems at odds with most formal frameworks, which recognize distinct lexical heads N, A, V and P, and no hybrids, which talk in terms of bound, clitic or free morphemes, and which assume that elements either move from their base-position or stay put. The sharp divide between lexical and functional categories in the more formal approaches is a non-issue for many grammaticalization theorists, for whom some items are simply 'more grammaticalized' or 'less highly grammaticalized' than others, whereas formal theorists are forced to make definite decisions: is this item still lexical,

or has it become functional? It has, however, already been noted by Haspelmath (1994) that formal descriptions of the difference between lexical and functional categories tie in very neatly with, for instance, the grammaticalization parameters proposed by a grammaticalization theorist like Lehmann (Lehmann 1995 [1982]; see also Roberts & Roussou 1999), and both approaches – non-formal and formal – should be able to benefit from each other's work, although there is lamentably little cross-talk between them, with each camp taking less than full account of the other's work (as observed also in van Kemenade 1999: 998). Ian Roberts & Anna Roussou's *Syntactic change: a minimalist approach to grammaticalization* is therefore a very valuable addition to the grammaticalization debate in that it offers an extremely well-informed formal account that builds extensively on insights from both camps.

The functional approach appears to see the primary locus of change in adulthood: innovations ultimately come about as a result of a speaker's desire to impress others, in his or her striving for social success. The formal approach is more interested in what the next generation of learners, in their critical period, with their language acquisition toolkit fully operational, will make of the innovation. The older generation may adjust their output for all manner of social reasons, but the chances are that their core grammar systems will remain unaffected; the innovation is at most a 'virus' that only superficially affects the workings of their 'operating system' (see, for example, Sobin 1997). It is the younger generation which may decide to reanalyse, to go for an operating system that is crucially different in one respect, and it is here that the locus of change is to be found for formal theorists. For them, gradualness of language change is a non-issue: language change is abrupt in the sense that speakers' individual grammars differ in their parameter settings.

Chapter 1 explains grammaticalization as a change in the parameter settings of functional heads. As grammaticalization generally involves loss of lexical content and a concomitant gain in the functional domain, the structural similarities and differences between lexical and functional categories in a formal theory like the Minimalist Program are extremely relevant here. The assumption of functional projections allows the generalization that some languages encode functional information – say, Mood – as free words, in the syntax (e.g. by modal verbs), while others may express the same information by bound morphemes, i.e. morphologically (like a subjunctive ending). The similarity in content is accounted for by involving one and the same functional projection (the Mood Phrase) in both cases; the morphosyntactic difference (free versus bound) falls out from the way in which the information gets associated with that functional head. The Modern English modals are merged in the Mood head (Merge; let's call this setting 1). A syntactic affix, like the subjunctive ending in Old English, is not only merged in Mood but also requires movement to become attached to the verb

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(Merge and Move; setting 2). If it is not expressed by some designated overt element, material from elsewhere may have to move to Mood; this material is typically the verb (Move; setting 3). An example of this is the pre-modals in Middle English, where the subjunctive mood started to be encoded by modal verbs, which moved to Mood and were not yet merged there. It is, of course, also possible that a language can get away with not expressing this particular bit of functional information overtly at all, either by a free or a bound form, and – given Roberts & Roussou's model, which assumes that the functional architecture of human language is invariant, i.e. that all possible functional projections are present in all languages – this seems to be a parameter of a higher order, with two settings: is this functional category expressed in this language or not (28f.)? It is, of course, only if the answer is 'yes' that the three settings above come into play.

'Parameters' represent a finite set of syntactic options made available by Universal Grammar. Each language has its own settings, but Universal Grammar has also provided default settings which will prevail if there is no evidence in the input for another setting. Roberts & Roussou (henceforth R&R) argue that the cues for the parameter settings will mainly be provided by functional material. It is the task of the language learner to determine from the input that he or she is exposed to which settings are the ones that are compatible with the input received by the learner from the particular language. If one assumes that the 'input' will not vary over the generations, it is difficult to see how one generation could arrive at different settings than the previous one; but the input may of course be subtly different because of changes in language use. In R&R's examples, these changes typically involve a higher frequency of eroded endings, which may reach a threshold which obscures or makes ambiguous the evidence for a particular parameter setting, so that the learner may arrive at another setting or revert to the default – and it must be remembered that it is the goal of language learning to set the parameters to a value compatible with the input, and that there is no requirement to arrive at exactly the same settings as the previous generation. R&R assume language design to be optimal, which is a natural enough assumption when modelling language. In discussing language change, however, it is probably wise to re-member that language systems in real life may well be less than optimal, an adequate rather than a perfect system (I am thinking here of psycholinguistic research into rule-derivation versus storage); and the paradox of language change possibly evaporates if we abandon the idea of optimal design.

The examples in chapters 2, 3 and 4 comprise eighteen case-studies from the grammaticalization literature analysed along these lines. Chapter 2 de-scribes the evolution of T(ense) elements. One of the many examples is Romance future markers which start out as lexical verbs, such as French *chanterai* ('sing.FUT.1SG', 'I will sing'), ultimately derived from the Latin periphrasis *cantare habeo* ('sing.INF have.2SG', 'sing have-I'). Chapter 3 focuses on C(omplementizer) elements, which usually derive from items

already somewhat grammaticalized, so that this is a case of functional material becoming even more functional. Examples are the modal particles *na* in Greek and *mu* in Calabrian, and the infinitival *to* deriving from a preposition and the complementizer *that* deriving from a demonstrative in English. Chapter 4 focuses on D elements, again involving a grammaticalized element grammaticalizing even further, but also involving structural simplification in that phrases are re-analysed as heads. Examples are the Romance definite article from Latin demonstrative; agreement affixes from personal pronouns; and Jespersen's cycle of negation, in which negation starts to become expressed by a Negative Polarity Item (e.g. French *pas*, *jamais*) instead of the regular negative element (e.g. French *ne*).

Chapter 5, 'Theoretical consequences', recapitulates the formal similarities of the cases from the previous chapters and discusses the contribution of a formal framework to grammaticalization theory. Three basic patterns show up. (i) Items which were earlier associated with a functional head by movement now come to be merged in that head, i.e. setting 3 above becomes setting 1. (In our earlier example, the modals used to be merged in V and moved to Mood but came to be merged directly in Mood in early Modern English. One of the reasons that this reanalysis became possible was because modals had become invariant elements.) (ii) The content of a functional head, earlier expressed by a syntactic affix, comes to be expressed by a different element which merges in that functional head, i.e. setting 2 above becomes setting 1. (Examples are the rise of modal particles in a number of languages.) (iii) A two-tiered process, in which a phrase first comes to be regularly associated with a functional projection by movement to the specifier of that projection and is then reanalysed as the head of that functional projection. All three patterns represent a structural simplification. The loss of semantic content and the corresponding gain in the functional domain of these grammaticalized items translate as leftward movement, from the lexical category itself (N or V) to the shell of functional projections around it (DP, TP). Further grammaticalization, i.e. a functional element becoming even more functional, is, again, always to the left (e.g. from the T-system to the C-system).

The remainder of this chapter offers explorations into the exact nature of functional categories and their relationship with typical grammaticalization phenomena, such as phonological reduction and semantic bleaching, which R&R reduce to the generalization that functional categories are defective at the interfaces of form and meaning (PF and LF): the lexical item loses all of its non-logical content, including its argument structure (LF interface), and is prosodically subminimal (PF interface). It is this latter feature which allows functional elements to cliticize; clitics are phonologically bound elements, which allows them to be reanalysed further into affixes, i.e. morphologically bound elements. This part of the chapter, which R&R explicitly note is speculative, displays their wide reading and their ability to make connections between insights from many different fields.

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Although the book shows that changes in formal thinking have created openings to talk about grammaticalization in formal terms, it is unlikely to build any bridges between formal and functional approaches. Category labels are certainly less of an issue since the advent of Bare Phrase Structure, as it is really the nature of the complement that determines whether an item is a C, a D or a P element (110). Assuming a rich, invariant functional architecture with grammaticalizing items gradually making their way up the functional ladder through a rich array of aspectual, modal and clausal heads is probably less likely to appeal to functionalists. A second, more serious, objection is that locating the trigger for syntactic reanalysis primarily in the loss of inflectional morphology, as R&R do, is not convincing in all cases. One such case is the *to*-infinitive, which in Old English split off from the purposive *to*-PP and grammaticalized into a more clausal category (106). R&R claim that changes in inflectional morphology are the trigger, but the erosion of endings alone cannot explain this category change. The old structure, the purposive *to*-PP, remained in existence alongside the new structure, the *to*-infinitive, and both still bore, formally, the same inflectional ending (i.e. dative -*e*). Even in the case of the rise of modal verbs in English, where there is a stronger case to be made for the loss of inflectional morphology as a trigger, detailed studies show that the relationship is pretty indirect. Although the erosion of endings in Old English had already led to many 'neutralized forms' in which subjunctives cannot be distinguished from indicatives, the use of pre-modals in Old English is not motivated by a need to disambiguate these forms, but by a desire to disambiguate volition, permission and obligation meanings (López Couso & Méndez Naya 1996). The use of modals in embedded clauses correlates strongly with matrix verbs which allow a range of meanings, so that the modal *motan* 'may' used in the complement of a verb like *bebeodan* will bring out the meaning 'offer' rather than 'command' (Ogawa 1989: 155). The reanalysis of modals as the expression of the subjunctive appears to be rather later (ca. 1350), and one wonders whether perhaps Mood was not expressed by any particular structure at all for a time. That said, *Syntactic change* presents an insightful way of looking at changes in syntax. Grammaticalization starts off when 'a grammatical construction is initially used for a special communicative effect that gives a short-term advantage to the innovator' (Haspelmath 1999: 1061; cf. the initial motivation sketched above for the use of the pre-modals in Old English), but acquires a momentum of its own when systematized by subsequent generations of speakers. It is in capturing this momentum that an approach like R&R's will lead to results.

REFERENCES

Haspelmath, M. (1994). Functional categories, X-bar-theory, and grammaticalization theory. *Sprachtypologie und Universalforschung* **47**. 3–15.
Haspelmath, M. (1999). Why is grammaticalization irreversible? *Linguistics* **37**. 1043–1068.

Kemenade, A. van (1999). Functional categories, morphosyntactic change, grammaticalization. *Linguistics* **37**. 997–1010.

Lehmann, C. (1995 [1982]). *Thoughts on grammaticalization* (LINCOM studies in Theoretical Linguistics **1**). Munich: LINCOM Europa.

López Couso, M. J. & Méndez Naya, B. (1996). On the use of the subjunctive and modals in Old and Middle English dependent commands and requests: evidence from the Helsinki Corpus. *Neuphilologische Mitteilungen* **97**. 411–422.

Ogawa, H. (1989). Old English modal verbs: a syntactical study (Anglistica **26**). Copenhagen: Rosenkilde & Bagger.

Roberts, I. & Roussou, A. (1999). A formal approach to 'grammaticalization'. *Linguistics* **37**. 1011–1041.

Sobin, N. (1997). Agreement, default rules, and grammatical viruses. *Linguistic Inquiry* **28**. 318–343.

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Kerstin Schwabe & Susanne Winkler (eds.), *The interfaces: deriving and interpreting omitted structures* (Linguistics Today **61**). Amsterdam: John Benjamins, 2003. Pp. vi + 399.

Reviewed by ERIC MATHIEU, University of Ottawa

This book is about ellipsis. It begins with a superb introduction by the editors, which gives not only a summary of the contributions chosen for the volume but also a comprehensive historical perspective on the subject. This proves very helpful because accounts of ellipsis are often tied to the theoretical tenets in vogue at the time of writing. For example, the notions of PF, reconstruction and focus have, over the years, undergone many subtle but important revisions. Consequently, ellipsis can be interpreted or analysed very differently today in comparison to earlier models. Schwabe & Winkler nicely summarize the three central questions which are relevant for the analysis of ellipsis: (i) Does ellipsis have internal structure? (ii) How is ellipsis interpreted? (iii) What role does information structure play in the structural representation and interpretation of ellipsis? The topic of omitted structures is notoriously difficult, and the editors must be commended for clarifying the theoretical and empirical issues at the outset of the book.

The volume is divided into three main sections: 'Towards the exploration of PF-deletion accounts' (section I), 'From the computational system to the syntax-semantics interface' (II) and 'The semantic component and its connection to focus and discourse structure' (III). The book also contains a

language index and a subject index. The first section contains chapters by Christopher Kennedy, Jason Merchant, Chris Wilder, and Katharina Hartmann. As the title of the section suggests, these chapters propose PF accounts of ellipsis. The second section includes articles by Caterina Donati, Winfried Lechner, Uli Sauerland, and Luis López & Susanne Winkler. These chapters investigate the question of whether a special process of ellipsis must be added to the system of grammar or whether the existing means are sufficient to account for the different kinds of ellipsis. The third section comprises chapters by Daniel Hardt, Maribel Romero, Kerstin Schwabe, Satoshi Tomioka, and Petra Gretsch. This section of the book concentrates on the relevance of focus and, more generally, discourse configurations to the analysis of ellipsis.

The first chapter, by Christopher Kennedy, is entitled 'Ellipsis and syntactic representation'. It reviews the well-known arguments for the idea that elided constituents have a syntactic representation. Considering two instances of elliptical constructions, namely VP-ellipsis and pseudogapping, Kennedy shows that these are subject to familiar constraints on syntactic representations (parasitic gaps, binding principles, and island constraints). However, the so-called attributive comparative deletion shows that the elided constituent is insensitive to Ross's Left Branch Constraint (LBC), suggesting that perhaps not all elliptical phenomena have a syntactic representation. On the assumption that the LBC applies at PF rather than LF, the puzzle is solved. Assuming that the LBC holds of morpho-phonological properties of lexical items at PF, the idea is that the constraint is inactive if ellipsis has taken place, precisely because ellipsis does not involve morpho-phonological properties of lexical items at PF.

Like Kennedy's chapter, Jason Merchant's contribution, entitled 'Subject-auxiliary inversion in comparatives and PF output constraints', tackles the issue of ellipsis on the assumption that it has PF relevance. The chapter establishes the novel generalization that subject-auxiliary inversion in comparative clauses requires the co-presence of VP-ellipsis. Merchant argues that this peculiar fact follows from a disjunctive formulation of the Empty Category Principle (ECP) which applies at PF. The analysis relies on the idea that there is an intermediate trace of the A′-moved comparative operator involved in the construction at the edge of VP. This trace is subject to the ECP at PF, and it interacts with the head movement which is also involved in subject-auxiliary inversion. The intermediate trace is unlicensed in structures with I-to-C movement. However, VP-ellipsis repairs the violation, an idea which has been independently proposed for other ellipsis structures.

The next contribution, by Chris Wilder, is entitled 'Antecedent-containment and ellipsis'. Wilder discusses antecedent-contained deletion (ACD) constructions in the light of new empirical evidence from sentences involving 'wide scope' ellipsis. The claims are that (i) ACDs involve A′-movement, (ii) an independent PF principle is at work: a VP-ellipsis site E

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may not be linearly contained in its antecedent site, and (iii) not all cases of alleged ACDs are in fact ACDs, but rather some are the result of pseudo-gapping.

Katharina Hartmann's chapter, 'Background matching in right node raising constructions', argues that right-node raising in German is not derived by movement, but by phonetic deletion of the right-node-raising target in the first conjunct. Hartmann also argues that the main condition for phonetic deletion is a parallel focus structure of the two conjuncts, which requires syntactic parallelism, as well as a symmetric distribution of pitch accents.

The second main section of the book opens with Caterina Donati's contribution, 'Merge copy'. The idea developed here is that movement and ellipsis are very similar: both are syntactic operations creating a copy which gets deleted at PF. However, there are numerous differences between movement and ellipsis. To account for the differences, the author suggests that while movement involves feature agreement and merge copy, the case of ellipsis is simpler: it involves only merge copy. The second part of the chapter explores some empirical and conceptual consequences of this proposal.

The next chapter, by Winfried Lechner, is called 'Phrase structure paradoxes and ellipsis'. It pursues two main objectives: (i) to introduce evidence for a remnant movement analysis of phrase structure paradoxes which arise with VP-fronting and (ii) to argue for the idea that (VP-)adjuncts can be merged in at least two distinct positions, and that the actual insertion point is determined by economy conditions. Two main conclusions are given: (i) merge, like move, is regulated by an economy metric (a new and interesting proposal) and (ii) economy cannot be local, but must instead be evaluated on the basis of larger information units such as phases.

Uli Sauerland's chapter, 'Unpronounced heads in relative clauses', argues that English relative clauses exhibit a general structural ambiguity. Either the relativized head raises from an internal position to that of the relative clause or it is base-generated in its surface position. It is further argued that when the relativized head is base-generated in its surface position, there is an elided internal head. The structural ambiguity thesis allows the author to account for the well-known reconstruction facts relating to relative clauses and for the different readings one obtains depending on the relative clause one is dealing with. The conclusion of the chapter is that a distinction should be made between the non-pronunciation of lower copies in a movement chain and the non-pronunciation of PF-deleted material in ellipsis phenomena.

The volume continues with an article by Luis López & Suzanne Winkler, 'Variation at the syntax-semantics interface: evidence from gapping'. The authors investigate gapping in English and argue that it is in fact a focus construction. The construction is the result of two movement operations: (i) remnant movement to a stacked A′-position in the coordinated vP and (ii) subsequent across-the-board movement of the verb. The first type of

movement is a version of contrastive focus movement while the second displacement corresponds to the information-structural function of defocusing. This chapter closes the second main section of the book, and since it partly deals with focus, it provides a nice transition to the third section of the book, which is on the relevance of discourse structure to ellipsis.

This section begins with a chapter by Daniel Hardt, 'Ellipsis and the structure of discourse'. Hardt argues that the interpretation of ellipsis is subject to constraints based on the structure of discourse. One of the constraints on ellipsis resolution requires that a matching relation holds between a containing clause and some antecedent clause. He considers two versions of this matching condition and shows that both versions suffer from empirical limitations. The problems are solved if we take into account the discourse structure requirement. The author shows that the effect of this condition can be clearly observed in examples involving multiple ellipsis, where discourse structure plays a key role in determining possible readings.

Next is Maribel Romero's contribution, 'Correlate restriction and definiteness in ellipsis'. It is concerned with two characteristics of certain elliptical constructions: a restriction on possible correlates (or antecedent phrases) for the remnants of ellipsis, and a definiteness effect which makes non-definite phrases behave semantically as definites in ellipsis sites. The author shows that these two properties are found only in some ellipsis construals, namely in German reduced conditionals and sluicing, and she shows that they do not apply to the majority of known ellipsis types, for example, VP-ellipsis and gapping. Romero proposes a unified account of the presence versus absence of such characteristics across ellipsis types, taking as the key factor the effects of focus in ellipsis and its interaction with the general semantics of each construal (i.e. conditionals, interrogative clauses and declarative clauses).

Kerstin Schwabe's article, 'F-marking and specificity in sluicing constructions', shows that in various sluicing types, the *wh*-phrase in the sluicing sentence, together with its associate, must be F-marked. The associate must be an indefinite expression which allows a specific interpretation. Specificity is defined as an anchoring relation between the discourse referent introduced by the indefinite expression and a discourse-given item.

In her 'The semantics of Japanese null pronouns and its cross-linguistic implications', Satoshi Tomioka shows that phonologically silent pronouns in Japanese receive all sorts of semantic interpretations. The author argues that this diversity of interpretation is tied to the fact that NPs in Japanese do not require a determiner. It is argued that the semantic tools required for the interpretation of such underspecified NPs can be used to derive the semantic variability of phonologically silent pronouns.

Petra Gretsch closes the volume with a chapter entitled 'Omission impossible? Topic and focus in focal ellipsis'. Gretsch argues that the view of

ellipsis according to which only redundant, backgrounded material can be omitted from a sentence is only partly correct. The chapter introduces cases of focal ellipsis such as the following question-answer pair:

A: Munich is situated in Bavaria and Kleve in?
B: I think in Northrhine-Westphalia.

Here we have omission of parts of the syntactic focus domain. The chapter concentrates on the syntactic analysis and the semantic/pragmatic interpretation of focal ellipsis and shows how this differs from more traditional, background ellipsis.

Very nicely edited, this book is a must for anyone interested in or working on ellipsis. The volume introduces a wide range of approaches to the topic and should be useful to both the researcher and the advanced student of elided structures.

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Christina Tortora (ed.), *The syntax of Italian dialects* (Oxford Studies in Comparative Syntax). Oxford: Oxford University Press, 2003. Pp. xiv + 255.

Reviewed by SANDRA PAOLI, University of Cambridge

This volume is a collection of ten state-of-the-art contributions written in honour of Paola Benincà, Professor of Linguistics at the University of Padua, Italy. Benincà has played a fundamental role in shaping Italo-Romance linguistics and Italian dialectology in particular, applying to it a rigorous, modern and scientific approach. Benincà's interests, ranging over phonology, morphology and syntax, have produced influential research that has inspired the articles collected here. The processes of meticulous data collection and organization of the results, the attentive interpretation of specific facts within the 'cartographic' approach (see below), and a vigilant eye for comparison with other Romance varieties are only some aspects of the invaluable contribution that Benincà has made to Italian dialectology; her impact as a linguist, as a dialectologist and as a mentor reaches far beyond this.

The contributions pertaining to syntax all work with the methodology developed in Italy of 'mapping out' the clause, also known as the 'cartographic approach'. From a purely theoretical point of view, this line

of reasoning has not met with the approval of all linguists, especially those in favour of translating the relative simplicity of the language faculty on a theoretical level into simple and concise structures on the syntactic level. If we interpret unambiguously ordered elements as the output of hierarchical relations between linguistic objects, then the evidence put forward in these chapters reflects a highly refined linguistic architecture, which must be expressed by an equally complex structural system. It is clear that the more data that are taken into consideration, the more detailed the definition of the structure will be, with an unmistakable tendency towards specialization, complexity and completeness, rather than simplicity and conciseness. The book offers the opportunity for anyone interested in understanding this system – and providing an account of complex data which is as complete as possible – to see it at work and appreciate the rigour behind the process.

Andrea Calabrese's contribution, 'On fission and impoverishment in the verbal morphology of the dialect of Livinallongo', looks at the verbal morphology of that dialect, which displays person asymmetries in the order in which tense and person morphemes appear on the verb. Adopting a strictly syntactic approach to inflectional morphology – which sees the order of morphemes as mirroring by the hierarchy of inflectional projections – requires the stipulation that Tense is above Agreement for some persons but not for others. By adopting the Distributed Morphology framework instead, and providing two new definitions for the operations of impoverishment and fission, Calabrese is able to account for the peculiarities displayed in the Livinallongo dialect in a neat and principled way.

Verbal heads are also the focus of the contribution 'Motion verbs as functional heads', by Anna Cardinaletti & Giuliana Giusti (henceforth C&G), which investigates the behaviour of motion verbs that can also act as functional verbs, i.e. like auxiliaries. A minimal pair is shown in (1), where the verb appears in its non-finite and finite forms, respectively:

(1) (a) Va   a   pigghiari u   pani.
        go.3SG to   fetch.INF the   bread
        'He goes and buys bread.'
    (b) Va   a   pigghia   u   pani.
        go.3SG to   fetch.3SG the   bread
        'He goes and buys bread.'

After analysing the phonological and syntactic properties of the connecting element *a*, and establishing that it is the realization of two different lexical items in the two constructions, C&G examine the behaviour of the two verb forms with respect to adverbs, clitics and quantifiers, and also consider the ability of these verb forms to be combined with adjuncts and complements, as well as their adjacency and morphological restrictions. The authors conclude that the motion verb *va* which appears in (1b) is inserted higher than that in (1a), much on a par with auxiliary verbs.

Applying and further refining his (1999) work, Guglielmo Cinque, in 'The interaction of passive, causative and "restructuring" in Romance', offers a reflection on restrictions which apply to the passivization of verbs triggering restructuring: while it is possible to passivize a 'finish' verb in Spanish, the operation is not possible with the majority of other restructuring verbs. Noting that the same behaviour is also found in other Romance languages, Cinque accounts for this by making two assumptions: (i) the category Voice° is the head through which a verb must transit in order to pick up/check passive morphology and (ii) in restructuring constructions the verb is generated in the corresponding semantic functional head. If lowering is disbarred, all functional verbs licensed in heads higher than Voice° will therefore be unable to bear passive morphology. The hierarchy of functional heads is further refined: an Andative head and an extra $Asp_{inceptive}$ head – proposed by Benincà – are added. The order obtained is the following, in which the (II) notation refers to the distinction made in Cinque (1999) between two distinct quantificational spaces related to some adverbs, namely quantification over events, indicated by (I), and quantification over the predicate, indicated by (II):

$$Voice° > Perception° > Causative° > Asp_{inceptive(II)}/(Asp_{continuative\ (II)}) > Andative° > Asp_{completive\ (II)}$$

In Diana Cresti's contribution, 'Aspects of the syntax and semantics of *ne*', the author examines some morphological properties of Paduan *ge-ne* constructions and compares them with *der* 'there' constructions in West Flemish. Cresti concludes that (i) *there*- and *ne*-type elements are related and (ii) they are both generated within the VP complement. Taking the parallel a step further, she claims that *ne* is an oblique form of *there*, an analysis justified on both syntactic and semantic grounds.

Richard Kayne, in 'Person morphemes and reflexives in Italian, French, and related languages', analyses the morphological make-up of reflexives in French, standard Italian and some Italian dialects. By identifying recurring morphemes and their related functions (such as indicating the person, the number, and the agreement with the following NP) as the building blocks of pronouns, Kayne claims that in spite of their monomorphemic appearance, the non-clitic singular pronouns in French and Italian (first and second person, and reflexive) consist of two morphemes, a PERSON morpheme and a SINGULAR morpheme. The advantage of this approach is the derivation of different types of pronouns from a simple and limited number of basic units.

Attention is then focused, in the next three chapters, on the left periphery. Nicola Munaro's chapter, 'On some differences between exclamative and interrogative *wh*-phrases in Bellunese: further evidence for a split-CP hypothesis', investigates the distributional properties of various *wh*-phrases in both exclamative and interrogative root sentences in that dialect. While in interrogative clauses some *wh*-phrases appear in situ, in exclamative clauses

they all invariably appear in sentence-initial position. Investigating the pragmatics of the two types of clause, the interaction between exclamative and interrogative *wh*-phrases on one hand and left-dislocated elements on the other, Munaro concludes that *wh*-phrases in exclamative clauses seem to occupy a higher position within the left periphery than *wh*-phrases in their interrogative counterparts. Finally, Munaro makes a further distinction between complex and bare *wh*-phrases: the latter occupy a lower position than the former.

Mair Parry's contribution is entitled '*Cosa ch'a l'é sta storia?* The inter-action of pragmatics and syntax in the development of *wh*-interrogatives with overt complementizer in Piedmontese', and focuses on the diachrony of the *wh*-phrase + overt complementizer (*che*) root interrogative constructions in modern Piedmontese, analysing a variety of texts dating from the late 18th century. She suggests that the development is not a simple case of spreading from embedded to root contexts, but may be the result of the interaction of both syntactic and pragmatic factors. More specifically, the pragmatics of exclamative clauses (which express both new and old information) explains the presence of *che* as a foregrounding element, which subsequently spreads to interrogatives, first of an exclamatory nature, and finally to general interrogatives.

In their chapter, 'Making imperatives: evidence from Central Rhaetoromance', Cecilia Poletto & Raffaella Zanuttini (P&Z) explore the syntax and semantics of imperative clauses in Badiotto, a dialect which makes use of four different particles in imperative clauses: *ma*, *mo*, *pa* and *pö*. After establishing that each of these particles contributes a different semantic flavour to the sentence (interpreted at the syntactic level as filling a different 'point of view' projection), P&Z identify their relative order (*pa* > *pö* > *ma*/ *mo*) and the positions they occupy. The projection hosting the two lowest particles is labelled ModP. In order to be licensed, its head as well as its Specifier positions must be filled. This requirement brings the discussion onto the theoretical level, and P&Z conclude that different licensing options are subject to parametrization.

Assessing the issue of enclitic subject pronouns in Romance is the aim of Giampaolo Salvi's contribution ('Enclitic subject pronouns in the Romance languages'). Reviewing existing analyses, he investigates some Gherdëina data which highlight the complexities of the phenomenon and the short-comings of existing analyses. He concludes that while enclitic forms in this dialect cannot be considered to be generated in subject position, their proclitic counterpart can, contrary to what is the case in Paduan. No final conclusion is reached in this chapter, but some valuable general points are made about the co-occurrence of clitic pronouns, both pro- and enclitic, and lexical items.

The last chapter of the book is dedicated to the investigation of double marking of indirect objects in a Calabrian dialect. John Trumper, in 'The

misunderstood double marking of indirect objects and new infinitive stra-
tegies in unexpected places: a brief study of Romance variation', observes
how not only direct objects but also indirect objects are marked by a
preposition. Furthermore, this dialect can mark the indirect object using
either an accusative or a dative form of the pronoun. Trumper claims that
this is not to be interpreted as the influence of the Greek substratum; these
syntactic changes are possibly the result of a demographic upheaval in the
period 1905–08.

This collection of articles will be of interest to syntacticians in general and
to those with a specific interest in Italian dialectology in particular. Students
who are already familiar with issues in Romance linguistics will obtain an
accessible model for carrying out investigations on complex data using a
meticulous and scientific approach, exploiting adjacency, co-occurrence and
relative ordering of elements.

In sum, this book is an up-to-date synopsis of current work in Romance
linguistics, and it provides the reader with an insight into some of the issues
that have been the subject of recent research in Italian dialectology. It
is invaluable both for the way the issues are presented with respect to the
pertinent analyses they have received, relating them to previous and/or
contemporary studies in the field, and for the topics for reflection which
are suggested by the data adduced. The novelty and richness of the data
presented in this book, and the systematic approach followed through the
analysis of these data, make it a great contribution.

REFERENCE

Cinque, G. (1999). *Adverbs and functional projections.* Oxford: Oxford University Press.

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