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REVIEWS

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Joseph Aoun & Yen-hui Audrey Li, *Essays on the representational and derivational nature of grammar: the diversity of* wh-*constructions* (Linguistic Inquiry Monograph **40**). Cambridge, MA: MIT Press, 2003. Pp. xii + 289.

Reviewed by KERSTIN HOGE, University of Oxford

This book explores two constructions which have been at the centre of theoretical debate in recent syntactic literature, namely multiple *wh*-interrogatives (see e.g. Boeckx & Grohmann 2003) and relative clauses (see e.g. Alexiadou et al. 2000). This twofold concern is reflected in the book's organisation. Multiple *wh*-interrogatives are dealt with in part I, '*Wh* interrogatives: superiority and interpretation', which comprises chapters 1–3, while relative constructions are addressed in part II, 'Relativization: derivation and structure', which covers chapters 4–7. The book further contains an introduction and an appendix; the appendix thematically belongs with part I, in that it discusses superiority-related effects, viz. the rescuing effect of a third *wh*-phrase and the so-called antisuperiority effect in Japanese.

Readers will rightly expect not only to learn something new about both multiple *wh*-interrogatives and relative clauses but also to find out what unifies these two syntactic constructions, and the book does not disappoint. At the heart of part I lies Aoun & Li's (henceforth A&L) analysis of multiple *wh*-interrogatives in Lebanese Arabic (henceforth LA). The new data from LA are argued to necessitate a new approach to superiority effects, which relies neither on Chomsky's (1995) Minimal Link Condition nor on an analysis of superiority as a Weak Crossover effect (Hornstein 1995).

The problem posed by the LA data is that superiority effects, identifiable as such by the fact that ungrammaticality is obviated when the *wh*-phrase in situ is changed to a complex phrase of the form *which* NP, extend to non-movement and non-crossing structures. It is thus possible for a multiple *wh*-interrogative to have one *wh*-phrase in situ and the other *wh*-phrase in the specifier of Comp, with the latter being related to a resumptive pronoun in an island. As the absence of reconstruction effects shows, these interrogatives must involve base-generation of the higher *wh*-phrase in the specifier of Comp and thereby qualify as non-movement structures. Nevertheless, superiority effects obtain unless the resumptive pronoun c-commands the *wh*-phrase in situ. This is true even for interrogatives where no *wh*-in situ intervenes (linearly or hierarchically) between the *wh*-phrase in the specifier of Comp and its resumptive pronoun. The relevant structures are schematically represented in (1) (A&L's (30a, b), page 19, and (34a, c), page 21).

The existence of superiority effects in LA non-movement and non-crossing structures cannot be captured by the standard account of superiority, which views superiority violations as the illicit movement of a *wh*-phrase across a c-commanding *wh*-phrase that is not in the same minimal domain. Similarly, the LA superiority effects do not lend themselves to an explanation along the lines of Hornstein (1995), where the functional interpretation of multiple *wh*-interrogatives paves the way for a reanalysis of superiority violations as Weak Crossover effects and thereby divorces superiority from movement. As argued convincingly by A&L, pair-list interpretations of LA multiple questions are not derivative of functional readings but are distinguished by different locality conditions, i.e. only multiple *wh*-interrogatives have a domain requirement defined by Tense, so that a *wh*-phrase can only have a pair-list interpretation with another *wh*-phrase within the same phase.

What then emerges is a conception of superiority as a constraint, which prohibits the occurrence of a variable or resumptive pronoun related to the *wh*-phrase in the specifier of Comp in a position where it does not c-command the second *wh*-phrase. A&L implement this idea by proposing to derive superiority from a minimality condition on chain formation, the so-called Minimal Match Condition (henceforth MMC), which states that 'an operator must form a chain with the closest XP it c-commands that contains the same relevant features' (4). Crucially, chain formation is not restricted to movement but can be a representational process, as in the case of multiple *wh*-interrogatives with a resumptive pronoun in an island. On the assumption that resumptive pronouns contain a *wh*-feature (33), the MMC derives the contrasts observed in non-movement structures as follows.

In a well-formed multiple *wh*-interrogative, e.g. (Ia), the *wh*-operator in the specifier of Comp forms a chain with the resumptive pronoun, since it is the pronoun which is the closest XP with a *wh*-feature c-commanded by the operator. Superiority effects in crossing structures, e.g. (Ib), involve the *wh*-operator forming a chain with the lower *wh*-phrase, which has the result that the resumptive pronoun will share an index with the intervening *wh*-phrase and will, hence, be A-bound, in violation of Principle C of the

Binding Theory. Superiority effects in non-crossing structures, e.g. (Ic, d), are said to constitute violations of the Bijection Principle. Here, the *wh*-operator must form a chain with both the resumptive pronoun and the lower *wh*-phrase, since the two are equidistant: neither c-commands the other.

The reliance on Binding Theory principles to rule out superiority violations in crossing structures is reminiscent of Aoun, Hornstein, Lightfoot & Weinberg's (1987) Generalised Binding approach to superiority. The resemblance is compounded by the analysis proposed for the ameliorating effect of D(iscourse)-linked wh-phrases. If, as required by the MMC, all chains are constrained by minimality, the absence of superiority effects can no longer be related to the absence of movement. Instead, A&L revive the idea of Aoun et al. that the absence of superiority effects with *wh*-phrases of the form which NP is due to the structural complexity of the wh-in situ. The lexical item which constitutes a D-head and thereby differs from monomorphemic wh-phrases, e.g. who, which are maximal projections in the specifier of D. As a head, which does not qualify as a possible variable for the wh-operator in the specifier of Comp. Hence, an intervening whichphrase does not prevent the *wh*-operator from forming a chain with a lower wh-element. In other words, it is not the D-linked nature of which-phrases that accounts for the absence of superiority effects but the morphosyntactic difference between *which*-phrases and monomorphemic *wh*-phrases.

Further support for A&L's analysis of *which*-phrases might come from the fact that no cancellation of superiority effects is observed with a *wh*-phrase of the form *how many* NP, as illustrated in (2).

- (2) (a) Mary asked how many people read what.
 - (b) *Mary asked what how many people read.

Examples like (2b) were used by Pesetsky (1987) to argue that what is relevant for the cancellation of superiority effects is the semantic distinction between D-linked and non-D-linked *wh*-phrases, rather than the distinction between complex and monomorphemic *wh*-phrases. However, if *which* and *how* differ in categorial status, i.e. *which* is a head whereas *how* is a phrase in the specifier of an articulated DP, A&L's MMC will neatly derive the relevant contrast without having to invoke the notion of D-linking.

While I am thus sympathetic to A&L's attempt to reduce the amelioration of superiority under D-linking to the morphosyntactic nature of *which*phrases, it needs to be pointed out that the MMC, which applies to movement and non-movement structures alike, leaves even less leeway than a movement-based account of superiority for the explanation of cancelled superiority effects. And it is telling that the standard examples of multiple *wh*-interrogatives without superiority effects, i.e. (i) D-linked interrogatives with non-*which*-phrases, (ii) interrogatives illustrating the rescuing effect of an additional *wh*-phrase, and (iii) German multiple *wh*-interrogatives, are either dismissed as non-standard *wh*-questions, in the case of (i), or left aside as unclear or not 'straightforward', in the case of (ii) and (iii). It is difficult to see how these phenomena could be captured, given the status of the MMC as a representational constraint, and a more wholehearted attempt to engage with this question would have been welcome.

An important consequence of A&L's account of superiority is the need for a theory which contains derivational and representational constraints – an approach which is likely to be rejected outright by some. The existence of both derivational and representational constraints is justified on the basis that in LA, ungrammatical wh-extraction from a wh-island contrasts with the grammatical occurrence of a resumptive pronoun in a wh-island. While the former violates the Minimal Link Condition, the latter, which involves base-generation of the wh-operator, does not. If the grammar did not contain the Minimal Link Condition to the MMC, the ungrammaticality of the wh-island violation could not be derived. Thus, the empirical evidence provided for distinguishing derivations and representations in the grammar rests on A&L's claim that true resumption, i.e. the occurrence of a resumptive pronoun which is separated from its wh-phrase by an island, does not involve syntactic movement, and it is the use of reconstruction as a diagnostic tool for movement that allows them to put forward this claim.

Reconstruction also figures large as a diagnostic tool in part II of the book, where A&L consider the structure of relative constructions in English, LA, Chinese and Japanese, and propose that relative constructions do not have a uniform derivation but 'can be derived differently both within a language and crosslinguistically' (191). More specifically, relative constructions can differ along the following parameters: (i) they can involve an adjunction or a complementation structure, (ii) they can be derived by basegeneration or by movement, (iii) if instantiating movement, they can be derived by operator movement or by Head raising (i.e. movement of the Head of the relative clause from a position within the relative clause to a left-peripheral position), and (iv) if instantiating Head raising, they can involve either DP-raising or NP-raising.

English realises these options in the following way. First, relative constructions can be seen to involve a complementation structure, i.e. not only must a relative clause be projected as a DP (cf. (3a) below, A&L's (16a), page 101), but there also exists a selection relation between D and CP (cf. (3b), A&L's (17c), page 102).

- (3) (a) He is an actor that wants to do everything and *(a) producer that wants to please everyone.
 - (b) the four of the boys *(that came to dinner)

Secondly, since English relative constructions clearly contain a gap, they must be derived by movement. A&L now argue that English relative constructions exemplify both Head raising and operator movement.

Non-*wh*-relatives are claimed to involve Head raising, whereas *wh*-relatives, non-*wh*-relatives with type II determiners (e.g. *some*) and adjunct relatives are said to instantiate operator movement. Empirical support for this claim comes from the distribution of idiom chunks and from reconstruction effects in relative clauses containing anaphors and bound pronouns. Only where Head raising has applied to move the head from within the relative clause to its surface position will reconstruction be possible. Readers familiar with Kayne's (1994) analysis of relative clauses will recognise the argument; what is new is A&L's claim that the data in (4) ((4a) = A&L's (2b) & (42b), page 110; (4b) = (46a, c), page 111; (4c) = (52a), page 113) show a contrast between non-*wh*- and *wh*-relatives.

- (4) (a) The headway that/??which Mel made was impressive.
 - (b) The picture of himself_i that/*?which John_i painted in art class is impressive.
 - (c) The picture of his mother that/?*which every student painted in art class is impressive.

However, as A&L themselves note in a footnote (244), not all speakers will agree that there is such a clear-cut contrast between *wh*- and non-*wh*-relatives with respect to reconstruction. In addition, the sentence in (5), in which the object of the matrix predicate *make headway* heads a relative clause, is problematic for the advocated view that the Head of a non-*wh*-relative clause always originates within the relative clause, because it strongly suggests that *headway* originates in the matrix clause with the rest of the idiom chunk.

(5) John made the headway that got us out of here. (Bernstein 2001: 561).

What ultimately ties together parts I and II is A&L's assertion that 'the derivation of relative constructions parallels the derivation of wh-interrogatives' (219). That is to say, the choice as to which options of relative formation are realised by a particular language is determined by the morphosyntactic properties of the phrases to be relativised, which are in turn reflected in the morphosyntactic structure of wh-phrases in wh-interrogatives. For example, English allows operator movement in wh-relatives, as in wh-interrogatives, because the Question, Quantification and Restriction parts of a wh-expression are generated as one unit. In contrast, Chinese allows operator movement only in adjunct relatives because non-adjunct Chinese *wh*-expressions contain only the Restriction part. In English, where the morphological composition of a wh-expression contains both Quantification and Restriction, NPs cannot occur in argument position and consequently Head raising cannot apply to move an NP to the left periphery of a relative clause. This contrasts again with Chinese, where non-adjunct whexpressions contain only the Restriction, which indicates that Chinese will allow NPs to occur in argument position. Consequently, Chinese can make use of Head raising of an NP in its relative constructions, with the result that reconstruction will be unavailable in cases involving a quantified NP.

This proposal allows A&L to recognise the close link that exists between wh-interrogatives and relative clauses in a framework in which relative clauses are not uniformly derived via wh-movement but can be generated by Head raising. If the world divides between splitters and lumpers, A&L do their best to provide a bridge between the two approaches when dissecting syntactic phenomena which were formerly lumped together, without completely losing sight of the characteristics that unite them. Resumptive pronouns in both wh-interrogatives and relativisation may fail to involve a unified strategy, but A&L show that all resumptive pronouns, regardless of whether they involve movement or base-generation, need to be distinguished from bound pronouns, and that all relativisation strategies ultimately find their explanation in the morphosyntactic properties of the nominal expressions in the language. It is this carefully balanced approach which, together with the beautifully clear argumentation and the focus on data not previously discussed, highly commends this book to any reader interested in current syntactic theory.

REFERENCES

- Alexiadou, A., Law, P., Meinunger, A. & Wilder, C. (eds.) (2000). *The syntax of relative clauses* (Linguistik Aktuell/Linguistics Today **32**). Amsterdam & Philadelphia: John Benjamins.
- Aoun, J., Hornstein, N., Lightfoot, D. & Weinberg, A. (1987). Two types of locality. *Linguistic Inquiry* 18. 537–577.
- Bernstein, J. (2001). The DP hypothesis: identifying clausal properties in the nominal domain. In Baltin, M. & Collins, C. (eds.), *The handbook of contemporary syntactic theory*. Oxford: Blackwell. 536–561.
- Boeckx, C. & Grohmann, K. (2003). *Multiple* wh-*fronting* (Linguistik Aktuell/Linguistics Today **64**). Amsterdam & Philadelphia: John Benjamins.
- Chomsky, N. (1995). The Minimalist program. Cambridge, MA: MIT Press.
- Hornstein, N. (1995). Logical form. Oxford: Blackwell.
- Kayne, R. (1994). The antisymmetry of syntax. Cambridge, MA: MIT Press.
- Pesetsky, D. (1987). Wh-in-situ: movement and unselective binding. In Reuland, E. & ter Meulen, A. (eds.), The representation of (in)definiteness. Cambridge, MA: MIT Press. 98–129.
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Marlyse Baptista, *The syntax of Cape Verdean Creole, the Sotavento varieties*. Amsterdam & Philadelphia: John Benjamins, 2002. Pp. xii + 289.

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This book is quite an achievement, and a must for linguists working or planning to work on Cape Verdean Creole (CVC), especially if a generative

framework is adopted. Marlyse Baptista provides an extensive description of the syntax of the language, defining her approach as follows: 'The primary theoretical framework of generative grammar that I adopt in this book is the Minimalist Program' (8).

Cape Verde is an African archipelago composed of two main clusters of islands, about 450 miles off the coast of Senegal. It was a Portuguese colony until 1975, and although CVC is the native language of all its inhabitants, Portuguese is still the only official language in the country. Baptista identifies the languages that have contributed to the formation of KRIOLU (as it is known by its native speakers): 'besides Portuguese, which contributed to its lexicon, the African element is mostly represented by the Niger-Kordofanian languages: West-Atlantic languages ... and the Mande languages' (19).

The fieldwork that supported the author's Ph.D. dissertation, completed at Harvard University in 1997, has been followed by three field trips to Cape Verde (in 1997, 2000 and 2001), to gather data representative of all four basilectal Sotavento (leeward) varieties, which are spoken on the islands of Brava, Fogo, Santiago and Maio.

The volume aims at a threefold audience: creolists, generativists, and native speakers of the language. Chapters 3–5 are essentially descriptive, whereas chapters 7 and 8 are more theoretical and, according to the author, 'should be of particular interest to generativists' (5); chapter 6 'serves as a bridge' (5) between the first and second parts. Thematically, the book offers an overview of NP and VP internal patterns (chapters 3 and 4), a description of word order patterns (chapter 5) and clause structure (chapter 6), and analyses of verbal syntax (chapter 7) and the syntax of pronominals (chapter 8). In chapters 1 and 2 we find, respectively, an introduction and a sociohistorical sketch. In these chapters, the author outlines her goals and orthographic choices, as well as the historical and demographic circumstances that surrounded the genesis of CVC.

One of the goals defined by Baptista is 'to promote a better understanding of CVC, a language that offers serious descriptive challenges' (4). Some of these challenges are provided by its complex pronominal system, which is described in the second section of chapter 3. We learn that CVC pronominals are 'not marked for case, number, or gender except for the formal second person singular pronouns *nho* and *nha*' (46). The distribution of both the clitic and nonclitic paradigms is illustrated, as are combinations of clitics and nonclitics. With the sentence in (I), Baptista exemplifies one of the possible combinations. The sentence also includes a possessive form.

(I) Kel rapas di meu, el, e more. (61) that boy of mine NONCL CL died 'That boy of mine, he died.' The demonstrative *kel* is not a pronominal in this context, but a modifier of the noun *rapas* 'boy'. Although in this section Baptista only introduces demonstratives in modifier positions (57–59), CVC also has true demonstrative pronominals, like *kel-la* 'that one' and *kel-li* 'this one'.

At several points in the book, the author takes into account relevant theories concerning some widely-debated characteristics present in creole grammars, adopting a comparative perspective and discussing whether these apply to CVC or not. This is the case, for instance, with pluralization strategies: 'This section proves particularly enlightening in the realm of inflectional morphology in creole languages and is significant with regard to the current debate on the morphological properties of creole languages' (35). Baptista argues that in CVC 'plural suffixation on nominal stems is a productive process' (36), against Holm's (1988) proposal that, as a rule, creole nouns are not inflected for number. She notes that although 'CVC is endowed with a wide range of quantifiers rendering a plural interpretation to the nouns they modify, ... the use of a quantifier does not preclude the noun from carrying the plural suffix, particularly if the noun is animate' (37). The example in (2) illustrates (TAM = TENSE, ASPECT, MOOD marker):

(2)Та skola. ten txeu mininus ki ta ba (37)have a.lot children TAM COMP TAM go school 'There are a lot of children who go to school.'

The descriptive goals of the book, as noted earlier, are generally met in chapters 3-5 (134 pages). The extensive list of phenomena under study includes, among others, pluralization, gender marking, nominal reduplication, pronouns, adjectives, TAM markers, the copula, verbal reduplication, passivization, serial verb constructions, negation, quantifiers, double object constructions, topicalization, clefting, and *wh*-questions. Chapter 6 (10 pages) briefly describes CVC TAM templates, illustrating the possible combinations of the markers *ta*, *sta* and *-ba*.

(3) João ta staba senpri ta kumeba. (166)
 João TAM be+ANT always TAM eat+ANT
 'João was always eating.'

In this chapter, Baptista also proposes that CVC is endowed with a biclausal structure: there are two different AuxP projections, which could account for the recurrence of some TAM markers, for instance, in the pattern *sta-ba ta* V-*ba*, and for the distribution of *senpri* 'always' between *sta* and *ta*, analysed as adjoined to the second AuxP in examples such as (3).

In spite of all these qualities, the book has some drawbacks. Besides description, the author's goal is 'to use the tools provided by generative linguistics to uncover scientific evidence for the principles that rule the linguistic system of this particular language' (4). Chapters 7 and 8 (100 pages) arrive at some conclusions which appear to me to be empirically and

theoretically problematic. Below I will address two such problems, namely the author's claims that CVC has verb raising (verb movement to a position higher than V) and referential null subjects.

The verb-raising and null-subject parameters have been extensively debated in the generative literature of the past decade. The positive settings for these parameters have often been linked to rich verbal agreement morphology. In turn, this link has met with a fair amount of scepticism. In particular, linguists have questioned what is meant by 'rich' morphology. It is also well known that certain languages with little or no overt verbal agreement morphology still allow verb raising (for example, Kronoby Swedish and Tromsø Norwegian).

One type of data used to diagnose verb raising in SVO languages involves the distribution of floating quantifiers. The traditional argument runs as follows: consider a quantifier modifying a subject NP; whenever it appears to the right of the verb, it must have been left behind by the NP subject moving to Spec, IP (where it receives nominative case); the quantifier is, then, stranded in Spec, VP (where the NP subject has been base-generated) and the verb raises past it. The analysis proposed by Bobaljik (1995) shows, however, that quantifiers may not be a reliable diagnostic for tracing NP base positions, since they can be analysed as adjuncts to the left of some XP. This accounts for the following contrast in English:

- (4) (a) Larry, Darryl and Gerry came into the café *all.
 - (b) Larry, Darryl and Gerry came into the café all [at the same time].
 - (c) Larry, Darryl and Gerry came into the café all [very tired].

Furthermore, the main data with floating quantifiers provided by Baptista as evidence for verb movement involves clauses with unaccusative verbs (like *txiga* 'arrive') (196–197):

- (5) (a) Tudu konbidadu txiga na mismu tenpu. all guest arrive at same time 'All the guests arrived at the same time.'
 - (b) Konbidadu **txiga tudu** na mismu tenpu. guest arrive all at same time 'The guests arrived all at the same time.'

Baptista argues that the subject NP here is base-generated in Spec,VP (195) and that the tree representing the sentence in (5b) 'crucially shows that the verb has moved to I° (or to T°), past the quantifier' (197). This analysis is problematic in view of the fact that the English translation of the sentence in (5b) is not ill-formed. English does not have verb movement in the sense under discussion, and yet it exhibits quantifiers in postverbal position. This could be accounted for by Bobaljik's (1995) analysis of quantifiers, as described above.

In either case, the subject of unaccusative verbs is widely assumed NOT to be base-generated in Spec,VP, but rather as the internal argument of the predicate. In these constructions, whenever the NP moves to Spec,IP it may very well leave the quantifier behind in its original postverbal position. And the verb can stay in V. Hence, the prediction above is not applicable in this case. Baptista fails to discuss the use of this diagnostic with, for instance, transitive verbs; however, I have worked on this topic with my own informants from Santiago, who systematically reject the quantifier *tudu* 'all' to the right of the verb.

Another criterion Baptista uses to diagnose verb raising is the placement of certain adverbs between the verb and its complement. Since the relevant adverbs are assumed to be left-adjoined to VP, it is concluded that verb raising is what allows these adverbs to appear to the right of the verb. However, some of Baptista's examples regarding adverb placement are taken from literary texts, like the following (187).

(6) El ta benba pisadu di dinheru ki ta konpensaba he ASP come loaded of money that ASP compensated materialmenti tenpu gastadu.
materially time wasted
'He would show up loaded with money that would materially compensate for wasted time.' (da Silva 1990: 28)

It is well known that, compared to spontaneous speech, literary texts are more liable to violate grammatical rules. This suggests that literary texts are not the most reliable means for tapping into the grammatical competence of native speakers. Moreover, as discussed in DeGraff (in press), sometimes the creole speech produced by speakers who are bilingual in a creole language and its lexifier (for instance, Haitian Creole and French, or Cape Verdean Creole and Portuguese) – as is the case with da Silva – may be influenced by some patterns that are grammatical in the lexifier, such as V-raising. As it turns out, similar examples of verb raising across morphologically light adverbs (like *ben* 'right') are rejected by my own informants from Santiago. Furthermore, these informants never use the word *ben*; instead they use *dretu*, always in final position. Compare the following:

(7) (a)	João	prende	ben	se lison.	(Baptista, page 185)
	João	learnt	well	his lesson	
(b)) João	prende	si	lison dretu.	(Pratas 2004)
	João	learnt	his	lesson well	

Nevertheless, there may be some dialectal variation involved here. This is a subject for future research. Baptista herself has previously shown some

concerns with sentences similar to the one in (7a), which she noted as being from her own dialect, and so they may not be 'representative' (DeGraff in press: note 66). This makes it more difficult to understand why the author affirms in this book so categorically that there is 'ample evidence' for verb movement in CVC (200).

Still on verb raising, she provides a comparison between the clausal architecture of CVC and Guinea-Bissau Creole (GBC). She argues that in GBC 'there is no evidence for an independent TP, whereas there is in CVC' (204). This is associated with the fact that the TAM marker *-ba* 'is a verbal inflection found exclusively bound to verb stems in CVC, whereas *ba* is a non-inflectional (unbound) Tense marker in GBC found not only after verbs, but also after nominal and adjectival predicates' (201).

(8)	(a)	João	ta	sta ba	ta	kume ba .	(CVC)	(199)
		João	TAM	be+ANT	TAM	eat+ANT		
		'João would have been eating.'						
	(b)	Ι	kumj	pra pon	ba.		(GBC)	(201)
		s/he	buy	brea	d [+1	PAST]		
		'S/he	had bo	ought brea	d.'			

Following Bobaljik & Thráinsson (1998) on the relation between a Split IP and verb raising, Baptista proposes that this difference between these two Creole languages 'predicts that there should be a difference in V-movement between CVC and GBC, and we have shown that this difference does exist' (209).

Her strongest argument for verb raising in CVC comes, in fact, from a consideration of the TAM imperfective marker -ba. Baptista proposes that verb movement to T allows this morpheme to affix to the right of the stem. In a language like English, however, we find the TAM suffix *-ed*. In his dissertation, Bobaljik (1995) outlines a Distributed Morphology analysis for English *-ed* suffixation, explaining it by means of lowering, a post-syntactic operation, in the morphological component of the grammar, and Costa & Pratas (2003) propose that the lowering of Tense is also what accounts for *-ba* suffixation in CVC.

In chapter 8, Baptista argues that CVC is a pro-drop language. Expletive null subjects in this language (with 'weather' verbs or raising constructions, for instance) are a widely attested phenomenon. Nevertheless, there is ongoing controversy on whether the existence of null expletive subjects is, by itself, sufficient evidence to classify a language as pro-drop. Moreover, the author assumes that CVC also has null referential subjects, and this assumption, in my opinion, still remains to be supported by a more convincing data analysis. Null referential (argument) subjects are categorically ruled out in most CVC sentences, even in embedded clauses, where their semantic

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content could be easily recovered from the context. Baptista's claim that CVC allows null referential subjects finds only potential support in sentences like (9).

(9) (El/E) e nha pai. (255) PRON.3SG/CL.3SG is my father 'It's my father./He is my father.'

In all other contexts (i.e. except for 3sg + present tense copula) referential *pro* is impossible. Hence, it is not clear how it would be licensed here. In Pratas (2004), I argue that there is no *pro* in (9) but some kind of haplology: the 3sg clitic and the copula, both *e*, coalesce phonologically as a single *e*. There is also another possibility: the *pro* in (9) is not referential, but expletive. If a sentence like *It's my father*, with an overt expletive subject, is possible in English, it might be possible with an expletive *pro* in CVC. I have not found empirical evidence for the claim 'that CVC is a radical pro-drop language' (266).

Despite the problematic cases noted above, Baptista's theoretical proposals come along with a careful review of the literature on both verbraising and pro-drop. Furthermore, theoretical proposals become secondary when such an extensive set of new data is provided, especially in the case of a language that has received far too little study from a generative perspective.

Personally, I am truly grateful to the author, for this book has been a source of inspiration for my own work, in generative linguistics in general and on CVC in particular.

REFERENCES

Bobaljik, J. (1995). Morphosyntax: the syntax of verbal inflection. Ph.D. dissertation, MIT.

- Bobaljik, J. & Thráinsson, H. (1998). Two heads aren't always better than one. Syntax I. 37-71.
- Costa, J. & Pratas, F. (2003). Capeverdean Creole: some parametric values. Paper presented at the annual meeting of the Associação de Crioulos de Base Lexical Portuguesa e Espanhola, Universidad de A Coruña, Spain, 26–27 June.
- DeGraff, M. (in press). Morphology and word order in 'creolization' and beyond. In Cinque, G. & Kayne, R. (eds.), *Handbook of comparative syntax*. New York: Oxford University Press.

Holm, J. (1988). *Pidgins and creoles: theory and structure 1*. Cambridge: Cambridge University Press.

Pratas, F. (2004). O Sistema Pronominal do Caboverdiano. Lisboa: Edições Colibri.

Silva, T. V. da (1990). *Nha Gida Mendi: Simenti di Onti na Txon di Manhan*. Praia: Institutu Kauberdianu di Libru.

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Doris Borrelli, Raddoppiamento sintattico *in Italian: a synchronic and diachronic cross-dialectal study* (Outstanding Dissertations in Linguistics). Routledge: New York & London, 2002. Pp. x + 130.

Reviewed by MATTHEW ABSALOM, University of South Australia

The external sandhi phenomenon of RADDOPPIAMENTO SINTATTICO (RS hereafter) is one of the touchstones of contemporary phonological theory and has featured in descriptive linguistic texts in Italy since the 15th century. Given this pedigree, any new work on the topic must necessarily bring new insights or, at the very least, clarify what we already know about RS. Unfortunately, the volume under review fulfils neither of these expectations. This OUTSTANDING DISSERTATION, a printed version of Borrelli's Ph.D. thesis, suffers from two major flaws: gross inaccuracies in content and scholarship, made worse by sloppy presentation.¹

A disconcerting aspect of the volume relates to the outdated and limited nature of references contained in the bibliography. There is little reference to the important research on RS published outside the U.S.A., and the bulk of works referred to are from the 1980s and early 1990s. The median publication year of the references relating specifically to the topic of RS (around 25 out of 91) is 1985.

The book opens with a contextualising chapter entitled 'Introduction and prosodic preliminaries', which begins by noting that '*raddoppiamento sintattico*, or sometimes *raddoppiamento fonosintattico*, has received a vast amount of attention in recent years' and that it has been '[I]ong recognized in Italian grammar books' (3). The author at this point does not provide one single reference to support her claim, as if this vast literature is in fact a fiction. This pattern of unsubstantiated claims, which continues throughout the volume, entirely compromises the scholarly integrity of the study.

Borrelli describes the environments for RS and makes the valid point that many studies dedicated to RS focus exclusively on stress-conditioned RS. She discusses the relationship between Standard Italian and the dialects, describing the traditional tripartite division of dialects based on the geographical designations North, Centre and South. The author claims that her study 'offers a comprehensive and unified account of RS incorporating both environments in which it occurs ... [T]he resulting analysis, while uniting diachronic and synchronic aspects, will thus account for general patterns

This review has greatly benefited from the input of my colleagues Mary Stevens and John Hajek, whom I warmly acknowledge.

throughout Italy' (5). This is an ambitious agenda which would appear beyond the scope of a volume of little more than 130 pages.

The description of RS presented by Borrelli accords with the conventional presentation found in much American literature on RS. Basically, RS is conceptualised as initial-consonant gemination deriving from two processes: phonological RS, which is productive and occurs after any word ending in a final-stressed vowel; and lexical RS, which is restricted to a small, defined set of words. Disappointingly, we are once again offered a limited, idealised description of RS despite the existence of published research which demonstrates that RS is in fact empirically much more complex. By 1911, it had already been noted by the well-known Italian scholar, Amerindo Camilli (whose numerous works on RS are absent from Borrelli's reference list), that in the classic RS environment there are a number of possible phonetic outcomes, not simply initial-consonant doubling (see Absalom, Stevens & Hajek 2002 for references). More recently, other scholars, none of whom appear in Borrelli's limited bibliography, have reiterated this point (Bertinetto 1985; Agostiniani 1992; Absalom & Hajek 1997). As well as initial-consonant gemination, it is possible that RS will be blocked by pausing, final-vowel lengthening or sudden pitch movement. Additionally, the insertion of a glottal stop between the RS trigger and the following consonant can inhibit RS (see Absalom, Stevens & Hajek 2002 for a summary). These facts must be included in any quality study on RS.

Following this introductory section, Borrelli turns to 'Prosodic preliminaries'. She describes Italian syllable structure and highlights traits of individual consonant groups. The second major fault in the work emerges in this section: factual inaccuracies accompanied by careless scholarship. Borrelli maintains that '[t]he affricates [ts, dz] are always long as are the palatalized consonants $[n, \Lambda, f]$ ' (6). To demonstrate this point, Borrelli provides statistics on consonant length taken from a 1970s phonetic study. In fact, however, the claim regarding length is incorrect, or rather, incomplete. Numerous studies show that the five consonants listed are long INTERvocalically, whether word-medially or across word boundaries (Serianni 1989: 19); by contrast, post-consonantally, post-pausally or in absolute initial position, these consonants are not phonologically long. Instead of clarifying this situation, the decontextualised presentation of length statistics only confuses the issue. Borrelli provides the following data: '[f] is 67% longer than [f] and 54% longer than [s]; [n] and [Λ] are two to three times longer than [m], [n], [l] and [f]' (6). The reader does not know the environment of these length differences, why the consonants listed were compared or, indeed, the significance of the results. This type of careless scholarship is singularly unhelpful.

Turning to vowels, Borrelli states that '[t]he most common environment of long vowels is in open stressed syllables' (6). This statement begs the question, where else do they occur? Her explication only leads to more

confusion. She continues that long vowels 'can also occur when the morphology causes a suffix, which happens to be a vowel, to join onto an identical vowel' (6). This appears straightforward until we read the ensuing contradiction that 'in such cases each vowel tends to be pronounced separately to the point of forming distinct syllables, rather than joining to form a long vowel' (6). Borrelli is clearly unaware of the existence of an extensive study of long vowels published by Valesio (1967), over three decades ago.

Borrelli states categorically that '[t]he language [Italian] does not allow for extra-long syllables' (7). This claim demonstrates a further compounding deficiency of this study: lack of familiarity with recent developments in Italian phonology. Hajek (2000) has recently questioned the conventionally accepted two-way length distinction in Italian, proposing the possibility of ternary vowel length contrasts, which can be supported empirically.

The third section of this introductory chapter is dedicated to a discussion of stress and vowel length in diachrony. Borrelli describes penultimate stress as most common, with the possibility of lexical stress falling on the antepenultimate and ultimate syllables. To illustrate this claim, Borrelli provides us with a highly suspicious example of scholarship. She presents a 'survey of one-hundred and twenty consecutive words in a dictionary' (8) and from this deduces the following distribution of stress patterns:

penultimate	76.67%
antepenultimate	20.83%
final	2.50%
pre-antepenultimate	o%

Borrelli fails to provide details of the source, but given that the words cited include *città* and *tavola*, one must wonder what sort of dictionary has a list of 120 consecutive words which span the alphabet in this way.

The discussion of stress in Italian is unsatisfying since, after presenting various positions, Borrelli simply states that the issue is 'by no means closed' and that 'the present study follows the traditional approach' (14). As indicated at the opening of this review, the volume does nothing to clarify our understanding in this respect.

Disappointingly, chapters 2–5 are also riddled with inaccurate information, unsubstantiated claims and a clear lack of knowledge of published literature in the field. Chapter 2, 'Historical gemination', attempts to trace the diachronic development of gemination via assimilation from Latin to Italian. In this chapter, Borrelli presents a range of data showing reconstructed developments of gemination. This reviewer finds it incredibly problematic that there is at times no reference to the sources of data cited.

Phonetic transcriptions provided by the author are erroneous. Borrelli transcribes *foglia* as [fo λ ia] (17, (26a)) when it should appear as either [fo λ fa] or [fo λ :a], depending on the view of geminate consonants taken. Ironically,

Borrelli's own transcription conflicts with her earlier mistaken claim that $[\Lambda]$ is always long.

Chapter 3, 'Raddoppiamento sintattico: data' purports to provide 'a careful examination of RS in the many dialects of Italy' (25); in a chapter which numbers eleven pages, this claim is clearly disproportionate. The first section deals with RS in Standard Italian and in the Centre dialects. Borrelli lists the terms which apparently trigger RS in these varieties. Again, there is at times no reference to the source of these data and the descriptions provided are inaccurate. For instance, Borrelli's agglomeration of 'Tuscan varieties (including those of Florence, Lucca, and Pisa)' (28) demonstrates a profound ignorance both of the linguistic varieties of Tuscany and of published descriptions of these varieties. She states that these varieties exhibit RS after the 'masculine plural article i' (28). RS is found exceptionally after the masculine plural article in Lucca, whereas in Florence and Pisa this is not the case (Agostiniani 1992). Inaccuracies of this degree undermine any notion of a 'careful examination'.

Borrelli's section on 'Northern dialects' highlights a problem of coherence within the work. In the opening chapter, we are told that Tuscany, Umbria and the Marches are central regions of Italy. In this chapter, however, Borrelli classes the dialects of 'northern and eastern Tuscany, northern Umbria, and the central Marches' as Northern dialects. This incoherence serves as a further illustration of the inaccurate treatment of information.

Turning to the South, section 3.3, the provenance of data presented will be unclear to most readers. It is clear to this reviewer, however, that whole swathes of argumentation presented by Borrelli have been sourced from other publications which are not adequately acknowledged.

In chapter 4, Borrelli offers a review of previous analyses of RS. Essentially, this chapter is a retelling which does not add to or extend our knowledge of RS. It is perhaps useful as a type of outdated literature review. What is of greatest concern to this reviewer is Borrelli's lack of coverage of seminal literature.

Chapter 5, 'Lenition', presents cross-dialectal patterns of lenition, which are relevant because of the interaction between lenition and RS. The chapter describes lenition first in Standard Italian, then in the three large geographical blocks of the Centre, North and South. The paucity of examples provided is problematic; for instance, in the section on Northern dialects, Borrelli only provides examples from Milanese and from this she infers that 'there is little if any productive lenition ... in this dialect group' (63f.). This is a large claim based on a corpus of just ten words. Another problem with the examples provided is that, at times, they do not appear to be from the source given. This is the case in her example (109), where Borrelli provides examples of the Tuscan *gorgia toscana*; while her examples (a–d) are found in the cited source, example (e) is not. Additionally, the phonetic transcription of this example is questionable, given that the high rounded back vowel is more

likely a semi-consonant: [hwesta]. All examples presented in (110) are absent from the cited source, and one of these even appears ungrammatical or, at least, poetic. Ironically, once again, in (113e), the palatal glide is transcribed as a singleton ([i#honsiʎɛri#van:o#a#k:onsiʎarsi] *i consiglieri vanno a consigliarsi*, 'the advisers go to seek advice') in conflict with Borrelli's own statement regarding its inherent length. While these may seem small things, taken in the context of the range and frequency of inaccuracies occurring in each chapter, the value of this volume must be questioned.

The sixth and final chapter, 'Analysis', offers an optimality-theoretic (OT) treatment of RS. The opening paragraph of this chapter (71) establishes a neat research agenda, but unfortunately, this analysis does not deliver. The account provided is an unmotivated mish-mash of previous work with little recognition of the relevant literature. Borrelli concludes the chapter leaving a number of issues unresolved, including:

- Why vowels are long in word-internal open syllables but not at word boundaries.
- Why oxytones favour RS, that is consonant lengthening and not vowel lengthening.
- Proparoxytones remain unexplained.
- Loanword phonology cannot be dealt with.

Again, the volume fails to extend our knowledge of RS or Italian phonology.

Furthermore, while purporting to offer a new, integrated analysis, Borrelli relies on dubious past formulations to explain so-called lexical RS: 'as in previous analyses, the lexical triggers of RS are stipulated to have in their underlying representation an extra mora' (76). She also refers to syntactic conditioning as valid, once again demonstrating no clear awareness that this has been roundly criticised as having no basis in the literature for RS in Italian, Roman and Tuscan varieties (see Bertinetto 1985; Agostiniani 1992; Absalom & Hajek 1997; Loporcaro 1997) – even, most notably, by one of its former proponents, Vogel (1997: 66).

A further comment regarding OT analyses of RS: Absalom & Hajek (1997) is the only attempt at an OT analysis, albeit preliminary, of ALL of the phonetic resolutions which occur in the RS environment. While this work has been available on the Internet since the mid-1990s, it and other contemporary optimality-theoretic treatments of RS (see Absalom, Stevens & Hajek 2002 for full references) are not cited by Borrelli.

Two supplementary points must be added. First, Borrelli employs a range of terminology without appropriately clarifying its meaning. Among the terms used are 'minimal phrase' and 'phonological word', both of which have contested meanings in the literature on phonological theory. There is an appeal to a sonority hierarchy (18) but it is unclear where this sonority hierarchy comes from, whether it is acoustic or perceptual, etc. Second, an issue which I have referred to repeatedly above relates to the lack of familiarity with important research on the topic. Research at doctoral level should be of a rigorous nature, which, in my view, implies recognition of the full gamut of publications available on the given topic, whether from the American tradition or not. The bibliographical shortcomings in this volume could have been redressed by examining more closely the bibliography in Lopocaro's (1997) meticulous discussion of RS, a work included as one of Borrelli's references.

Finally, on the issue of presentation, there is a high degree of inconsistency in the format of in-text citations. To give but one example, on one page (61) Borrelli refers to (Rohlfs), (Rohlfs, §150) and (Rohlfs 1969, §151). There are many occurrences of an author's name alone in brackets as the only reference to the source. This degree of incoherence would be unacceptable in undergraduate work, not to mention in an OUTSTANDING DISSERTATION.

To conclude, this volume is riddled with slapdash scholarship, unsustained claims and irregular presentation of data and citations. This is compounded by deficiencies in the treatment of data based on an overly limited bibliography. The most unfortunate outcome of its publication in a prestigious series such as 'Outstanding Dissertations in Linguistics' resides in the fact that the partial and imbalanced view of RS presented will continue to be accepted as conventional by readers who do not have sufficient grounding in Italian linguistics. This type of study does nothing to further our understanding of complex phonological phenomena such as RS. In fact, in its rigid and reductionist framework, based on the search for the most neat and elegant theoretical formulation, it denies us all the messy complexity of real linguistic behaviour which, arguably, lies at the heart of our passion for language and linguistics.

REFERENCES

- Absalom, M. & Hajek, J. (1997). Raddoppiamento sintattico: what happens when the theory is on too tight? In Bertinetto, P. M., Gaeta, L., Jetchev, G. & Michaels, D. (eds.), Certamen phonologicum III: papers from the Third Cortona Phonology Meeting, April 1996. Turin: Rosenberg & Sellier. 159–179.
- Absalom, M., Stevens, M. & Hajek, J. (2002). A typology of spreading, insertion and deletion or what you weren't told about *raddoppiamento sintattico* in Italian. In Collins, P. & Amberber, M. (eds.), *Proceedings of the 2002 Conference of the Australian Linguistics Society*. Sydney: University of New South Wales. 1–12. [Paper is available at http://www.latrobe. edu.au/rclt/als/proceedings/als2002/Absalom_et_al.pdf]
- Agostiniani, L. (1992). Su alcuni aspetti del rafforzamento sintattico in Toscana e sulla loro importanza per la qualificazione del fenomeno in generale. *Quaderni del Dipartimento di Linguistica, Università degli studi di Firenze* **3**. 1–28.
- Bertinetto, P. M. (1985). A proposito di alcuni recenti contributi alla prosodia dell'italiano. Annali della Scuola Normale Superiore, Classe di Lettere e Filosofia Serie III, XV, no. 2. 583–643.

Camilli, A. (1911). Ancora dei rafforzamenti iniziali in italiano. Le Maître Phonétique 26. 2-74.

Hajek, J. (2000). How many moras? Overlength and maximal moraicity in Italy. In Repetti, L. (ed.), *Phonological theory and the dialects of Italy*. Amsterdam: John Benjamins. 111–135.

Loporcaro, M. (1997). L'origine del raddoppiamento fonosintattico: saggio di fonologia diacronica romanza. Basel: Francke Verlag.

Serianni, L. (1989). Grammatica italiana: italiano comune e lingua letteraria. Turin: UTET.

Valesio, P. (1967). Geminate vowels in the structure of contemporary Italian. *Lingua* 18. 251–270.
Vogel, I. (1997). Prosodic phonology. In Maiden, M. & Parry, M. (eds.), *The dialects of Italy*.
New York: Routledge. 58–67.

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Denis Bouchard, *Adjectives, number and interfaces* (North-Holland Linguistics Series: Linguistic Variations **61**). Amsterdam, Boston, MA & London: Elsevier, 2002. Pp. xii + 458.

Reviewed by ANDREW SIMPSON, SOAS

One of the primary stated aims of this investigation of DP-internal syntax is 'to provide as comprehensive as possible a description of the phenomena surrounding adjectival modification in French, and to use this as a basis to understand variation found in other languages' (I). The study focuses in particular on the potential role of the category Number in the patterning of adjectives and other elements within DPs, and in doing so pursues the general goal of describing syntactic variation solely in terms of interface properties which can be justified by language-independent processes of cognition. Suggesting that both movement and the hypothesis of a fixed, universal hierarchy of functional projections are not justified by properties of the Conceptual-Intentional system, Adjectives, number and interfaces (henceforth ANI) makes an ambitious attempt to develop an analysis of variation in DP-structure without assuming either movement or an elaborate pre-established internal structure of DP constituents. This approach is referred to as 'Adaptive grammar': 'we must shift from a Generative grammar that searches among formal systems to an Adaptive grammar that searches among logically anterior properties [for] the effects they may have on a language system' (324).

Following its general introduction, ANI has four main chapters, each dealing with some aspect of the internal syntax of DPs (most frequently in French and English), and a long, final chapter on the potential advantages of Adaptive grammar over recent movement-based Principles and Parameters models, with fairly extensive criticism of the latter. As the core ideas of ANI are essentially developed in chapters 2 and 3 of the book, I have decided to concentrate on this part of ANI in the present review, though

mention of the interesting extensions of the main approach to other patterns, in chapters 4 and 5, will also be briefly made.

The principal descriptive problem which chapter 2 of ANI sets out to confront is the observation that certain adjectives frequently precede the noun in French DPs, whereas other adjectives commonly follow it. In a number of recent analyses this is attributed to raising of the noun to a midlevel functional head position in the DP. ANI, however, sets out to develop an alternative account, based on differences in the way that pre- and postnominal adjectives are interpreted relative to the noun. The starting point of the analysis is the assumption that arguments and modifiers ('dependents') regularly combine with other 'functor' elements in a particular linear order in each language due to the parametric setting of a LINEARIZATION PARAMETER 'The functor precedes/follows its dependent'. In French, a head-initial language, it is stated that the functor category precedes its dependent, and that the ordering of an adjective following a noun is a reflection of this basic linearization convention, the N being the functor and the adjective its dependent. Such an ordering of adjectives with the N also instantiates one very basic way in which adjectives can semantically combine with nouns, the functor N being modified AS A SEMANTIC WHOLE by the dependent adjective. ANI then goes on to suggest that there is also a second way that adjectives may semantically combine with nouns - via the modification of a particular semantic sub-property of a noun. It is proposed that the meaning of nouns commonly consists in a characteristic function f, a time interval i, a possible world w, and a variable assignment function g, and that adjectives with an appropriate semantics may optionally modify just one (or more) of these sub-properties/functions in an N. For example, it is suggested that a temporal adjective such as 'future' is able to modify the interval of time *i* in an N, the Adj 'perfect' may semantically combine with the characteristic function f, 'false' can optionally modify the possible world function w, and 'alleged' can apply its force to the value assignment function g. Critically, the LINEAR ordering of nouns and adjectives is argued to play a role in distinguishing the different ways in which an adjective may be combined with a noun. If an adjective modifies the entire network of sub-functions of an N and combines with the N as a semantic whole, it is suggested that this default mode of modification is regulated by the Linearization parameter, and in French the adjective dependent will follow the noun functor, resulting in N Adj sequences. Where an adjective is intended to modify only a certain subfunction of an N, ANI suggests that it may NOT follow the N, as such a sequencing would signal the regular intersective whole-to-whole modification of an N by an Adj. Rather, in order to encode modification of a subpart of an N, an 'Elsewhere' application of the Linearization Parameter forces adjectives to be positioned in a different way, preceding the N. This consequently results in sequences such as le futur président 'the future president', ce presumé communiste 'that alleged communist' and de parfaits

scelerats 'perfect scoundrels', where the adjectives have intensional rather than extensional readings. In such a view, interestingly, all adjectives are claimed to be intersective, with adjectives traditionally taken to be subsective being analysed as attributing a property to just a subpart of the nouns they modify.

Following the initial presentation of this novel approach to adjectival modification, the bulk of chapter 2 is then devoted to expanding on, and supporting, such ideas with a substantial amount of evidence and argumentation. It is noted that certain adjectives may allow for a use in either pre- or post-nominal position (e.g. les nombreuses familles/les familles nombreuses 'the large/numerous families', un habile chirurgien/un chirurgien habile 'a skilful surgeon'), and that though the difference in their interpretation in the two positions is sometimes subtle and difficult to assess in isolation. once context and the use of factors such as negation and interrogation are employed, a clear difference in meaning is perceivable, which is fully in line with the characterization of pre- and post-nominal modification suggested in the chapter. The wealth of data and careful discussion provided here is enlightening, fresh, and generally very convincing. The chapter also shows how a range of other patterns associated with adjectival modification (such as the placement of transitive participles) will naturally follow from the account of pre-/post-N modification developed in the chapter.

Having provided extensive support for its account of adjectival placement in French in chapter 2, chapter 3 of ANI then attempts to see how this may be adapted to capture the facts of adjectival modification in languages with rather different patterns, such as English. As English is a head-initial language, ANI anticipates that adjectives which modify the whole of an N should follow the noun, as in French, and that adjectives modifying a subpart of N should precede it. However, modification in both such ways results in the positioning of adjectives before N in English, as for instance in the ambiguous sequence *my old friend* (where 'old' would be positioned preceding the N in French if meaning 'former' and following the N if meaning 'aged'). The explanation for the French/English difference here, ANI suggests, is due to the different ways that number is encoded in DPs in the two languages, as outlined below.

Quite generally, it is first argued that languages require some means to individualize or 'atomize' the sets defined by common nouns so that such Ns can be used to refer to individual entities, and that atomization may potentially be effected by adding the features of number to a DP (or alternatively via the use of classifiers in other languages). It is further suggested that number may critically be grammaticalized in different DP-internal positions in different languages. In French, for example, it is argued that number is primarily represented on determiners/in D due to the regular singular/plural contrasts which are audibly present in determiners, whereas in English, it is suggested that number is primarily encoded in singular/plural distinctions on nouns/in N. (Where any additional 'secondary' representation of number is attested, such as in demonstratives, this is described as 'agreement' rather than the primary semantic encoding of number.) Later, in chapters 4 and 5, such differences in the location of number are argued to have clear consequences for the omission of DP-internal material. French, with number encoded on D, allows for the frequent omission of N, as it is D + Num which critically atomizes the DP, whereas English, with number on N, permits N-omission much less easily, and contrasts such as the following are found: $le gros_/the big *(one); la rouillée_/the rusted *(one)$. Conversely, it is found that D/determiners can be more readily omitted in English than in French, as D does not have the important atomizing function in English that it does in French; this difference results in contrasts such as: *Beavers build dams everywhere/I hate beavers* and *(*Les*) *castors construisent des barrages./Je deteste* *(*les*) *castors*.

This hypothesized distinction between French and English in the encoding of number is then made use of in the following way. First, the assumption is made that regular adjectival modification requires the combination of an adjective with a noun BEFORE the latter undergoes atomization by the application of number. Second, ANI adopts a proposal made in Williams (1981) that a word-final morphological head only has scope over elements to its left. If number occurs as a suffix on N, as in English, this will have the effect that it can only have scope over adjectives to its immediate left. As a result, all regular adjectival modification will be forced to occur in positions to the left of N in English, whether it modifies a subpart of N or N as an undifferentiated whole (and to compensate for the lack of positional freedom, it is suggested that intonation/stress is employed to encode differences in the way that an adjective modifies an N). In contrast, French, with number encoded higher in the DP, will allow for adjectives to occur either side of N, as positioning adjectives to the right of N will NOT locate such elements outside of the scope of any atomizing number on N as in English. The linear positioning of adjectives in French is therefore suggested to be solely dictated by the Linearization Principle. (As Bouchard notes, there is, however, a technical difficulty present here, as number suffixed to a determiner in D in French might not be expected to be able to take adjectives occurring to its right in its scope. This is a little concerning, as Williams' scopal rule is actually a key component of the analysis put forward here.)

With its reference to the different primary location of number in the DP, ANI thus develops an integrated characterization of variation in adjectival placement, variation in the potential omission of Ns and Ds, as well as a platform to describe various other phenomena, such as the occurrence of clitics in a language (further instances of the omission of N). ANI also establishes a potential set of diagnostics for probing the phenomena of adjectival modification further in a wider array of languages. These aspects of ANI, along with a careful gathering of information about a wide range

of adjectival patterns, and a fine description of the interpretations present in adjectival modification, are all positive qualities of the book, and make it a very valuable and stimulating volume to read.

On a slightly more critical note, there are a number of issues relating to the central analysis of the book which I feel require further examination. First of all, although there is in-depth treatment of French and English, and some further mention of Walloon, Italian and Celtic, I believe it would have been more convincing if the book had attempted to test the predictions it makes against a wider array of typologically different languages. This should not be difficult to do and might serve to add important support for the number-based theory of adjectival placement. Secondly, ANI assumes that adjectives will participate in the same kind of linearization with respect to a head which complements show (hence the term 'dependents' in the Linearization Principle refers to both modifiers and complements). This is not a standard assumption, and data from a large-scale study (of over 600 languages) in Dryer (1992) appears to confirm that the positioning of adjectives relative to nouns is not normally predictable from the regular head/complement ordering in a language. It could of course turn out that the occurrence of number on Ns constrains the positioning of adjectives to be pre-nominal in many head-initial languages in the way it does in English (hence giving the appearance of random variation in Dryer's data). However, until such evidence is gathered, it might seem that adjectival positioning relative to N does not so obviously follow the direction of complement selection. Finally, a word can be said about the general aim of the volume, namely to describe linguistic phenomena solely by means of mechanisms which can be justified as legitimate interface conditions with logically anterior properties (hence disqualifying movement as a legitimate linguistic mechanism). Though it is clear that Number will indeed qualify as a legitimate interface factor, the same cannot be said about another important component of the analysis developed in the book - Williams' suggestion that a word-final morphological head only has scope over elements to its left. Unless it is explained and motivated further (which it is not in ANI), this formal (and crucial) condition seems to be one which is quite the opposite from an interface condition with logically anterior properties. In order to convince one fully that ANI's analysis of adjectival placement really is free of all formal 'imperfections' and is driven by properties of the interfaces alone, it would therefore have been helpful if the full range of factors affecting word order variation were more transparently described in terms of properties of the interface.

Notwithstanding such potential criticisms, it can be said that *Adjectives*, *number and interfaces* is definitely to be recommended, and is an extremely useful and original work, which should be of interest to both new and experienced researchers interested in the area of DP syntax and issues relating to the legitimacy of general syntactic formalisms.

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REFERENCES

Dryer, Matthew (1992). The Greenbergian word order correlations. *Language* 68. 81–138.
Williams, Edwin (1981). On the notions 'lexically related' and 'head of a word'. *Linguistic Inquiry* 12. 245–274. *Author's address: Department of Linguistics, SOAS, University of London,*

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Eric Haeberli, *Features, categories and the syntax of A-positions: crosslinguistic variation in the Germanic languages.* Dordrecht: Kluwer Academic Publishers, 2002. Pp. v + 378.

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The behaviour of verbal arguments in clausal syntax has been a wellstudied topic since the beginning of the generative enterprise, and it empirically dominated the initial stages of the Minimalist program (Chomsky 1995). Subjects and objects are so central to syntax that every new framework will, at the very least, have to make explicit statements about their distribution. Despite this thorough attention, most scholars will agree that we have yet to finish answering even the core questions. Take the observation that clauses generally seem to require subjects, whereas the same is not true for objects. Mainstream generative frameworks have tried to cope with this fact by stating that some subject position (usually the specifier of I(NFL)P or T(ENSE)P) has to be filled and that some abstract case or 'EPP-feature' on the head of that projection triggers the presence of a nominal phrase. Now, EPP stands for 'extended projection principle', the old rule stating that every clause must have a subject. Hence, it is easy to see that such analyses hardly do more than give a technical description of the facts, providing no real insight. With respect to language variation, take the fact that some but not all languages display short movement of arguments across VP-adverbs, scrambling and/or object shift. There is still a lively debate about the nature of these movements and about what determines their presence or absence in a language (see, among many others, Zwart 1997; Neeleman & Weerman 1999 and van Gelderen 2003 for differing views).

In this monograph, Eric Haeberli proposes a new theory to account for the distribution of arguments. The book roughly consists of two parts. In part one, the first two chapters, Haeberli sketches the relevant issues, makes

his theoretical assumptions explicit (in short, Chomsky's (1995) minimalism: yes; Kayne's (1994) anti-symmetry: no) and sets out to formulate a framework that captures the core facts about arguments without reference to abstract case or EPP-features. In part two, Haeberli uses and extends this model so as to account for a wide range of cross-linguistic data taken from Germanic.

This book is an important contribution, as it explicitly argues for the viability of checking theory and its role in the formulation of principles and parameters. Although checking theory has been used to account for variation in verb placement (see Bobaljik 1995 and Zwart 1997), it has never before been so extensively applied with respect to parametrization in the syntax of A-positions (roughly, possible argument positions that exclude topic and focus positions). Although the book is full of ideas, technical in presentation and far from an easy read, Haeberli takes the reader through things with care. Just as should be the case, this work does not end on the last page, which is another way of saying that criticism is not impossible. Unfortunately, a brief evaluation of the main proposals of each chapter would exceed the scope of this review. I will, therefore, briefly discuss parts one and two in turn, and then raise some general issues.

The first part offers a new way of looking at the syntax of arguments. The central questions are: Why does a clause need to have a subject? Why is an object raised to subject position in passive constructions? Why can verbs directly select nominal arguments, in contrast to adjectives and nouns, as seen in (1)?

- (I) (a) to believe (*of) Paul
 - (b) afraid *(of) Paul
 - (c) the father *(of) the bride

Although abstract case and EPP-features have played an important role in answering these questions, Haeberli proposes to eliminate them and to use only features that are likely to have some conceptual grounding: categorial features. He proposes that there is a difference between what categories look like in the lexicon and how they have to be interpreted eventually at Logical Form. An (incomplete) overview is provided in (2).

(2)		Lexicon	LF-interpretation
(3)	NOUN	[+N, +V]	[+N, -V]
(4)	VERB	[+N, +V]	[-N, +V]
(5)	DETERMINER	[+D(+N), +T(+V)]	[+D(+N), -T(-V)]
(6)	TENSEfinite	[+D(+N), +T(+V)]	[-D(-N), +T(+V)]
(7)	ADJECTIVE	[+N, +V]	[+N, +V]

That a syntax of arguments exists at all is a consequence of the fact that the wrong positive features have to be eliminated during the derivation. A verb, for instance, must be interpreted as [-N, +V] but is positively marked for all its features in the lexicon. It therefore needs to attract a nominal phrase, with an interpretable [+N] feature, which can check off the [+N] feature on the verb. Conversely, a noun is lexically specified as [+V]and needs the verb in order to lose this plus-marking. This pattern repeats itself with finite tense, which has to get rid of its [+D, +N] features and therefore attracts a DP to its specifier. If the external argument is lacking, as in a passive construction, the object DP will be attracted instead. The fact that every clause has a subject now no longer needs a specific rule: it is simply one instantiation of categorial feature checking, a process which takes place everywhere in syntax. That nouns and adjectives cannot select nominal phrases (cf. (I) above) falls out beautifully too. A noun must attract a category from its complement with an interpretable [+V] feature, and a complement noun crucially lacks this. An adjective, on the other hand, is already correctly specified in the lexicon as [+N, +V] and will therefore attract no element from its complement. Hence, a noun complement would never get rid of its [+V] specification. Although these results are impressive, there are a few drawbacks. Note that to account for the fact that preposition insertion will render the examples in (1b, c) grammatical. Haeberli has to assume that prepositions are minimally marked [+V], which is not intuitively obvious. Second, one may wonder how the syntax knows whether a [+N, +V] category from the lexicon needs to become a verb or a noun. Therefore, Haeberli is forced to assume that all uninterpretable plus-features are marked as such in the lexicon before they enter the syntax. This raises the question of why the lexicon would not specify the categories according to their LF-interpretation to begin with, since marking plus-features as uninterpretable is very close to marking them negatively.

The second part of the book deals with cross-linguistic variation within the Germanic languages. Chapter three tries to answer the question of why German displays more freedom in the ordering of arguments than Dutch, and offers a new way of relating this to a rich case morphology. Chapter four tries to account for the fact that some but not all Germanic languages allow adverbs in between the complementizer (or inverted verb) and the subject position. It is argued that having this option depends on agreement properties and the availability of an empty expletive in a particular language. Chapter five aims to incorporate expletives into the framework. Parametric differences which are analysed include the fact that some but not all languages have expletive constructions with transitive verbs, and the fact that, cross-linguistically, expletives place varying degrees of restrictions on DP-arguments in the clause (that is, whether or not they must be indefinite). Chapter six focuses on Icelandic and offers

answers to two important remaining questions: How do we analyse oblique subjects in this language? How come Icelandic has rich case morphology but nevertheless does not show the same freedom in argument ordering as German?

Part two of the book is as ambitious as part one is innovative. It is at its best when apparently unrelated differences are brought together. The fact that Icelandic lacks scrambling of prepositional phrases is related to the fact that it also lacks preposition stranding under A-movement. Likewise, the proposal which accounts for the presence of oblique subjects in Icelandic is also involved in explaining why it lacks the word order freedom which German has. The main question that arises for part two is whether, on the whole, the empirical scope is not too ambitious. Two issues in particular are relevant. Let us discuss each in turn.

The first issue is the degree of technicality often displayed in the analyses. Let me give a concrete example. Haeberli not only offers an account of the parametric option of having oblique subjects, present in Icelandic though not in German (a difference for which he needs two parameters, in fact), but he is also interested in the rather complicated agreement patterns in this construction. To account for these, Haeberli introduces specific licensing mechanisms, an empty expletive, and a few assumptions about the nominative and dative cases and about the number and the order of functional projections. Particularly in a theory where technical details already play a pivotal role, the result is rather overwhelming and the analysis appears as complicated as the data.

The second issue, partly related to the first, is the degree of arbitrariness involved in some (but not all) central explanations. I will again provide one illustration. Haeberli explains the fact that German has a freer argument ordering than Dutch by referring to the fact of the former having morphological case. He proposes that morphological case triggers the presence of syntactic case features that have to be checked. Definite arguments are first moved to TENSEP in order to check the relevant categorial features. The syntactic case features, introduced by distinct verbal heads (ACCUSATIVE and DATIVE) and TENSE (NOMINATIVE), will all reside in TENSE once the verbal heads have moved to this position. Haeberli then proposes that case features have to be checked in separate projections created on top of TENSEP. The order in which these are created is free (for example, NoMP before DATP, or vice versa). This then leads to free word order effects. As Dutch has no syntactic case features, the arguments are rigidly ordered in TENSEP. There is a crucial arbitrariness involved in this proposal. The order in which the different case projections are created is free, according to Haeberli, because nothing singles out a particular one. Of course, one could easily invent something, particularly in a framework where the timing of operations is generally made precise; not specifying the order is almost an anomaly. Under the assumption that the highest case feature in the structure (NOMINATIVE ON TENSE) has to move first, etc., a rigid (and in this instance wrong) order would result, namely DIRECT OBJECT > INDIRECT OBJECT > SUBJECT. Haeberli thus shows that an account for the contrast between Dutch and German can be formulated within the framework proposed, but not that it is particularly insightful to do so. Approaches with a more traditional flavour (see, for instance, Bouchard 2001 or Neeleman & Weerman 1999, who view case morphemes as indicating how arguments should be mapped onto a thematic hierarchy), although also not without problems, are less arbitrary and therefore intuitively more attractive.

This monograph can be seen as an attempt to answer the question: What would the theory look like if some core principles as well as a substantial number of parametric differences were cast into one formulation of checking theory? Although I find that, in general, the theory breaks more ground with respect to the principles than with respect to the parameters, Haeberli at least bites the bullet instead of evading the line of fire. Hence, the fact that the theory gets significantly more complicated as the proposal develops is understandable, given the ambitious empirical scope of the book, and cannot negate the fact that the starting point of the enterprise (the elimination of abstract case and EPP-features in favour of categorial feature checking) is simply great. Future work will therefore have to decide to what extent this framework can be improved and/or simplified in order to gain more understanding of what does and what does not cause cross-linguistic variation in Germanic. This will hopefully bring us closer to addressing the broader and more fundamental question: Is the 'checking' metaphor the right descriptive, as well as explanatory, tool for this particular job? For now, Haeberli deserves praise for enabling us to compare in a meaningful way a checking approach to the syntax of arguments with the approach taken in other frameworks.

REFERENCES

Bobaljik, J. (1995). Morphosyntax: the syntax of verbal inflection. Ph.D. dissertation, MIT.

Bouchard, D. (2001). The concept of 'universal' and the case of Japanese. *Lingua* III. 247-277.

Chomsky, N. (1995). The Minimalist program. Cambridge, MA: MIT Press.

Gelderen, V. van (2003). Scrambling unscrambled. Ph.D. dissertation, Leiden University.

Kayne, R. (1994). The anti-symmetry of syntax. Cambridge, MA: MIT Press.

Neeleman, A. & Weerman, F. (1999). Flexible syntax: a theory of case and arguments. Dordrecht: Kluwer.

Zwart, J.-W. (1997). Morphosyntax of verb movement: a Minimalist approach to the syntax of Dutch. Dordrecht: Kluwer.

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Martin Haspelmath, Ekkehard König, Wulf Oesterreicher & Wolfgang Raible (eds.), *Language typology and language universals: an international handbook* (vols. 1 & 2). Berlin & New York: Walter de Gruyter, 2001. Pp. xx+1855.

Reviewed by ANNA SIEWIERSKA, Lancaster University

The many publications, conferences, symposia and workshops devoted to the typological approach to language over the last decade or so clearly testify to the fact that linguistic typology has come of age. If, however, one were to still harbour doubts as to the maturity of language typology as a field, Language typology and language universals: an international handbook is bound to dispel them. The sheer volume of the work has made it possible for the first time to present the extensive range of typological research currently being undertaken and to provide some idea of the size and truly international character of the typological community. The handbook features 124 contributions by 108 authors, all experts on the relevant topics, from 20 different countries. The majority of the authors are European or affiliated with European institutions. This may come as a surprise to those who associate linguistic typology primarily with the West Coast of the United States, but is fully in keeping with the locus of much of current typological work and, needless to say, the institutional ties of the editors. Although the editors do not elaborate on the factors that motivated their choice of contributors to the handbook, the impression that one gets is that a conscious effort was made to redress the Anglo-American bias reflected in previous major publications on linguistic typology – such as the four volumes of Greenberg et al. (1978) or the three volumes of Shopen (1985), or the introductions of Comrie (1981/1989) and Croft (1990/2002) - and to present a European and especially a German perspective. This is not to say that the contributions to the field of language typology of Anglo-American scholars are neglected or down-played, but rather that their work is placed in a more global setting. While the European orientation of the handbook is highly welcome, the decision to have contributions in three languages, English, German and French, is not altogether fortuitous. Of the 124 contributions, 39 are in German and 6 in French. Thus, a third of the contributions are likely to be inaccessible to many readers. This is a pity, since the net result may be that much of the European orientation will be lost precisely on those who it was intended to reach.

The contributions comprising the handbook are divided into fifteen sections. The first seven sections offer a detailed overview of the foundations and the historical and theoretical underpinnings of linguistic typology. Section one sets the stage for the ensuing discussion with two contributions. The first outlines the relationship between language universals and language typology, drawing on different notions of language and different levels of observation and abstraction. The discussion includes a consideration of the linguistic as opposed to conceptual nature of universals, their degree of innateness and the role played by general principles of perception and cognition. The second contribution reviews various approaches to language typology. These include the single-parameter approach, concentrating on, for instance, morphological structure, word order or head- and dependentmarking; the construction-based approach, focusing on a given construction such as the resultative, passive or causative; the proto-type approach; the hierarchy and scale approach; and the areal approach.

Section two features nine contributions outlining how the issues of language universals and language diversity have been approached in fields outside linguistics proper, such as cognitive science, artificial intelligence, biology, genetics, language pathology, the philosophy of language and the study of different writing systems, as well as in sign language and text analysis. Section three dips into the history of language research and provides an overview of the approaches to language universals entertained in antiquity, the Middle Ages, the Renaissance and the European enlightenment. This historical perspective is further pursued in the next five contributions in section four, which present the views on language typology held by various pre-twentieth-century scholars, both European (e.g. Lamy, Arnould, Wilkins, Girards, Beauzées, von Humboldt) and non-European (e.g. Panini, Sibawaihi, Fujitani, Sapir).

Section five provides an account of the positions on typology espoused by four of the well-known schools of typology of the second half of the twentieth century (discussed in greater detail in Shibatani & Bynon 1995), namely Greenberg's, The Petersburg School, The Paris RIVALC and The Cologne UNITYP. Also included is an overview of Principles and Parameters, and the approach to typological analysis inspired by the work of Klaus Hegers, which has many points of convergence with European and American Functionalism.

Section six considers four types of explanation that have been advanced for language universals and typological preferences, namely those involving processing ease, iconicity, economy and markedness. The section also contains a contribution on language sampling and the use of statistical methods in typological research. The following fourteen contributions of section seven are devoted to the issue of cross-linguistic comparability, which is explored with respect to various textual, semantic and morpho-syntactic dimensions, such as event structure, participant roles, parts of speech, tense and aspect, reference and predication, deixis, clause linkage, discourse structure and grounding, and contextuality.

The theoretical aspects of linguistic typology give way to the empirical in sections eight through twelve, which provide an up-to-date account of

the typologies of different language phenomena – morphological, syntactic, phonological and lexical – and their cross-linguistic distribution in terms of both genetic and areal groupings. Most of the contributions include a diachronic as well as a synchronic perspective. Section eight consists of six contributions, dealing with aspects of morphological structure: agglutination, flection, introflection, compounding, affix position and incorporation. Section nine contains nine contributions on different morpho-syntactic categories, parts of speech, personal pronouns, articles, number, intensifiers and reflexive pronouns, modal categories, localizing expressions and adpositions, etc.

Section ten, on syntactic typology, opens volume two and, as might be expected, is the largest section of the handbook, featuring twenty one contributions. Many of the well-studied phenomena are represented: clausal word order, voice (passive, reflexive and middle), case marking (of objects), causatives, resultatives, possession (adnominal, internal and external), interrogatives, existentials, coordination (clausal and phrasal), comparatives, conditionals, complement clauses, converbs, focus constructions, dislocations and reference tracking strategies.

Section eleven is concerned with lexical matters. The first three contributions discuss different approaches to lexical typology: the cognitive, anthropological and universal primitive approaches, respectively. The following six contributions consider kin terms, derivation, colour terms, spatial terminology, quantifiers and verbs of perception. Section twelve focuses on phonological structure. Five topics are considered: the structure of the syllable, phonological processes, metrical patterns, tone systems and intonation.

The last three sections of the handbook deal with the synchronic and diachronic characterization of languages in terms of salient typological characteristics. Section thirteen explores six well-known parameters of variation: the bifurcation of languages into syllable-timed vs. stress-timed, finite vs. non-finite, subject-oriented vs. subjectless, head-marked vs. dependent-marked, configurational vs. polysynthetic, and discourse configurational vs. non-discourse configurational. Section fourteen considers the typological characterization of language families and linguistic areas. Two contributions presenting the principles of areal typology and its relationship to dialectology are followed by a discussion of the typological convergences found in four acknowledged linguistic areas: Europe and Standard Average European, the Balkans, the Sudeten region and Mesoamerica.

The final section, fifteen, concentrates on diachronic aspects of linguistic typology. The first nine contributions discuss the typologies of diachronic change relating to a variety of phenomena: processes of lexicalization and grammaticalization, contact-induced typological change, pidginization and creolization, language obsolescence and language death. These phenomena are then given more detailed exemplification in the last seven contributions,

which illustrate the typological changes that have taken place over time within particular language families, namely Romance, Germanic, Turkic, Ancient Egyptian, Northern Ethiopic and Caucasian.

As suggested by the above, the handbook is encyclopaedic in its scope and coverage. One could, however, question the editors' decision to allocate so much space to the history of typological research and its connections to other fields at the expense of better coverage of the actual patterns of crosslinguistic variation and the factors underlying it. For example, the section on syntactic typology lacks separate contributions on relative clauses, applicative constructions, ditransitive constructions, serial verbs, non-verbal predicates, clausal negation, morphological alignment and agreement. Further, there is only one contribution devoted specifically to word order and this deals just with the Greenbergian word order correlations. The section on morphological categories would have benefited from contributions on gender, classifiers, evidentiality and case, and the section on phonology from an entry on phonological inventories. Arguably a more important omission is the lack of a section with contributions discussing the relationship between language typology and models of grammar. While the Chomskian view of language universals and typological variation finds reflection in several contributions, the positions held and solutions adopted within currently existing functional models of grammar, such as Systemic Grammar, Functional Grammar and Role and Reference Grammar, or within cognitive models such as Construction Grammar, do not feature. Particularly suprising is the absence of an entry on the ways in which universals and typological markedness are dealt with within the various versions of Optimality Theory, which is mentioned only in the context of the discussion of certain phonological issues but not at all in relation to morpho-syntactic phenomena. Another area which receives too little attention, in my opinion, is the methodology employed in typological research. The only issues that are covered well are language sampling and cross-linguistic comparability. The semantic map approach is illustrated in the contributions on areal typology and Standard Average European but is not fully explicated. There is no discussion of different methods of data collection and analysis, or a consideration of the role currently played by computerized databases and corpora or a critical evaluation of the value and predictive potential of different types of implicational universals. The absence of a comprehensive discussion of implicational universals is particularly glaring, given that one of the aims of the handbook, as stated in the preface, is to help experts on individual languages 'place their language within the space of what is possible and common in the languages of the world' (vi). Needless to say, this requires a sound understanding of how implicational universals are arrived at, how they should be interpreted and what exactly they entail.

The individual contributions to the handbook differ in length from 3 to 42 pages (in two columns), most being about 15 pages. They are thus long

enough to provide a reasonably good overview of the topic under discussion, to air potential areas of controversy and suggest possible new directions of investigation. The discussions are in the main well illustrated with language examples, separated from the body of the text and adequately glossed. The vast majority of the contributions contain quite an extensive list of references. Thus, readers whose appetite has been whetted can easily pursue their investigations further. Unfortunately, very few of the contributions contain cross-references to other entries in the handbook. This, however, is compensated for in part by the relatively detailed subject index.

The handbook is too expensive for most individuals to buy but it is definitely an item which a university or departmental library should have. As with most handbooks, it is meant to be consulted rather than read, to act as a point of departure rather than as the last word. On the whole, it maps out the terrain of different approaches to the study of language universals and linguistic typology well, though unfortunately mainly for readers of both English and German. Readers with English only are likely to be frustrated at times by not being able to access obviously relevant material. They may, however, still benefit from the list of references. Sometimes, this is good enough.

REFERENCES

Comrie, B. (1981/1989). Language universals and linguistic typology: syntax and morphology. Oxford: Blackwell.

Croft, W. (1990/2002). Typology and universals. Cambridge: Cambridge University Press.

Greenberg, J. H., Ferguson, C. A. & Moravcsik, E. (eds.) (1978). Universals of human language (4 vols.). Stanford: Stanford University Press.

Shibatani, M. & Bynon, T. (1995). Approaches to language typology. Oxford: Clarendon Press.

Shopen, T. (ed.) (1985). *Language typology and syntactic description* (3 vols.). Cambridge: Cambridge University Press.

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Brian D. Joseph & Richard D. Janda (eds.), *The handbook of historical linguistics*. Malden, MA & Oxford: Blackwell, 2003. Pp. xviii+881.

Reviewed by Joseph Salmons & Andrea Menz, University of Wisconsin–Madison

This handbook (henceforth *HHL*) will be widely read by practicing historical linguists and advanced students. The present reviewers, one from each of

those core readerships, are confident that both audiences will gain much from it. Let us turn directly to the volume, section by section.

I. ON LANGUAGE, CHANGE AND LANGUAGE CHANGE introduces the volume. Handbook introductions inevitably seem perfunctory, but this wide-ranging survey encompasses a quarter of the volume. Janda & Joseph (henceforth J&J) seek to provide 'a particularly revealing and useful perspective on the nature of language, the nature of change, and the nature of language change' (I). As this suggests, the essay does not shy away from theorizing, supported by examples though without empirical trench warfare. J&J discuss philosophy, history of science, time travel, train car design, Mickey Mouse's hands, and Confederate General George Pickett, but such exuberance is tempered frequently by a more careful tone. This style of presentation is generally engaging, the questions at hand are utterly central, and the answers are significant.

For example, J&J consider 'uniformitarianism', concluding (35f.) that linguistics and other sciences have a uniformitarian THEOREM, derivable from parsimony and other independently-needed principles, but no such PRINCIPLE. They propose instead 'informational maximalism', 'the utilization of all reasonable means to extend our knowledge of what might have been going on in the past, even though it is not directly observable', a worthy obligation for *HHL* and our field and the 'sworn duty of every kind of historian' (37). On other issues, J&J provide sure-footed discussion of such slippery issues as the role of acquisition in change. Elsewhere, diachronic linguists are instructed to look to psychology and sociology rather than embracing 'the siren of biological organicism' (10), though J&J are later more positive about biological models (67f.).

Turning to individual chapters, a valuable feature of *HHL* is what one might think of as 'point-counterpoint' chapters. Pairs of contributions take somewhat differing (mainstream, seldom polemic) perspectives on fundamental questions like the comparative method (Rankin, Harrison), phonological change (Kiparsky, Hale), and analogy (Anttila, Hock), with more complex constellations on syntactic change and grammaticalization. Some contributors provide fresh arguments, ideas, and data; others synopsize and review familiar views. Our remarks concentrate on the former.

2. METHODS FOR STUDYING LANGUAGE CHANGE opens with Robert Rankin's 'The comparative method' and S. P. Harrison's 'On the limits of the comparative method', which lay out goals, premises, methods and limits of this foundation of linguistic reconstruction in a manner that is thorough, yet accessible to the beginning/intermediate student. They focus their attention primarily on how the comparative method applies to phonology, but also touch on morphology, syntax and even the morphology–syntax interface. Both draw attention to much-disputed issues of regularity,

uniformitarianism, and naturalness in sound change, which arise repeatedly in the introduction and throughout the volume.

Don Ringe, with his usual clarity and care, treats the methods and limits of 'Internal reconstruction', very much in a spirit of informational maximalism. The chapter is divided into subsections that focus on 'alternations resulting from conditioned merger [...] and secondary split' (245–253 and 253–257, respectively), and 'reconstruction from broader patterns' (257–259). In the last, Ringe draws on the Proto-Germanic strong verb system to demonstrate how internal reconstruction can fill in gaps in the comparative method, while warning against its over-application.

Lyle Campbell returns to the appropriate application of the comparative method in 'How to show languages are related: methods for distant genetic relationship'. Campbell focuses on how to 'distinguish fringe proposals' for distant genetic relationships 'from more plausible ones' (263) and ensure that efforts are dedicated to the latter. The bulk of the chapter catalogs pitfalls awaiting historical linguists who attempt to establish distant relationships, including, for example, a detailed treatment of 'chance similarities' (274–277) and an entertaining discussion of 'erroneous morphological analysis' (278).

Johanna Nichols' 'Diversity and stability in language' explores why 'some things in language are prone to change more rapidly than others, and [...] some things are readily borrowed and others are not' (283). Nichols considers what is involved in developing a 'full theory of stability and diversity [... that] account[s] for the probability of various elements of language to be inherited or acquired, and the various conditions that may hold for particular elements and scenarios' (289). This chapter also contains a practical survey of the 'Relative stability of selected linguistic elements' which covers everything from segments to word order, with an especially good discussion of gender, exemplified by Niger-Kordofanian and Nakh-Daghestanian data (299–303). This section is particularly useful in conjunction with advice given earlier on avoiding pitfalls in linguistic reconstruction.

3. PHONOLOGICAL CHANGE begins with Paul Kiparsky's 'The phonological basis of sound change', reprinted with minor alterations from the *Handbook of phonological theory* (Goldsmith 1995), which in turn draws on a 1988 handbook chapter. He treats regularity, phonetic conditioning, 'lexical diffusion as analogy', naturalness and his well-known view 'according to which phonetic variation inherent in speech, blind in the Neogrammarian sense, is selectively integrated into the linguistic system and passed on to successive generations of speakers through language acquisition' (315). The crux is 'selective integration', implying language-specific structure-dependence and requiring underspecification.

Mark Hale's 'Neogrammarian sound change' presents an explicit response to Kiparsky. Hale begins with a definition of sound change, 'the set of differences between the grammar generating the primary linguistic data used by an acquirer and the grammar ultimately constructed by that acquirer' (345). Hale contests Kiparsky's 'selective integration' because acquirers lack access to rules of the grammar which they have not yet fully acquired, and therefore have no structure on which to base selective integration (353). He also argues that sound change, qua diachronic event, by nature cannot be constrained by Universal Grammar, since it takes place outside of the human mind. He advocates recognizing two kinds of sound change: 'regular' and 'sporadic'.

Gregory Guy's 'Variationist approaches to phonological change' is an observant, well-written chapter which provides a solid account of the tremendous value of variation for the study of sound change. Guy continually emphasizes Labovian connections between variation and change – 'there is no change without variation ... but not all variation leads to change' (370) – advocating a 'quantified or "variable" rule' model for change (375) and a continuum approach to the boundary between phonetic and phonological change. Ultimately, Guy sees inaccuracies in Saussure's claim that 'the opposition between ... the synchronic and the diachronic is absolute and admits no compromise' (398), arguing for 'an integrated view of linguistic theory' (399) which recognizes the sometimes 'static', sometimes 'dynamic' nature of language viewed both synchronically and diachronically.

The final chapter here is Richard Janda's "Phonologization" as the start of dephoneticization – Or, on sound change and its aftermath: of extension, generalization, lexicalization, and morphologization'. The arguments are as elaborate as this title, examining the border between sound change narrowly construed and morphologization. On Old High German umlaut, Janda argues that 'phonologization must precede the loss of a former conditioning environment, and that morphosemantic, morpholexical factors are likely to play a crucial role thereby' (412). Janda's critique of Twaddell raises valuable questions, although the handling of complex Germanic data should raise warning flags for specialists (see Iverson & Salmons 2004). In defence of the same point he also briefly discusses Slavic palatalization. Janda concludes with J&J's 'Big Bang' theory of sound change in which 'purely phonetic conditions govern an innovation at its necessarily brief point of origin, … but they are rapidly supplanted by speakers' imposition of phonological and sociolinguistic conditions' (420).

4. MORPHOLOGICAL AND LEXICAL CHANGE commences with two perspectives on analogy. Raimo Anttila's 'Analogy: the warp and woof of cognition' focuses on analogy's cognitive naturalness. Anttila argues that 'traditional analogy, as manifested and known in historical linguistics, was and is right' (433) and ultimately concludes that 'analogy is the cognitive glory of humans... [It] must be used in explanation and understanding,

problem-solving, decision-making, persuasion, communications, that is, in all kinds of learning or human activity'. Finally, he claims that 'language structure and language use are also predominantly analogical, and this is why analogy is the backbone of universal grammar' (438).

Hans Henrich Hock's 'Analogical change' seeks 'to reconcile some of the contradictions in ... perspectives by way of a hypothesis which views sound change and analogical (and semantic) change as points on a continuum of changes that may be considered analogical in the larger sense' (441). He proposes that the degree of regularity of a particular change is a direct result of the kinds of factors conditioning that change. Changes conditioned purely by phonetic/phonological factors (so-called 'Neogrammarian' sound changes) therefore tend to be more regular than changes which 'minimally involve non-phonetic/non-phonological information' (Hock gives the examples of 'Brit. Engl. *r*-insertion' and 'German "reordering" of final devoicing', page 455), which in turn are more regular than strictly 'analogical' changes (such as 'blending and contamination', page 456). The chapter also includes interesting discussions of 'Sturtevant's Paradox' (450) and 'the notion that leveling serves to establish the principle of "one meaning, one form"' (445).

Wolfgang Dressler's 'Naturalness and morphological change' synthesizes previous research on naturalness. He outlines the framework and history of Natural Morphology before moving on to an overview of the various subtheories, including 'type-adequacy' and 'system-dependent naturalness', ending with a short summary of the advantages of Natural Morphology.

The final chapter, Brian Joseph's engaging, insightful 'Morphologization from syntax', begins by convincingly justifying a distinction between grammaticalization and morphologization, and explaining 'how to tell' whether 'some phenomenon is "in the morphology" or ... "in the syntax"' (478). Joseph presents a detailed illustration of Greek future verbs, taking a stance against the 'claim of unidirectional movement along the cline of grammaticalization' (484), citing examples (J&J 1988) of 'demorphologization' and '(re)syntacticization' (485), and discussing the possibility of the morphologization of 'higher levels' (e.g. pragmatics, page 485). Joseph briefly discusses implications of these points for reconstruction, summing up the ways in which 'recognizing grammaticalization' can help reconstruction, while urging caution in light of the lack of unidirectionality.

5. SYNTACTIC CHANGE begins with David Lightfoot's brief 'Grammatical approaches to syntactic change' (revised in 1998), summarizing his familiar views on parameter setting in acquisition, and denying any need for distinct theories of change. Certain small differences in primary linguistic data trigger cascading, catastrophic changes over long periods of time.

Susan Pintzuk lucidly explores similar theoretical avenues in 'Variationist approaches to syntactic change', with a focus on quantitative, corpus-based

methodology. Drawing particularly on Old English (and Germanic) word order, she stresses the notion of grammatical competition 'between two distinct grammatical options in areas of grammar that do not ordinarily permit optionality' (516). Like many of the best *HHL* contributions, Pintzuk uses her chosen tool deftly while acknowledging that understanding language change requires a complete toolbox – sociolinguistics, psycholinguistics, etc.

Alice Harris reviews typological diachronic syntax in 'Cross-linguistic perspectives on syntactic change', giving a concise overview of the approach to syntactic change put forward in Harris & Campbell (1995).

Marianne Mithun's 'Functional perspectives on syntactic change' offers a kind of nonformal counterpart to Pintzuk's chapter – a concise functionalist overview of syntactic change, with a detailed case study. She brings new analyses of Yup'ik and comparative Eskimo, such as extension of derivational verbal suffixes into inflectional markers. Mithun is informationally maximalist, even holistic, insisting that analysis of any structure requires considering its fullest discourse and grammatical contexts.

6. PRAGMATICO-SEMANTIC CHANGE focuses on grammaticalization, first with Bernd Heine's essay by that title. (Andersen (forthcoming) offers extensive, insightful discussion of how this topic is treated throughout *HHL*.) Heine reviews familiar territory, but adds a measured response to grammaticalization critics, illustrated with Greek future *ta*- (cf. Joseph, above). This provides welcome sharper focus on numerous points, and tempers more radical views of grammaticalization, though it probably will not convince skeptics. Heine concludes with some 'weak predictions' about patterns of cross-linguistic change, for instance that new temporal markers tend to evolve from locative markers (598).

Joan Bybee's 'Mechanisms of change in grammaticalization: the role of frequency' reflects her important prior research, arguing that frequency is 'a primary contributor' to (602) and 'universal' in (622) grammaticalization. She builds a fine-grained story of English modal *can* (<*cunnan*), arguing that repetition paradoxically simultaneously promotes reductive change in semantics and phonology while ensuring morphosyntactic stability.

Elizabeth Closs Traugott's 'Constructions in grammaticalization' applies Construction Grammar to grammaticalization, drawing on her earlier work. She redefines grammaticalization as: 'the process whereby lexical material in highly constrained pragmatic and morphosyntactic contexts is assigned grammatical function, and once grammatical, is assigned increasingly grammatical, operator-like function' (645).

A refreshing contribution is Benjamin Fortson's 'An approach to semantic change'. Fortson discards taxonomies of meaning change – as wrong-headedly result-oriented, assuming literally no constraints on

possible relationships between referents – for a focus on semantic reanalysis, especially during acquisition, and thus on discontinuity: any 'connection between old and new meanings is illusory' (652). Distinguishing reanalysis from social transmission, he situates reanalysis in the ongoing context of lexicon creation. The rest of the chapter treats the semantics of grammaticalization, finding little special about grammaticalization. Thus in his view, the development of English modals from full verbs was purely lexical, not syntactic. More important, semantic bleaching is treated as an overvalued tendency and epiphenomenal, though 'basic metaphorical extensions' are found repeatedly across languages (658). Fortson's views, of a sort familiar in syntactic or phonological change, feel more novel in the realm of semantic change, and suggest fruitful approaches to this often-neglected subject.

7. EXPLAINING LINGUISTIC CHANGE leads with John Ohala's 'Phonetics and historical phonology', pursuing his familiar, certainly correct view that comparative linguistics can benefit from scientific phonetics. His overview of 'the phonetic basis of sound change' (671) includes accounts of variation in both speech production and perception, discussion of whether variation equals change, and an outline of how phonetics informs our understanding of various kinds of sound changes, for instance dissimilation as 'perceptual hypercorrection' (678–680). Ohala concludes that 'sound change, at least at its very initiation, is not teleological' and that 'the "change" aspect of sound change is not mentalistic and thus is not part of either the speaker's or the listener's grammar' (683).

Sarah Thomason's 'Contact as a source of language change' presents a sweeping survey of language contact in its broadest sense, providing some revisions to Thomason & Kaufman's (1988) model. In contact, as Thomason has long argued, à la Paul Feyerabend, 'anything goes'. Her notion of change 'by deliberate decision' (703f.) reflects a certain casualness: even without clearly attested examples of conscious change, she draws big lessons about what can(not) happen in language change.

Walt Wolfram & Natalie Shilling-Estes, in 'Dialectology and linguistic diffusion', provide more discussion of variation and give welcome attention to diffusion, with well-developed and sometimes less familiar illustrations, especially from Oklahoma English. The 'gravity model', anchored in social valuation of speech, finds a place alongside 'wave' and 'tree' models. Again, the authors value informational maximalism: understanding dialect diffusion 'obviously calls for a multidimensional approach that considers an array of geographical, social, and linguistic factors which may interact in different ways' (733).

In the brief 'Psycholinguistic perspectives on language change', Jean Aitchison sketches two cognitive topics often thought to cause change. On the first topic, child language, she asks 'But why have so many intelligent linguists been prepared to adopt the "babies rule" viewpoint?', answering her own

question with 'false models ... instilled into generations of linguists' (739). This derisive tone of certainty is out of step with the volume's more nuanced treatments of this problem. On the second topic, language processing, Aitchison gives positive nods to typological work (especially by John Hawkins) and connectionist/Optimality Theoretic approaches, acknowledging, though, that to date the diachronic import of neither has been pursued in detail.

Summing up, *HHL* proves an atypical handbook in several positive senses, beginning with the introduction's bold tackling of foundational issues. While many chapters offer the expected compact overviews of familiar topics, others are, we hope, destined to become influential as needed lucid statements on particular issues (Ringe, Nichols, Guy, Joseph, Pintzuk, Mithun) and thought-provoking, original contributions (J&J's introduction, Hale, Fortson). Equally noteworthy is the extensive cross-chapter interplay, especially between the almost Hegelian 'point-counterpoint' chapters, but also in the alternating concentration on theory versus practice. Equally valuable are the threads on particular topics that surface repeatedly throughout, such as informational maximalism, language variation, and what actually constitutes 'change'. Language acquisition plays a quirkier, more sporadic role than one might expect, though, and grammaticalization may get more space than it warrants.

There are naturally gaps, doubtless driven by space considerations (just as for this review). As phonologists, we are disappointed by the decision to sidestep prosody's profound role in language change (117). The importance of prosody is made abundantly clear by Lahiri, Riad & Jacobs (1999) and others. While we see no need for detailed treatment of traditional lexicostatistics, much exciting work is being published in cladistics and quantitative approaches to change.

Remarkably, we find virtually no typographical errors. Minor issues of interpretation or fact do appear. For example, returning to Old High German umlaut, the claim (18f.) that Alemannic manuscript spellings prevent an 'otherwise certain' misdating is incorrect; Gütter (2003) and others actually give philological evidence for a somewhat earlier chronology.

The value of *HHL* is multifaceted; its influence will be far-reaching and long-lasting.

REFERENCES

- Goldsmith, J. A. (ed.) (1995). Handbook of phonological theory. Oxford: Blackwell.
- Gütter, A. (2003). Zur Chronologie des Primärumlauts von /a/ im Altoberdeutschen, vor allem im Altbairischen. *Beiträge zur Geschichte der deutschen Sprache und Literatur* 125. I–23.

Harris, A. & Campbell, L. (1995). *Historical linguistics in cross-linguistic perspective*. Cambridge: Cambridge University Press.

Andersen, H. (forthcoming). Review article on the *Handbook of historical linguistics*. *Diachronica* **21**.

- Iverson, G. & Salmons, J. (2004). The conundrum of Old Norse umlaut: regular sound change versus crisis analogy. *Journal of Germanic Linguistics* 16. 77–110.
- Joseph, B. & Janda, R. (1988). The how and why of diachronic morphologization and demorphologization. In Hammond, M. & Noonan, M. (eds.), *Theoretical morphology*. San Diego, CA: Academic Press. 193–213.
- Lahiri, A., Riad, T. & Jacobs, H. (1999). Diachronic prosody. In van der Hulst, H. (ed.), *Word prosodic systems in the languages of Europe*. Berlin: Mouton de Gruyter. 335–422.
- Thomason, S. & Kaufman, T. (1988). Language contact, creolization, and genetic linguistics. Berkeley, CA: University of California Press.

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Simin Karimi (ed.), *Word order and scrambling*. Malden, MA & Oxford: Blackwell, 2003. Pp. xx + 385.

Reviewed by MOHAMMAD RASEKH MAHAND, Bu Ali Sina University

Scrambling, or free word order, is a feature of some but not all languages. It was first believed to be a stylistic rule, and there are two approaches to studying scrambling: base-generated positioning or syntactic movement. Different studies have indicated that the various sorts of scrambling are instances of A-movement or A'-movement. The optionality of scrambling has become a challenge for the Minimalist approach (Chomsky 1995), a theory that allows syntactic movement only if it is triggered by morphological factors.

The book under review is the result of the International Conference on Word Order and Scrambling, held on April 7–9, 2000, in Tucson, Arizona. Some new solutions are proposed here to the optionality problem. In recent years, the main trends of research in this area have included the discourse effects of scrambling and its relation to Topic/Focus, the semantic effects of scrambling, its acquisition and the interaction between scrambling and prosody. Simin Karimi, in her introduction to the volume, briefly reviews the literature on scrambling and the current status of studies on scrambling.

The first chapter, by Kenneth Hale, Eloise Jelinek & MaryAnn Willie, is entitled 'Topic and focus positions in Navajo', and addresses some problems in Navajo sentence structure, arguing that this language belongs to a parametric class of languages which exhibit two particular features at spell-out. Firstly, nominals and quantifiers are in operator scope positions at spell-out, so it is a Discourse Configurational language; and secondly, it is a Pronominal Argument language, in which these operators c-command and bind overt pronominal variables in argument positions at spell-out. The authors indicate that the order of the nominal operators reflects Topic/Focus structure, while the pronouns are ordered according to their grammatical relations. It is also argued that an NP in a left-peripheral position may be in the Contrast operator position.

The second chapter, 'Argument scrambling, operator movement, and topic movement in Hungarian', by Katalin É. Kiss, demonstrates the different nature of free word order in three fields of the Hungarian sentence. It is shown that the word order of Hungarian in post-verbal position is affected by a specificity feature of arguments. The middle field of the sentence consists of a strict hierarchy of an aspectual operator, a focus, and distributive quantifiers. The topic field of the Hungarian sentence hosts constructions which are not operators but externalized arguments, functioning as the subjects of predication.

The third chapter is 'Grammatical relations in Tohono O'odham: an instrumental perspective', by Mizuki Miyashita, Richard Demers & Delbert Ortiz. Tohono O'odham is a pronominal argument language in which pronominals are discourse variables and their position in a sentence is not the result of movement in the traditional sense. The primary mechanism for interpreting ambiguous sentences in this language involves features of discourse.

The first three chapters are mainly concerned with the interaction of scrambling and discourse features. Although they cover some of the major points in each of the three languages discussed, they fail to give a general account of the facts observed. In other words, their descriptions are acceptable for each language, but they do not address the universal discourse features of this movement.

The fourth chapter is 'Bare nominals, non-specific and contrastive readings under scrambling', by Veneeta Dayal. It explores the empirical validity of the generalization that scrambling of indefinites correlates with the loss of non-specific readings. It is argued that if contrastive readings are non-specific, the generalization has to be restated to prohibit non-specific indefinites from scrambling without the additional support of contrast. It is also suggested that leftward scrambling forms a Ground: Link structure.

The fifth chapter, 'On object positions, specificity and scrambling in Persian', by Simin Karimi, examines the syntactic, semantic and morphological asymmetries between specific and non-specific direct objects in Persian. Karimi proposes a two-object position hypothesis for specific and nonspecific objects in this language and explains why scrambling applies freely to specific objects but is restricted in the case of non-specific ones. A third object position, created by scrambling, is also proposed, and it is argued that scrambling is triggered by discourse features such as topic and contrastive focus. This chapter introduces a new account of short scrambling in Persian, particularly the scrambling of specific objects, but it does not discuss some other prevalent forms of scrambling in Persian, such as scrambling to the end

of the sentence, or the scrambling of non-specific objects, which goes along with a change in the sentence stress pattern in this language.

'Scrambling, subscrambling and case in Turkish' is chapter 6, by Jaklin Kornfilt. The chapter looks at some new facts about scrambling out of larger DPs, or subscrambling, and uses the facts of Turkish to show that there is no specificity effect per se, as an independent principle of grammar. The author proposes that incorporation can have different dimensions in different languages, but is also constrained. Certain properties of incorporation are observed in Turkish, but other properties are not, such as changes in the thematic structure of the verb due to incorporation, and complete morphological merge of the incorporated element into its host.

Chapters 4–6 are mainly concerned with the relation between scrambling and specificity. They make the point that scrambling moves specific nouns more easily than non-specific ones. However, these chapters lack any discussion of the exact relation between prosody, contrast and the scrambling of non-specific nouns in the languages under discussion.

Chapter 7, entitled 'Does Russian scrambling exist?', is by John Frederick Bailyn. This chapter argues against the necessity of positing scrambling to account for Russian free word order. Instead, the author suggests that a subset of the relevant phenomena are related to a purely syntactic process of inversion, a kind of raising to subject, and the rest are related to focus, which is represented in a unique sub-component of the interpretive interface. He concludes that A-scrambling is in fact generalized inversion, and A'-scrambling is dislocation, a prosodic movement related to information structure. Bailyn's view as introduced in this chapter is that what we know as scrambling is not scrambling at all, but a form or forms of other movements, such as inversion and focus movement. Although his ideas are supported here by evidence from Russian, it seems that focus is at work in scrambling in other languages too.

'A-scrambling and options without optionality' is chapter 8, by Shigeru Miyagawa. The author argues that A-scrambling of the object is driven by the Extended Projection Principle (EPP), and is not an optional movement. He argues that what appears to be an optional rule is simply a situation whereby a language has an independent property or properties which allow more than one option as a way to meet an obligatory requirement. The independent properties essential for EPP-scrambling are verb raising and the occurrence of morphological case marking. Miyagawa attempts to show that scrambling is not optional, at least when it is A-scrambling, but the problem with his suggestions is that in a pro-drop language, where EPP is not satisfied with an overt subject, it cannot be an obligatory force for scrambling.

Helen de Hoop's 'Scrambling in Dutch: optionality and optimality' is chapter 9. The author proposes an optimality theory (OT) analysis for truly optional scrambling of definite objects in Dutch. She introduces two constraints: (I) STAY: no scrambling, and (2) SURFACE CORRESPONDENCE I (SCI): definite NPs scramble. The data show that anaphoric definites scramble in two-thirds of all cases, but do not scramble in one-third. Also, non-anaphoric definites scramble in 50 per cent of all cases. The analysis captures the general tendency of anaphoric definites to scramble. It seems that looking at scrambling from an OT viewpoint can solve some of the recalcitrant problems in the field.

Chapter IO is 'Word order and (remnant) VP movement', by Anoop Mahajan. He uses the antisymmetry approach to word order variation suggested by Kayne, and proposes a different way of implementing the SOV versus SVO difference. He suggests that V-to-I movement should be eliminated from the syntactic component. He argues that the OV versus VO distinction may be triggered by the presence of a Determiner feature (for objects) which forces the formation of a VP remnant in OV languages, leading to stranding of the object prior to VP-movement to [Spec,IP].

Vaijayanthi Sarma is the author of chapter II, 'Non-canonical word order: topic and focus in adult and child Tamil'. Tamil is also a scrambling language: this chapter identifies two extraction procedures, leftward and rightward, which have the properties of movements to non-argument or nonlexical positions. It is argued that scrambling in Tamil mimics topicalization or clefting, and it is additionally shown that focusing strategies are independent of topicalization strategies. Children are aware of the case restrictions on scrambling and use order shifts to signal interpretive changes like adults.

Chapter 12 is 'L2 acquisition of Japanese: knowledge and use of case particles in SOV and OSV sentences', by Noriko Iwasaki. It is observed here that even when L2 learners had knowledge of scrambling, they did not always accurately produce scrambled sentences. The gap between an L2 learner's knowledge and performance was not random performance failure, but instead revealed that L2 Japanese speakers use a canonical sentence template as a processing strategy. Chapters 11 and 12 are mainly concerned with the acquisition of scrambling. This aspect of scrambling has only recently been investigated, and the findings will help to uncover the complexities of this phenomenon.

'Scrambling and processing: dependencies, complexity and constraints' is chapter 13, by Irina Sekerina. It is a study of how scrambled sentences are processed. The chapter compares sentence processing experiments conducted on German, Japanese, Finnish, Serbo-Croatian and Russian, and discusses the implications for linguistic and psycholinguistic theories of scrambling.

The last chapter in this volume, chapter 14, is '*Wh*-movement versus scrambling: the brain makes a difference', by Angela D. Friederici, Matthias Schlesewsky & Christian J. Fiebach. It compares two constructions in German, *wh*-movement and scrambling. The authors present a number of

studies using event-related brain potentials which show that *wh*-movement and scrambling elicit different brain responses. It is concluded that scrambling in German induces a local syntactic violation while *wh*-movement does not. Both of the two final chapters investigate scrambling from a new standpoint, which is helpful in shedding light on its lesser-known aspects.

Overall, this collection provides thought-provoking material which will stimulate much future research. Perhaps the most fundamental question, addressed in the first six chapters, is the nature of the relation between scrambling and pragmatic features. The optionality of scrambling is discussed in the next three chapters. The final chapters are mainly concerned with the acquisition of scrambling and the processing of scrambled sentences. The issues raised in this book are important for any theory of syntax, language acquisition and/or the syntax-pragmatics interface.

REFERENCE

Chomsky, N. (1995). The Minimalist program. Cambridge, MA: MIT Press. Author's address: Linguistics Department, Faculty of Literature and Humanities, Bu Ali Sina University, Hamedan, Iran. E-mail: rasekh@basu.ac.ir (Received 9 February 2004)

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E. F. K. Koerner, *Towards a history of American linguistics* (Routledge Studies in the History of Linguistics 5). London & New York: Routledge Taylor & Francis Group, 2002. Pp. x + 316.

Reviewed by GIULIO LEPSCHY, University of Reading & University College London

When I was asked by the *Journal of Linguistics* to review this book, which I had not yet seen, I responded with pleasure, partly because the questions discussed in it fall within one of my longstanding areas of interest, partly because I had reviewed, long ago, three volumes devoted by Konrad Koerner in the early 1970s to Ferdinand de Saussure, and I had kept up with his successive work of the following decades. Koerner, who taught for many years at the University of Ottawa before returning recently to Germany, is a prodigiously energetic and productive scholar, particularly well known for his activity in the field of the history of linguistics – as a researcher, editor of more than 350 volumes (published since 1973 under the imprint of John Benjamins, in several series of 'Amsterdam Studies in the Theory and History of Linguistic Science'), founding editor of the important periodical *Historiographia Linguistica* as well as of *Diachronica*, and

organizer of the triennial International Conferences on the History of the Language Sciences, first held in 1978.

Keeping in mind the vastness of the works mentioned above, I wondered whether my unexpected sense of disappointment with the present volume came from a feeling of anticlimax: *parturiunt montes*. But I do not think so, and in the following pages I shall try to explain how my reaction was caused not by excessively high expectations but by some intrinsic limitations of this collection.

The book consists of ten essays, followed by a conclusion coyly titled 'In lieu of a conclusion'. Some of the essays are published here for the first time: the first, 'The historiography of American linguistics', the sixth, 'On the rise and fall of generative linguistics', the ninth, 'On the origin of morphophonemics in American linguistics', and the concluding one, 'On the importance of the history of linguistics'.

The others have been previously published, and the 'references to early locations where the subjects treated in the present volume ... have been dealt with in some fashion, in all circumstances in much less developed form' (v), are listed in the acknowledgements (v–vi). The chapters, with the date of the first printed version in parentheses (in some cases there are also later editions), deal with the following topics: chapter 2, 'Towards a history of Americanist linguistics' (1988); chapter 3, 'On the sources of the Sapir-Whorf hypothesis' (1992); chapter 4, 'Leonard Bloomfield and the *Cours de linguistique générale*' (1989); chapter 5, 'American structural linguistics and the problem of meaning' (1970); chapter 7, 'Noam Chomsky's reading of Saussure after 1961' (1994); chapter 8, 'The "Chomskyan revolution" and its historiography' (1983). In a sort of *excusatio non petita*, the author states that he has

always taken the attitude that one's intellectual property cannot be copyrighted by others, unless it was written for an encyclopedia or a collective work for which one has received payment and thus traded one's rights to a publisher. Cannibalizing one's own writings ... is fair game. (v)

This statement may contribute to explaining (but does not justify) the repetitiveness of many of the comments which reappear again and again in the course of the volume. Cannibalizing one's own writings may be all right for an author, but is less appetizing for readers who find themselves partaking of the same entrées in different forms and degrees of preparation. To this, one should also add that the style is wooden and sometimes unidiomatic, and that, to judge from the number of typos, the sub-editor must have been less than careful.

There are two questions that seem to be the main preoccupations throughout this volume, to which the author keeps returning in different guises and from different perspectives. One, of a general kind, is an attempt

to characterize the nature of the history of linguistics and to define the notion of 'historiography'. The other, more specific point, concerns the notion of 'revolution' in science and, more particularly, the question of whether Chomskyan linguistics should be considered a development (however original and innovative) from structural linguistics, or a radical break (in fact a revolution) against it. To the nature of historiography the author devotes the concluding chapter of his book. For someone like myself, who was educated in Italy around the middle of the last century, the distinction between history and historiography is obvious. Our culture was based on works such as those of the great historian and philosopher Benedetto Croce, one of whose books we used to read in secondary school, entitled Teoria e storia della storiografia. The terminological distinction between history (res gestae) and historiography (historia rerum gestarum) is clear enough, and so are the theoretical implications, suggesting that if you want to understand a historical problem it is desirable – indeed unavoidable – to study the HISTORY of the question, i.e., its historiography. A principled, theoretically aware consideration of a historical issue includes its historiography. If this is natural for cultural history but presents peculiar difficulties for the history of science, linguistics (which, for some aspects, seems to belong to the sciences, for others, to the humanities) is, from the viewpoint of its history, particularly problematic. A theoretically sophisticated consideration of these questions has been current since the end of the nineteenth century. Koerner, however, writes that

since the late 1970s, the History of Linguistics has become a recognized subject of serious scholarly endeavour, notably in Europe but also elsewhere, and it appears to many in the field that discussion of the subject's *raison d'être* is no longer required. (286)

Readers might agree, were they not tempted to put the date back by about a century and replace 1980 with 1870. The effect of the comment, which the author adds in a parenthesis, is therefore rather weakened:

Perhaps given my long-standing North American exposure in matters historical, I may be permitted to differ, for my intention had never been to convince people in Germany, Italy, or Spain for instance that a historical perspective to our work in linguistics or language philosophy would be desirable. It would have meant carrying coals to Newcastle, since in these and many other countries there has been a long-standing tradition of seeing subjects in a historical mode. (286)

Well, yes, this may indeed be true. But then one wonders whether it was worth writing a book about the historiography of linguistics, concentrating on questions which ignore such perspective or treat it as marginal. Besides, Koerner states that he is dealing with a NEW perspective, but unfortunately does not explain in what way the notions he is using differ from the traditional ones, and what exactly he means by 'linguistic past' in this context:

In my view, what I prefer to call (extending the traditional meaning of the term) the Historiography of Linguistics, by which I mean a principled manner of dealing with our linguistic past, or Linguistic Historiography for short, furnishes the practising linguist with the material for acquiring a knowledge of the development of their own field. (289f.)

The second issue mentioned above concerns the relation between structural linguistics and generative grammar. The author comes back to this topic again and again, stressing that he sees it in terms of continuity rather than revolution (IIf.): 'Chomskyan "autonomous linguistics" has much more in common with Bloomfield's linguistic theory and practice than with Sapir's' (63). Koerner stresses that one of Chomsky's doctoral students, Ray C. Dougherty, who wrote about a Bloomfieldian counterrevolution, mistakenly insisted that *Syntactic structures* had 'initiated a revolution in linguistics' (108). About the 'Chomskyan Revolution' Koerner comments:

In may be a 'psychological fact' for those who want to believe that there was one, but from the point of view of philosophy of science, there is little evidence that a 'scientific revolution' occurred following the publication of *Syntactic Structures* in 1957. (113)

And again:

It has become common-place to talk about a 'Chomskyan Revolution' in the study of language, with the result that few, if any, would pause to think about what the term 'revolution' implies or is taken to imply. It is interesting to note that it is non-linguists in particular ... who referred to 'Chomsky's revolution in linguistics'. (157)

And further:

Despite many disclaimers, TGG [transformational generative grammar] is basically post-Saussurean structuralism ... However, it cannot be denied that many young men and women in linguistics during the 1960s and 1970s *believed* they were witnessing a revolution in the field, and it appears that this widespread belief (and the associated enthusiasm that young people tend to generate) has been, I submit, at the bottom of the 'Chomskyan revolution'. (163)

One could continue with more and more passages of a similar tenor:

there has been much more continuity and cumulative advance in American linguistics than we have been made to believe both by the active participants in the 'revolution', the followers, and the court historians (210);

and 'there was more evolution than revolution occurring in American linguistics during the 1940s and 1950s' (224); the 'practitioners' rhetorical claims of revolutionary turns and paradigmatic incommensurabilities' must be reconciled 'with evidence that, in hindsight, suggests more continuity and cumulative advance (or in some cases even regression)' (245).

Making the same point over and over again inevitably causes a sense of tedium. But this is not just due to the repetitiveness of the individual essays. The difficulty is more serious since it seems to me that it is pointless to discuss whether a theory represents a revolution or an evolution. The question itself is not capable of a sensible definition or a meaningful answer. The etymology and cultural history of the term 'revolution' is of course an interesting topic, and the study of various uses and implications of the term, in different areas and periods, may be instructive and rewarding. Designations such as 'French revolution', 'October revolution', 'Industrial revolution', 'Copernican revolution', etc. are well established and their use is fairly standardized (although initials may be lower case or capitalized), and it is perfectly reasonable to try to clarify the phenomena in question, or to look at them in a new light. For instance, as I was writing this review, I went to see at the National Theatre in London David Hare's new play The permanent way. The programme notes print an interesting piece by Ian Jack in which the history of railways is traced, and it is stated that 'the Industrial Revolution, contrary to its name, arrived by increments'. This is a good point to make, in the relevant context, and it clarifies the argument. Of course it is legitimate to point to elements of 'continuity' which link the present to the past, but it would be frivolous to insist that one should therefore not talk of an industrial 'revolution'. In any case, the nearer in time a cultural change is to us, the more difficult it may be to decide whether its designation has in fact become established or whether it is a question of a controversial usage, adopted by some and rejected by others. The fascist regime in Italy, while it was in power, used to talk of the 'Fascist Revolution', but since it fell from power the designation has become obsolete. The situation is even more problematic in the case of titles such as Kuhn's 'structure of scientific revolutions'. Here too, notwithstanding the attempts to define the replacement of one paradigm by another, it seems fruitless and unrewarding to argue whether a hypothesis belongs to this or that trend, rather than discussing the relevant questions of substance. Trying to prove that a work fits into one or another paradigm (assuming that this notion makes sense), for instance, whether Saussure's Cours or Chomsky's Syntactic structures belong to structural linguistics, or different paradigms altogether, seems to me to have become a pointless exercise, particularly when one is left with the impression that an empty terminological game is being played, and few substantive questions are being clarified.

Concerning the relative positions of Saussure, of different structuralist trends, European and American, and of the various developments of Chomskyan linguistics, the situation was controversial from the start, and was clearly presented in the relevant works written in the sixties (see, for instance, Lepschy 1966: 37-39, 180-183 and the bibliography quoted there; also Lepschy 1992: 57f.), and in the best of the more modern accounts (such as Matthews 1993, 2001). My impression is that Koerner's discussions add little of substance and, if anything, leave the situation more confused than it was, distracting readers from the intellectual issues involved and diverting their attention towards topics which are alleged to be culturally, ideologically and politically important but in fact turn out to concern petty questions of personal rivalry and self-seeking careerism, attributed mainly to linguists of a generative persuasion. This kind of documentary research, masquerading as sociological history, is frequently based on gossip, mean interpretation of private correspondence, malevolent imputing of base motivations. I feel that readers may react with irritation, as I did, at the manner in which criticisms are presented or reported in these essays. As above, I think that, rather than offering a detailed analysis, the point can best be proved by offering a series of quotations which illustrate the temper of this book's attitude. For instance.

... one cannot help noticing that he [R. A. Harris] uncritically accepts at face value Chomsky's self-serving accounts of what American linguistics was like during his formative years. (113)

... the picture that [R.A.] Harris draws of his [Chomsky's] character on a variety of occasions – the manner in which he fights his adversaries, his attitude toward the 'intellectual property' of others, and his human shortcomings generally ... is anything but complimentary. (114)

Consider also the appeal to 'keen observers of Chomsky's technique of covering up his true sources of theoretical insight by referring to other, in fact quite unlikely candidates' (145, note 17).

As for Morris Halle, 'Chomsky's longtime supporter and ally' (166), he appears as the sinister organizer, administrator and academic politician behind the Chomskyan 'revolution'. A visitor at MIT in 1962, before the International Congress, watched 'Morris Halle plot as if he were Lenin in Zurich' (172). Koerner observes that

If we take the Communist overthrow of the Tsarist regime in Russia in 1917 as an example, we may detect some similarities between this social and political revolution and what happened in American linguistics during the 1960s. I am thinking in particular of the manner in which representatives of the *ancien régime* were treated (they may not have

lost their lives, but many academic careers of those who did not join the new faith were negatively affected, some were ruined) and, what is of special interest in the present context, of the manner in which history was rewritten, memory of the immediate past was obliterated and replaced by something else. (214)

The MIT Linguistics Department flourished

on the strength of the tremendous sums of money that flowed into its coffers during the 1960s and early 1970s. While it would be unfair to say that money alone has made the success story of TGG possible – to maintain such a view would mean to deny the existence of human resourcefulness and creativity (not in the Chomskyan sense, *nota bene*!) – nevertheless every researcher knows the importance of funding for any project s/he might conceive. (168f.)

The overall effect of these comments seems to me depressing, particularly when one compares their pettiness with the unmistakable sense of intellectual vigour and originality, indeed of sheer genius, which one feels when one approaches an essay written by Chomsky – irrespective of the fact that one may disagree with any individual suggestion, and indeed with many of his hypotheses concerning the history of linguistics.

In order to end on a more upbeat note, I shall observe that in chapter 2, devoted to Americanist linguistics, readers will find many useful and informative comments to which no doubt they will wish to refer in future, if they deal with this interesting and insufficiently known area. Koerner makes good use here of modern studies, and makes helpful comments on the history of so-called 'missionary linguistics', and on many figures who still deserve to be studied in greater detail such as John Pickering, Jonathan Edwards, Albert Gallatin, Pierre Étienne Du Ponceau, and many others. He concludes that

It is this long-standing tradition of work on Amerindian languages which explains that American linguists did not need to read Saussure's *Cours* in order to focus on the descriptive, 'synchronic' side of language structure. (30)

In what way exactly this can be linked to the main theme of this volume, however, is a question which would require a more complex discussion.

REFERENCES

Chomsky, N. (1957). *Syntactic structures*. The Hague: Mouton. Kuhn, T. S. (1962). *The structure of scientific revolutions*. Chicago: University of Chicago Press. Lepschy, G. C. (1966). *La linguistica strutturale*. Turin: Einaudi.

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Lepschy, G. C. (1992). La linguistica del Novecento. Bologna: il Mulino.

Matthews, P. H. (1993). *Grammatical theory in the United States from Bloomfield to Chomsky*. Cambridge: Cambridge University Press.

Matthews, P. H. (2001). A short history of structural linguistics. Cambridge: Cambridge University Press.

Saussure, F. de (1916). Cours de linguistique générale. Lausanne & Paris: Payot.

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