Joan C. Beal, *English pronunciation in the eighteenth century: Thomas Spence's* Grand repository of the English language. Oxford: Clarendon Press, 1999. Pp. xii+239.

Reviewed by MARGARET J-M SÖNMEZ, Middle East Technical University, Ankara

Beal's fine study of a largely ignored eighteenth-century pronouncing dictionary is an important contribution to the field of English historical phonology largely through the benefits of its inclusive methodology: the technique leaves no relevant evidential stone unturned and the results are consequently firmly fixed in their historical, social and linguistic framework. The approach is consciously as theory-free as possible, the materials being given priority over phonological expectations. While the pronouncing dictionary of the title provides a focus for the work, Beal's inclusion of its scholarly context in her phonetic analyses leads to mature and refined results. The outcome is a work that contains a number of new insights into sound change at the phonetic level, and into the interrelationship between phonetic details, their social conditioning and their phonological implications.

From the smaller world of Thomas Spence's life and works to the larger context of language studies then and now, this is a book that makes connections. We are shown, for instance, how the focus of Spence's dictionary and his life's interest in political and social reform are closely tied, and these are seen in their historical and local contexts. Relations between Spence's work and that of other eighteenth-century orthoepists are also described, drawing our attention to the fact that two of the best-known writers of pronunciation guides from this period (Buchanan, Sheridan) were, like Spence, native speakers of non-standard dialects.

The early part of the book reminds us on a number of occasions that studies of eighteenth-century English are rare. In her discussion of the reasons for this neglect Beal draws clear links between the types of sound change and variation that are witnessed in materials from the eighteenth century and the theoretical standpoints of modern phonological scholarship, concentrating on structuralist, generativist and dependency models. She also discusses the facts that many of these variations and changes may have seemed too recent for the earlier writers of histories of the language, and that the period presents no great systemic sound change or series of sound changes to draw attention to itself. In addition there seems to have been a generally held opinion that eighteenth-century works on pronunciation are too prescriptive to provide reliable evidence, an opinion that this book largely invalidates with its careful piecing together of evidence from many sources. It is emphasised in this work that Spence's *Grand repository* is the first truly phonetic English pronouncing dictionary (77, 80); that is, it is the first to apply consistently an alphabetically-based (rather than diacritic) one sound = one spelling system to its words. Nevertheless, the use of familiar symbols encouraged a system which 'is a phonemic rather than a phonetic one' (90).

It could be argued that the devising of an unalphabetic system forces orthoepists to describe each sound and therefore to become phonetically explicit in a way that Spence is not. Phonetic opacity notwithstanding, the readers of this book as, no doubt, of Spence's can only be gratefully aware of how much clearer his system is than that of earlier orthoepeic works. Spence's system is undoubtedly, as Beal says, 'user friendly' (83).

Whereas the use of the alphabet may have encouraged phonetic vagueness his use of a keyword approach for vowel sounds (for example 'ă as in man') confirms the system as a phonemic transcription. Investigation into the possible phonetic forms of a number of symbols is therefore required, in order to establish the pronunciations that Spence thought his readers would understand. This is duly provided, although it is not always possible to settle upon a final sound, as is the case with Spence's symbol {A} (ā as in mane'), where it is argued that a monophthong something like /e:/ is probably indicated (89). Upper case symbols for vowels in Spence's system represent the sound of the letter's name (81) and, furthermore, diphthongal sounds are usually ligatured in this system, so some sort of mid front vowel is probably indicated; but none of the capitalised vowel symbols are marked for diphthongal pronunciation, and if {I} is accepted as representing a diphthongal sound, then why not {A}? The internal

evidence is inadequate and the external evidence negative (we are told that there is no clear evidence of diphthongisation in these words until 1809).

The deficits of Spence's notation system are compensated for by the fact that it is not only clear but also consistent, and his care in avoiding duplications (two or more symbols for one sound and vice versa) is impressive enough for us to consider seriously what would otherwise seem to be an excessive use of the symbol for /1/ in unstressed syllables. Spence's transcriptions imply that reduced vowels in such syllables were almost always pronounced with /1/, and Early Modern and present day evidence is provided to show that he may have been accurately reporting a conservative, northern accent in this as in many other of his suggested pronunciations.

There are difficulties involved in trying to describe the phonology and pronunciation system of an idiolect or dialect: although some scholars attempt a synchronic description of a single system, generally it is convenient to base the description on a previously researched system (such as the ME vowel phonemes) or comparison with a present day dialect (usually some form of RP). Information from all three of these approaches is used (99), but Beal uses evidence from a wider range of periods and dialects than earlier works, freely ranging from Middle English and the Early Modern period preceding Spence's work to later pronunciations from dialects such as 'Estuary English' and present day Tyneside, and not forgetting the northern and southern dialects from Spence's own time. These are all shown to provide useful material in the quest for a better understanding of eighteenth-century pronunciation, and in this we have a clear demonstration of how liberating and informative a theoretically unconstrained methodology can be

That important sound changes were operational during the century remains in no doubt after reading this book, and we are reminded here of nine major features of the period's phonology: lengthening and rounding of ME (and later) /a/, splitting of ME /o/, shortening of ME /o:/, 'yod'-dropping (/ju/ > /u/), reduction of unstressed vowels, loss of rhoticism and related vowel adjustments, h-dropping and merger of /m/ and /w/. A careful and detailed examination of these nine pronunciation features is presented in Beal's fifth chapter. Spence's suggested pronunciations are compared with those of Walker (1791), Sheridan (1780) and Burn (1786) and, where further illumination is required, with those of Johnston (1764) and other eighteenth-century sources (98).

Several things are done at the same time here: using the Oxford Concordance Programme, Beal obtained complete lists of words involving the sound segments under discussion, and these are compared with words from the other eighteenth-century pronouncing dictionaries selected (96–98). This provides essential information concerning the lexical diffusion of the sound changes being researched and expands the evidential basis for discussion about possible phonetic conditioning of change. Sixteenth- and seventeenth-century orthoepists are regularly scrutinized for evidence of early manifestations of the sound changes, providing a time-depth crucial in showing the progress of lexical diffusion and phonetic conditioning. The prescriptive comments of Walker (1791) are shown to provide useful information about the existence and diffusion of variations in pronunciation. Evidence from twentieth-century studies of Early Modern English pronunciation is also used where appropriate. The results of all these lines of investigation are presented within a framework of sociolinguistic awareness that itself brings in mention of other studies of English pronunciation and other dialects, ranging from Northern Ireland to Philadelphia.

Beal's discussion of lexical and social diffusion and her treatment of a tricky instance of competing change in the case of later shortening of ME /o:/ (139) is exemplary, and the whole of this final section is essential reading for any student of Early and Later Modern English pronunciation. Just one case will be reviewed here as an example.

Once one has read her discussion of the lengthening of /a/ before preconsonantal and word-final /r/ one can no longer be satisfied with the usual explanation of compensatory lengthening: there is plentiful evidence of /a/ lengthening before preconsonantal /r/ in the seventeenth and even sixteenth centuries, long before any loss of the /r/ is recorded. No such early lengthening is noted for /a/ before word-final /r/, however. The quality of the consonant following a still-pronounced /r/ seems to have exerted some influence over the lengthening of the preceding /a/, with a following /l/ or voiceless consonant (apart from /t/) acting as a block to the vowel lengthening while a following /b/ /d/ /m/ /n/ /nd/ or /t/ allowed or even perhaps encouraged the lengthening. As Beal states,

what we seem to have here...is an account of a sound change subjected to very fine conditioning: not only is the vowel lengthened in the environment (/-rC) but not (/-r#), but lengthening in the former environment also seems to depend upon the nature of the consonant following /r/. (III)

Although there is some conflicting material, this remains a tantalising glimpse of what can happen when evidence relating to phonetic and lexical diffusion is combined. Further treats are in store with seventeenth- and eighteenth-century indications of a 'firm' or 'rough' /r/ word initially and a 'liquid' or 'softened' /r/ in positions which correspond to those in which /r/ was eventually lost in non-rhotic dialects.

The descriptions of a 'weak' or more vowel-like /r/ following a longer vowel, and the long-distance influence of following sonorants, are clearly amenable to interpretation in a dependency framework, but more generally and perhaps more importantly we find here a dynamism – the concurrent lengthening of one segment and weakening of a neighbouring segment – rarely described in such detail, and the theoretical implications are most interesting, although not touched upon in this book. This relatively confined example of a change which, according to the information given, seems neither 'pushed' nor 'dragged' but rather maintained by concurrent and complementary phonetic shifts, provides us with an alternative to the more conventional and causal models of compensatory or assimilatory change. Of course the idea of sound change progressing through infinitesimally small phonetic stages is unfashionable, but we should perhaps consider the possibilities of small, maybe smaller-than-feature, assimilatory or compensatory adjustments occurring in the early stages of some sound changes.

Beal's work has a far wider significance than its subtitle might suggest, and the book is an important work of scholarship in eighteenth-century English phonology and in the history of English phonology more generally.

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Joan Bybee, John Haiman & Sandra A. Thompson (eds.), Essays on language function and language type: dedicated to T. Givón. Amsterdam: John Benjamins, 1997. Pp. vi+478.

Reviewed by STEPHEN MATTHEWS, University of Hong Kong

An ideal festschrift should celebrate the style as well as the intellectual preoccupations of the dedicatee. The frontispiece of this volume, depicting Talmy Givón playing the fiddle in a T-shirt, sets a suitably informal tone which is continued in most of the twenty contributions. 'Instead of an introduction', the book opens with tributes and reminiscences from his colleagues (beginning with Bybee's recollections on Givón's style of dress and his dog) followed by a bibliography covering the period 1966–1995 (Givón's first novel appears, under 1966, but his recent novels do not). DeLancey's footnotes recall the early Givónian style ('see Lightfoot 1979 for a valiant but hopeless attempt to reconcile the history of the English modals with a

categorically constrained theory...', 67). Even the typos are entertaining: one wonders who the 'pronominal critics' are (126).

Turning to substance, the essays reflect the mature Givónian approach to typology in which functionalism is tempered with 'taking structure seriously' (Givón 1995). A surprising weakness is that the papers are organised only alphabetically: DeLancey's cries out to be grouped with Noonan's, for example, and Gildea's with Hale's, on conceptual as well as geographical grounds. Since few typologists can resist the temptation to classify, I shall, at the risk of leaving some isolates, attempt to group the contributions under topics.

- (i) Morphological typology: Joan Bybee's 'Semantic aspects of morphological typology' argues that 'languages of different types carry out grammaticalization to differing extents' (30), illustrating the point with the development of aspectual categories in isolating languages. Marianne Mithun in 'Lexical affixes and morphological typology' examines the challenge which 'lexical affixes' in languages such as Bella Coola pose to the root/affix distinction which underlies this typology. She argues that these are indeed affixes, on functional as well as formal grounds, and develop through grammaticalization of noun incorporation patterns. Frantisek Lichtenberk's 'Head-marking and objecthood' discusses the status of object-marking verbal morphology in To'aba'ita, an Austronesian language of the Solomon Islands; while some of the affixes concerned can be analysed as pronominal arguments, full NPs used with object-marking are argued to be genuine objects rather than adjuncts.
- (ii) Case marking: Bernard Comrie in 'The typology of predicative case-marking' argues that case may be assigned to predicate nominals by means of either government or agreement (the GB sense is clearly not intended, though the allusion may be). He also concludes that a partial typology appears more feasible in this domain than a holistic one.
- (iii) Word order and diachronic syntax: Spike Gildea's 'Introducing ergative word order via reanalysis' shows how the order Absolutive Verb Ergative (SV/OVA), widespread in the Carib family, derives from nominalized subordinate clauses (cf. The city's destruction by the enemy). Ken Hale's 'The Misumalpan causative construction', on the reanalysis of an obviation construction as causative, reveals two connections to the dedicatee: Misumalpan is among the many language groups on which Givón has published, while towards the end Hale surprises the reader by invoking Givónian iconicity as a factor in the restructuring process.
- (iv) Grammatical relations and diathesis: Matthew Dryer answers his question 'Are grammatical relations universal?' by arguing that notions such as subject and object are well-defined only at the language-specific level. Tom Payne & Thomas Laskowske in 'Voice in Seko Padang' apply the approach developed in Givón (1994) to a language of Sulawesi in which the 'passive' voice serves both passive and inverse functions. A different approach to diathesis is represented by R. M. W. Dixon & Alexandra Aikhenvald's 'A typology of argument-determined constructions' which distinguishes four construction types in terms of the role of arguments: passive, applicative and causative constructions, for example, are categorised as argument-transferring, while focus alternations of the Philippine type are argument-focusing. Ronald Langacker in 'A dynamic account of grammatical function' defends the potential of Cognitive Grammar to deal with dynamic aspects of anaphora and other problems, developing the CG notion of reference-point.
- (v) Grammaticalization: Scott DeLancey's 'Grammaticalization and the gradience of categories: relator nouns in Tibetan and Burmese' discusses a class of words which are stubbornly intermediate between nominal and prepositional status. In the same geographical and conceptual domain, Noonan's 'Versatile nominalizations' explores the many pathways along which a nominalization has been grammaticalized in the Bodic language, Chantyal.
- (vi) Possession: Bernd Heine & Kézié Lébikaza's 'On attributive possession in Kabiye' investigates an alienability distinction resulting from grammaticalization of the noun 'home' as a marker of alienable possession. Doris Payne's 'The Maasai external possessor construction' looks at a paradigm case of 'EP': possessors appearing as direct objects. The range of possessive relationships partaking in EP is found to vary systematically between dialects according to a hierarchy of inalienability.
- (vii) Discourse and anaphora: Paul Hopper in 'When "grammar" and discourse clash' examines the challenges that result when corpus data suggest conclusions quite different from constructed examples, intuitions and even prototype concepts. Also using English corpus data, Carol Lord & Kathleen Dahlgren in 'Participant and event anaphora in newspaper articles' develop a framework for constraints on anaphora and its resolution, incorporating factors such as

distance, topicality and short-term memory. Charles Li's 'On zero anaphora' audaciously uses classical Confucian data from Late Archaic Chinese to show that zero anaphora for pre-established referents is the norm in Chinese as a whole. Dan Slobin's 'Mind, code and text' develops some ideas of Givón and Talmy on translatability in the domain of motion events. Using a rich literary data-base, he pinpoints several properties distinguishing 'satellite-framed' from 'verb-framed' languages.

(viii) Metalinguistica: In a wide-ranging discussion recalling the style of the dedicatee, John Haiman's 'Self-abasement in language' examines various metaphorical usages of the message 'I am small'. Colette Grinevald's 'Living in three languages' offers some engaging autobiographical reflections on her own multilingualism: while one wonders how representative such an experience could be, the essay might serve as the prototype for a volume collecting accounts of life as a 'linguist' in the popular sense.

It is a fitting tribute to Givón that his work has contributed to almost all the above areas, while the range of languages featured also does him credit – this is one volume unlikely to be accused of Eurocentrism. Nor is it by any means a repository of obscure papers, though it might have been structured so as to make the most of its substance.

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Veerle van Geenhoven, Semantic incorporation and indefinite descriptions: semantic and syntactic aspects of noun incorporation in West Greenlandic. Stanford, CA: CSLI Publications, 1998. Pp. xv+247.

Reviewed by Dalina Kallulli, SAIL Labs

Few topics have been as hotly debated both in modern linguistics and in philosophy of language as the semantics of indefinite descriptions and their syntax and the issues are still as alive as ever. Therefore, the ultimate task of van Geenhoven's book, namely that of providing a semantic analysis of indefinite descriptions, is ambitious and quite relevant.

In the recent semantic literature, indefinite descriptions have been analysed as ambiguous between referential and quantificational, as variables, and as ambiguous between a variable and a quantifier. Through a thorough scrutiny of the semantic properties of West Greenlandic noun incorporating configurations, the author shows that none of the aforementioned analyses can fully account for the semantic properties and syntactic behaviour of all kinds of indefinite descriptions, to which incorporated nouns belong. She argues that, like all narrow scope indefinites, incorporated nouns and their external modifiers in West Greenlandic denote a property only. As such, incorporated nouns are not arguments but predicates. The author argues that the predicate contributed by an incorporated noun is absorbed by a verb as the restriction of this verb's internal argument, the existential interpretation of which is lexicalized as part of that verb's meaning. Van Geenhoven shows how this process, called SEMANTIC INCORPORATION, captures the inherent narrow scope of incorporated nouns as well as their lack of a specific, a partitive and a definite reading.

^[1] This lexicalized existential quantifier was originally introduced by Carlson (1977) in the context of existential bare plurals in English. It straightforwardly accounts for the narrow scope of English bare plurals in non-generic contexts.

Moreover, the author argues that the so-called definiteness restriction is a restriction brought about by the process of semantic incorporation. Specifically, she claims that the characteristic property of the existential construction is that it involves a semantically incorporating (verbal) predicate. Thus, from a cross-linguistic perspective, semantic incorporation sheds light on the notion of so-called 'weak' NPs. In particular, the author draws on properties of so-called existential bare plurals in Germanic to relate to her theory of semantic incorporation. Her arguments are clear and convincing. Incorporated nouns also have semantic counterparts in better studied languages. Germanic bare plurals in non-generic contexts represent one such counterpart.

Semantic incorporation is only intended as a sub-theory of a more general theory of indefinite descriptions. For van Geenhoven, indefinite descriptions fall into two distinct classes: predicative indefinites, to which West Greenlandic incorporated nouns and Germanic weak NPs belong, and (free) variable indefinites. Predicative indefinites contribute a restriction to an independently introduced argument variable only, but introduce no such variable themselves. Free variable indefinites on the other hand contribute a free variable as well as a restriction over this variable.

While arguing against both the lexicalist and the transformational approaches to noun incorporation configurations, the author maintains that incorporating and non-incorporating verbs also differ from each other syntactically. She argues that in addition to the strong and weak case positions, there exists a Case-less object position, adjoined to V, in which incorporated nouns are base generated.

While the West Greenlandic data legitimize the postulated Case-less object position, more discussion space should have been granted to the ramifications that such a view has for German weak NPs. In particular, the author should have considered why German weak NPs which share the semantics of incorporated nouns are NOT generated in the same Case-less object position as incorporated nouns but rather are in the weak case position. As it stands, the author's argument implicitly boils down to the morphological distinctions that exist between incorporated nouns and German weak NPs, namely the fact that while incorporated nouns give rise to some sort of morphophonological merger, German weak NPs do not do so. But this is on a par with the argument that since incorporation can be either syntactic or lexical (that is, unpredictably it can either give rise to lexical compounds or not), the syntax has to be differentiated accordingly, an argument which the author refutes.

My main criticism of the present study is that there is no account of the lack of one-to-one distributional parallels between incorporated nouns in West Greenlandic on the one hand, and existential bare plurals (and more generally weak NPs) in Germanic on the other. If West Greenlandic incorporated nouns and Germanic weak NPs share the same semantics, and if syntactic structure is pertinent to semantic interpretation, as the author argues, then one reasonably expects the clausal distribution of incorporated nouns in West Greenlandic and that of weak NPs in Germanic to be similar. But this does not seem to be the case. While subjects and datives do not incorporate, existential bare plurals may (arguably) occur both as subjects and as dative objects. Given that the author argues that weak NPs denote properties and are therefore predicates, she would have to accept that subjects are predicates. In view of the Strawsonian tradition whereby subjects are saturated structures (that is, arguments, not predicates), this is a contradiction in terms.²

A minor point concerns so-called 'weak' definite expressions. These are definite expressions which may be interpreted predicatively, as in: take the bus/the train/the plane, go to the shore/the airport, etc. It would then perhaps make sense to extend semantic incorporation to account for the predicative definites in such (productive) set expressions.

In sum, I would recommend this book as essential reading to everyone involved in research on noun phrases and, more generally, to people with an interest in semantics and in the syntax-semantics interface.

^[2] If I understand van Geenhoven correctly, she does not assume a framework (e.g. Chierchia 1985) which allows for properties to be predicated of properties. More to the point: even if she were to adopt such a framework, it would remain to be explained why noun phrases that function as subjects do not incorporate while their semantic counterparts in Germanic seem to be able to do so.

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John Hajek, *Universals of sound change in nasalization* (Publications of the Philological Society, 31). Oxford & Boston, MA: Blackwell, 1997. Pp. xvi+254.

Reviewed by RODNEY SAMPSON, University of Bristol

Universals, synchronic and diachronic, of vowel nasalization first excited widespread attention in the 1970s, and after a slight lull the past decade has seen a resurgence of interest. Prominent among recent contributions is the present work, a slightly revised version of the author's outstanding 1992 doctoral thesis. Its novelty is twofold. On the one hand, the analysis systematically draws on experimental phonetic evidence to establish a solid foundation for the proposals made, which relate not just to the process of vowel nasalization but to general phonological theory as well. On the other hand, instead of using as a database possibly uneven reports of a range of disparate languages, attention is focused on just nine geographically compact Romance dialects, five being located specifically in the Emilia-Romagna region of Northern Italy alone and all showing clear evidence of having undergone significant vowel nasalization but with differing results. The choice of database is thus doubly well-founded since not only do these dialects have a richly attested parent language, Latin, enabling safe diachronic statements to be made but the author also has first-hand experience of the present-day structure of the dialects through his own fieldwork. Detailed examination of the observed vowel nasalization phenomena yields various insights into the general process of vowel nasalization, but the main original contribution of the work is arguably the postulation of a number of parameters of vowel nasalization which may either have universal applicability or just represent strong cross-linguistic tendencies.

After two preliminary chapters considering general theoretical issues and methodological questions, Hajek addresses various aspects of vowel nasalization as it operates in VN sequences (where 'V' = any vowel and 'N' = any nasal consonant), other types of vowel nasalization, progressive and spontaneous, not being explored in this work. First, the general nature of vowel nasalization is considered and it is demonstrated that any diachronic model containing the simple, if not simplistic, phonological rule $VN > \tilde{V}$ is untenable. An intervening stage $\tilde{V}N$ has to be recognized, leading to the universal empirical claim that contrastive vowel nasalization always represents the result of a three-stage process enshrined in the 'new V-NAS model': VN $> \tilde{V}N > \tilde{V}$, whereby (universal) phonetic nasalization gives phonologized (conditioned) nasality before a separate and distinct process of nasal consonant deletion may take place. Such a claim, which of course accords precisely with the known facts in the 'classic' case of French, is perhaps uncontroversial for most historical linguists. However, the associated contention that nasal consonant deletion 'will not normally be expected to occur unless contextual vowel nasalization has already preceded it' (69) is more contentious. For example, it forces the assumption that Catalan forms like bo 'good (m.sg.)' < BONUM must have evolved via stages with phonologized vowel nasalization, then contrastive nasality and finally denasalization, a highly plausible view though not one shared by all Catalanists.

The bulk of the rest of the work addresses the individual factors determining vowel nasalization and from the data observed a variety of parameters are postulated. It is perhaps in the treatment of prosodic factors that Hajek most strikingly breaks new ground, notably in exploring the significance of the presence of vowel length in promoting nasalization. Three parameters are identified, all ultimately founded on vowel length and all presented as apparently

having universal applicability. In the Vowel Length Parameter, nasalization preferentially affects phonologically long (stressed) vowels before short ones (88). Indeed, it is observed that in the North Italian dialects studied, and in other languages, short vowels are always lengthened prior to being nasalized, $VN>V\!:\!N>\tilde{V}\!:\!N~(>\tilde{V}^{'})$. Such a scenario, for which strongly supportive experimental perceptual evidence is marshalled, runs directly counter to the concept of compensatory lengthening whose inadequacies are forcefully demonstrated (84–85, 184–186). Vowel length/duration considerations also underlie the Extended Stress Parameter, according to which nasalization operates most preferentially with stressed vowels, then pretonic and lastly post-tonic vowels (97). They are also fundamental to the Foot Parameter (109), which claims that nasalization occurs most readily with the stressed vowel in oxytones, then paroxytones and finally proparoxytones. For both these parameters, strong independent experimental phonetic evidence is again presented to confirm the existence of the 'predictable differences of phonetic vowel length' (110) explaining observed patterns of vowel nasalization.

The situation is rather less clear with possible non-prosodic parameters relating to vowel height, vowel quality (i.e. the front-back axis), contextual position (e.g. with tautosyllabic vs. heterosyllabic N) and N-quality. For the first two, previous proposals are carefully evaluated and consistently found to be invalid or unsubstantiated, the negative assessment of the influence of vowel height on the pattern of nasalization being of special interest to French specialists. The final two conditioning factors likewise yield no universal parameters, but they do allow the identification of patterns locally valid for North Italian and certain other language areas, and yet again experimental evidence is presented to show that differences in phonetic duration are of crucial relevance.

A concluding chapter considers N-deletion, the final stage of phonemic vowel nasalization, where a number of substantive and theoretical issues are taken up. Amongst the former is the rebuttal of a common assumption amongst 1970s universalists that N weakens to become velar [n] before disappearing. For North Italian (193–94), it is shown that [n] widely found in items like pan 'bread' represents a restoration through hardening of the second mora of the nasal nucleus, not the last trace of the vanishing original N. More problematic however is the author's assumption of 'the apparent independence of vowel nasalization and attrition or reduction of N' (181), especially as it is earlier claimed that N-deletion presupposes V-nasalization (69), indicating some degree of interdependence. Also, the assumed independence sits uneasily with the interdependence acknowledged for the converse process, N-fortition, which serves to inhibit vowel nasalization (169). The question here therefore remains an open one. Theoretical concerns relate to the formal handling of N-deletion in North Italian. Hajek finds feature geometry unsatisfactory and proposes a syllabic template model effectively stating that coda nasals are deleted from the rhyme, the preferential locus for deletion. While unexceptionable for dialects of North Italy, it leads to difficulties when accounting for the loss of intervocalic nasals with associated vowel nasalization in Sardinian and Corsican dialects. To save the situation, the ambisyllabicity of the nasal is postulated so as to bring it into coda position (199-201), even though the syllabic structure of the dialects concerned is scarcely supportive for any such claim. Indeed, the evidently recent chronology and phonologically special character of Sardinian and Corsican vowel nasalization would appear to suggest that it is likely to have been promoted by factors rather different from those operative in North Italy (cf. Sampson 1999).

Occasional caveats notwithstanding, the present impeccably presented work is to be warmly welcomed as an important contribution to the field. It may be hoped that it will serve as a catalyst for further investigation both in and outside Romance.

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Robert Hetzron (ed.), *The Semitic languages.* London: Routledge, 1997. Pp. xx + 572.

Reviewed by Janet C. E. Watson, University of Durham

This survey of the Semitic languages is the fourth volume in the Routledge Language Family Descriptions series. Other publications in the series deal with Romance, Celtic, Slavonic and Germanic languages, and Indo-European, Uralic, Dravidian and Turkic languages. The work under review constitutes the first general survey of all the languages of the Semitic language family and, as such, will be of lasting value to researchers and students of individual Semitic languages or of comparative Semitic.

The book comprises a preface by the editor, and twenty-three chapters by well-known scholars in the field. The book is divided into three parts: part I deals with generalities (four chapters); part II with Old Semitic (nine chapters); and part III with Modern Semitic (ten chapters).

Part I begins, most appropriately, with a chapter by Alice Faber on 'Genetic subgrouping of the Semitic languages'. The other chapters within this part deal with scripts of the Semitic languages, the Arabic grammatical tradition and the Hebrew grammatical tradition. Part II has chapters on Akkadian, Amorite and Eblaite, Aramaic, Ugaritic, Ancient Hebrew, Phoenician and Eastern Canaanite, Classical Arabic, Sayhadic and Ge'ez. Part III looks at Arabic dialects and Maltese, Modern Hebrew, the Neo-Aramaic languages, the Modern South Arabian languages, and the Ethiopic-Semitic languages of Tigrinya, Tigré, Amharic and Argobba, Harari, the Silte group (E. Gurage), and Outer South Ethiopic. Although every known Semitic language is covered in parts I and II of the book, not every language is represented by a single chapter. The chapters on Phoenician and Eastern Canaanite, Amorite and Eblaite, Sayhadic, Arabic dialects and Maltese, Neo-Aramaic, Modern South Arabian, the Silte group and Amharic and Argobba all contain comparative material on closely related linguistic entities. The short final chapter on Outer South Ethiopic, by the editor, provides descriptive samples of a more diverse group. The book concludes with an index which lists personal names, names of languages and dialects and grammatical terms.

In general I found the book very readable, although the length and scholarly standard of the chapters varies greatly. I would have been interested in a chapter within part I on Common Semitic, perhaps based around Hetzron's entry, 'The Semitic languages', in the International encyclopedia of linguistics (1992). The first chapter by Faber provides a very clear introduction to the subject. In this, she compares the traditional grouping of Semitic languages on cultural and geographical principles (Moscati et al. 1964: 4) (incorrectly given as Moscati 1969) with a model based on shared morphological innovations, first proposed by Hetzron (1972, etc.). In the first model, the major divisions are East and West Semitic with West Semitic subdivided into Northwest Semitic and South Semitic. South Semitic is subdivided in turn into Arabic and Southeast Semitic. In Hetzron's model, the major divisions are still along the West-East axis, however West Semitic is subdivided into Central Semitic (including Arabic and Northwest Semitic) and South Semitic. South Semitic has a Southeast and a Southwest branch. The principal difference between the two models lies in the placement of Arabic. Based on five shared morphological innovations, Hetzron claims that Arabic is more closely related to Canaanite and Aramaic than to Southeast Semitic, and it is these three languages which constitute the new Central Semitic subdivision. Hetzron argues that linguistic grouping is better achieved by considering shared morphological innovations which, by virtue of their idiosyncrasy, are less likely to have recurred independently (4). One of the three features commonly cited in evidence for the earlier classification of Arabic as a sibling of Southeast Semitic is the change from *p to /f/. As Faber states, this is a natural phonological change (4) of common cross-linguistic occurrence. It is therefore insufficient evidence for linguistic grouping. The realisation of the emphatic phonemes as pharyngealised, by contrast, appears to be an innovation which affects a group of phonemes and is characteristic only of Central Semitic.

Other features common to Central Semitic include the development of a non-geminate nonpast *yaqtulu* form which contrasts with the inherited nonpast *yaqattal*, generalisation of vowels in the prefix conjugation of verbs, generalisation of -t- for first singular and second persons in the suffix conjugations, and development of a compound negative. In view of the fact that proponents of the Arabic = Southeast Semitic grouping admit Arabic shares morphological features with Northwest Semitic, including the masculine plural suffix /-i:n/, the internal passive, a definite article which developed out of a demonstrative element, and the *pu'ayl*

diminutive (cf. Versteegh 1997: 17), the Arabic = Central Semitic grouping (making Arabic a sibling of Northwest Semitic) appears to have stronger validity. Arabic features shared with Southeast Semitic (the existence of a verb stem with a long first vowel, and broken plurals) are treated in Hetzron's model as retention of Common Semitic constructions which have been replaced in Akkadian and Northwest Semitic.

The other chapters in part I are clear summaries of the subject, although I felt that the grammatical traditions of Arabic and Hebrew did not sit well with the other two, clearly introductory, chapters. Daniels' chapter on the script of Semitic languages with its correspondence tables is usefully placed in the introductory section since many of the chapters on ancient languages mention the orthography. These include Akkadian (70), Amorite (101), Eblaite (106), Aramaic (119), Ugaritic (132–133) and Ancient Hebrew (148–151).

In parts II and III, each of the chapters is structured as follows: introduction to the language and nature of the data; the phonology; the morphology; and the syntax. A list of references and further reading suggestions appears at the end of each chapter. Beyond this, however, there is little uniformity; this, together with remarkably few cross-references between chapters, makes the work very difficult to read as a book, and more questions are raised than answered.

The general comments I have about the chapters are the following: while a number of chapters have a good set of references and further reading suggestions (e.g. chapters on Classical Arabic, Neo-Aramaic, Modern Hebrew, Arabic dialects and Maltese, Modern South Arabian languages), others lack them entirely. These include Akkadian, Aramaic, Ancient Hebrew, Phoenician and the Eastern Canaanite languages, Tigrinya and Outer South Ethiopic.

The consonantal and vocalic inventories are given at the beginning of the phonology section in each chapter. These should ideally follow a single specified layout. With the exception of Arabic dialects and Maltese (268), Modern South Arabian languages (381) and Harari (487), the inventories lack labels for place and stricture. The majority of unlabelled inventories are arranged in columns and rows; columns give place of articulation with those phonemes furthest forward in the articulatory tract on the far left and those furthest back on the far right -i.e.labial, alveolar, palatal, velar, pharyngeal, laryngeal (see Jastrow, page 334); the rows generally give stricture from strongest (i.e. stop) to weakest (glide). In several cases, however, even this arrangement is not adhered to. For Tigrinya, for example, stops are listed from left to right with rows indicating voiceless, ejective, voiced and nasal with a separate table to the right of this for the continuants (424). For the related language of Tigré, the columns from left to right indicate labial, coronal, velar, postalveolar, pharyngeal and laryngeal, thereby not adhering to the front-back order. In this table, /y/ is incorrectly placed under the velar column and the glottalised sibilant among the postalveolars. The inventory for Akkadian (70) uses the left-most column for labials (including labiovelar glide), but in the listing of coronal consonants uses three separate columns for stops, liquids and sibilants. The palatal glide is incorrectly placed in the same column as the sibilants, and the postalveolar sibilant is listed separately. Finally, the inventory for Phoenician and Eastern Canaanite gives place of articulation in rows placing laryngeal at the top and bilabial at the bottom (175).

There is a similar inconsistency in the transcription systems used. This problem is mentioned by Hetzron in the preface; however, it is not pleasing to deal with macrons (e.g. Aramaic, Modern South Arabian), colons (e.g. Classical Arabic), double vowels (e.g. Arabic dialects) and vowel+glide (e.g. Arabic grammatical tradition) for the representation of vocalic length. There may be an argument for different transcription systems for separate language groups; however, there can be no such argument for lack of consistency within a single language. In the three chapters on Arabic and Arabic dialects, three different representations of length are used. An additional problem is the value of the transcription symbols used, and for this it would have been useful to have a table of transcriptions at the beginning of the book. For most of the symbols, the values are easily identifiable, and Jastrow's chapter on Neo-Aramaic provides phonetic values for phonemes (e.g. c is a dental affricate [ts]) (335); however, in other chapters, the value of symbols is not made explicit: in Berman's chapter on Modern Hebrew, for example, c is described simply as a voiceless affricate (314).

The length of chapters is far from uniform. This is to be expected insofar as there is more data available for well-documented languages than for little-known languages: thus, Phoenician and Eastern Canaanite languages are described in thirteen pages, and Ancient Hebrew in twenty-nine; however, for comparative purposes vital information is lacking from certain chapters. For example, the numerals are not given for Amorite and Eblaite, but they are for the other modern Ethiopic languages. A number of chapters fail to consider word stress. Noun phrases are

discussed for nine of the languages only. Several chapters have a discussion of syllable structure, however it is not treated for any of the Ethiopic languages: Ge'ez, the Silte group, Harari, Amharic, Argobba or Outer Ethiopic Semitic. In the case of Amharic, a consideration of syllable structure is vital in order to establish the phonemic status of labialised k^w , q^w , g^w , h^w . On page 458, Hudson says that these sounds 'could be considered sequences of the consonant and w; however, their status as phonemes is suggested by the fact that the Amharic writing system provides unique characters for these in their occurrence before vowels other than a.' An argument based on orthography is insufficient. The English phoneme $/\tilde{c}/$ is represented orthographically as two letters ch, but this does not indicate that the sound is a composite of two phonemes. The question is whether a labialised phoneme is treated syllabically as a sequence of two phonemes or as one. If the language disallows syllable-initial consonant clusters and k^w is attested in syllable-initial position, as it appears to be in Amharic, this is sufficient evidence to analyse kw as a single phoneme.

Different terminology is often used to describe similar phenomena. Ethiopic languages have the word order SOV. For Amharic, Hudson describes word order as 'the verb is final' and 'Typically, the subject is first in the sentence' (480); in describing Harari, Wagner says 'The normal order is subject-object-predicate' (502); Kogan gives the normal word order of Tigrinya as SOV (441); and Raz describes Tigré word order in terms of three main features: I. the main verb is placed at the end; 2. complements and qualifiers precede the words they qualify (therefore *object* precedes verb [my italics]); 3. the subject is usually placed at the beginning of the sentence (455).

Finally, I would have appreciated more word-for-word as well as idiomatic translations of longer data samples, particularly in the chapters on modern Ethiopic languages with an SOV word order. See, for example, Harari bari ğugal ziqo:rarxi-sa me:taqxa-dale ko'ot gidi:r ga:ra:č halu 'if you approach the wall of the gates, there are two big buildings, one on either side of you' (504).

In spite of my comments, the vast majority of the chapters are well written summaries of the language(s) in question, and stand well as descriptions in their own right. The chapter by Kaye & Rosenhouse on Arabic dialects and Maltese must have posed more difficulties in writing than those dealing with one or two closely related dialects, however, not least because so much is known and has been written about modern Arabic dialects. This is one of the longer chapters (263–311), and deals with all the major grammatical features of the majority of documented Arabic dialects. Maps are provided to show the geographical location of the main dialect groups (264) and the distribution of affricated variants of *k and *q (272). This chapter I found the most disappointing. Data from dialects with which the authors are acquainted is accurately presented and analysed – Bedouin Arabic and dialects spoken in Nigeria, Chad and Sudan. Where the authors examine dialects for which they relied on secondary data, however, they produced a large number of inaccuracies and overgeneralisations.

On page 273, the authors claim that kaskasa/kashkasha occurs 'in modern Yemenite dialects, as in CA (= Classical Arabic)'. This phenomenon is not restricted to Yemeni dialects (Holes 1991: 673; Watson 1992: 60), but it does not occur in Classical Arabic; the Arab grammarians wrote about kaskasa/kashkasha as two instances of infelicities to be avoided in speech (ibid: 63). On page 275, the Yemeni dialect of San'a is described as having 'developed' p in native words. The words cited are sappaak 'pipe fitter' and dhuppi 'fly'. In both of these cases, [p] results from the devoicing of voiced obstruents and cannot be described as a phoneme (Jastrow 1984). Furthermore, they claim that Yemeni Arabic has developed a d by way of voicing of t'. The voiced variant occurs predictably in intervocalic and word-initial position (ibid) as a result of lenition and therefore d/ cannot be described as a separate phoneme from d/. They mention that a number of dialects have lost the emphatic-non-emphatic contrast, but fail to explain that the dialects concerned are peripheral (275). There are a few internal inconsistencies: on page 295, form VII (with n- prefix) is said to not occur in Yemeni. On page 298, however, urban Hijazi and Yemeni are said to use t- and n- as the passive marker. Both of these statements are incorrect: in the Yemeni dialect of San'a, while n- is certainly not a productive passive marker, there are at least two common form VII verbs of which I am aware (Watson 1993: 440-441). At the top of page 274, jiim is said to been fronted to gy in Yemeni Arabic, but a table on the same page gives the Yemeni phoneme as /j/ (= dz). In the discussion on word order, seven examples of verb-(predicate)-subject are given (301); however, five of these do not in fact exemplify verb-(predicate)-subject word order, since two have no verb (Dam. Ar. 'əli' axxeen kbaar tneen 'I have two big brothers' and Arabian [sic] Ar. maa fiih xuðratin halheel 'there is not

much grass'), and three have no overt subject (e.g. Yem. sic. Ar. lagyuu ðaak imðiib 'they met this wolf').

When dealing with a large number of related dialects, overgeneralisations are almost inevitable in any summarial account, and there are several here. Tables 14.4 and 14.5 presenting independent and dependent pronouns in seven dialects give alternative forms for each pronoun in the Yemenite column. As laid out here, these forms appear to be in free variation; however, in each case, they belong to different dialects of Yemeni Arabic. The list of possible words for 'no' is Yemeni is equally confusing. The authors present sixteen different words for 'no', but by failing to explain that these belong to different dialects, give the impression that each and every one of them is attested in 'Yemenite Arabic' (302). On page 284, 'Yemenite dialects' are said to preserve case endings. There is a vestige of NUNATION in dialects of the Yemeni Tihama; however, the vast majority of Yemeni dialects do not exhibit any trace of case endings. In describing genitival exponents in the dialects, Sudanese is said to have the exponent huul, hiil (300). Central Sudanese, however, has hagg in addition to the imported bitaa' (Persson & Persson 1979: 99; J. Dickins, p.c.).

Finally, this chapter lacks several key references and suggestions for further reading: in discussing the passive, reference to the one monograph on the passive in Arabic would have been in order (Retsö 1983). Although Cairene Arabic is mentioned a number of times, Tomiche (1964) is listed under 'further reading' rather than Woidich, who is without doubt the leading contemporary authority on Cairene Arabic. The works of other major researchers are also omitted. These include: Heath and Caubet for Moroccan Arabic, Vanhove for Maltese and dialects of southern Yemeni Arabic, Reichmuth for Sudanese, Naïm-Sanbar and Watson for the Yemeni dialect of San'a, Grotzfeld for Syrian, Grand'henry for Algerian, and Cohen for Mauritanian. The majority of further reading suggestions and references listed in this chapter predate 1990.

The key problem in this chapter, I believe, is that for dialects they have not themselves studied, Kaye & Rosenhouse have used secondary data without quoting their sources. When they mention glottalised reflexes of emphatic t and q in the Yemeni dialect of Zabiid (277), I cried out for a reference. In the Yemeni western mountain range, glottalised allophones of plain t and k are attested in utterance-final position as a result of pausal glottalisation. As Simeone-Senelle points out in this volume, some final voiced consonants may be devoiced and realised as ejectives in the South Arabian language of Mehri (385). Is this what is happening in Zabiid, or it is really the case that this dialect has glottalised plosives phonemically? Without being able to inspect the evidence, it is impossible to say, and it makes the data unreliable at least. In the other chapters, data tends to be taken either from the writer's own field notes, or, in the case of ancient languages, from identifiable sources. On the whole, though, data sources are not mentioned. The citation of sources would enable the reader to check the material for themselves and prevent a scenario whereby incorrectly reproduced data suffers further distortion.

As a whole, this ambitious book is a welcome addition to the library of Semitic studies. It is replete with interesting material and will be of value to comparative Semiticists and theoretical linguists for many years to come. As I have pointed out, however, it could benefit from an extra chapter on Common Semitic and suffers from a lack of internal consistency. In any future edition, I would hope that some of the issues raised in this review will be addressed.

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Alan Juffs, Learnability and the lexicon: theories and Second Language Acquisition research. Amsterdam: John Benjamins, 1996. Pp. 277.

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This book is the first and so far most comprehensive study of the acquisition of argument structure in a second language within a generative framework. Since its publication in 1996, it has become a standard reference in a rapidly developing research area, and is regularly cited by researchers working on the L2 lexicon and its interface with syntax. This status is well-deserved: the book is one of the best examples of how theoretical research on second language acquisition can be both rigorous and informative for linguistic theory. It shows persuasively that the lexicon, far from being the domain of idiosyncrasy, is governed by complex regularities that cannot be acquired on the basis of exposure to positive evidence alone. In this sense, it demonstrates that for both the child and the adult language learner the knowledge of syntax-semantics correspondences eventually attained is underdetermined by the input, just like purely syntactic knowledge. This is an important discovery, which strengthens the basis for assuming the influence of UG in second language acquisition and which has been supported by other recent studies (e.g. Montrul 1997; Dekydspotter, Sprouse & Anderson 1997). In providing solid theoretical arguments and sound experimental evidence, this book represents a step forward towards a unified theory of language acquisition.

The book is divided into six chapters and an epilogue. The first chapter provides a general introduction to linguistic theory, language acquisition, and the place of the lexicon within it. The version of generative grammar assumed is Principles and Parameters which, despite the advent of minimalism, is still the most productive framework for research on the syntax-semantics interface. As Juffs himself points out in a recent study (Juffs 1996), the research and results described in this book would not be undermined by the theoretical revisions incorporated by the minimalist program: this is because lexical variation may have morphological consequences and therefore repercussions on the computational system of the syntax. Chapter 1 also introduces the learnability problems related to the subcategorization requirements of locative verbs in English, which sometimes alternate between two different argument structures (i.e. I'm stuffing the turkey with breadcrumbs; I'm stuffing breadcrumbs into the turkey) and sometimes do not (i.e. I filled the jar with cookies; *I filled cookies into the jar). How does the child figure out which alternations are possible and which are not? The problem is quite complex: alternations with non-alternating verbs simply do not occur, so in the absence of negative evidence the child will have no reliable indication that they are disallowed; furthermore, verbs do not consistently occur with all arguments, since some arguments are optional in both alternating and non-alternating verbs. Unless it is assumed that the child actually keeps track of the non-occurrence of certain alternations, one has to conclude that the child comes to the task already equipped with knowledge of the possible ways in which human languages can organize meaning in lexical categories. The same question arises for second language acquisition: can adult learners acquire properties of the L2 lexicon which are not deducible from the input and which cannot be

transferred from the L1? Precisely the same issue has been at the centre of the debate on the acquisition of L2 syntactic knowledge.

Chapter 2 is a very thorough overview of the generative approaches to the syntax-semantics correspondences in the lexicon. Juffs' key to the analysis of these proposals is the tension that underlies an explanatory theory of the syntax-semantics interface. The ideal theory, he argues, should comprise an account of conceptual structure which accurately reflects the rich knowledge that speakers have about the meaning of sentences, as well as the cross-linguistic variation in the way meanings are lexicalized; it should also provide an explanation of how conceptual structure is mapped onto syntactic relations. At the same time, however, the theory should be constrained enough to account for the rapid acquisition of argument structure, and particularly for the fact that children only make generalizations from which they are able to retreat. Juffs is certainly right in claiming that this requirement is often overlooked. He distinguishes between theories that focus on the representation of meaning and theories that are more concerned with the mapping problem (see Levin & Rappaport Hovav 1996 for a similar distinction). Theories in the first group (e.g. Pinker 1989) have semantic power but do not really provide a cognitive justification for the semantic primitives postulated, and do not constrain the operations based on them sufficiently to allow a principled distinction between well-formed and ill-formed representations. Theories in the second group (e.g. Hale & Keyser 1993), on the other hand, extend syntactic principles of X-bar theory to the analysis of lexical representations, without an independent level of argument structure. The risk of proliferation of semantic categories is therefore reduced but - as Juffs observes - at the expense of an account of cross-linguistic variation and of important generalizations on its limits. Juffs therefore argues in favour of a modified approach that incorporates the semantic power of Pinker's system and the syntactic constraints of Hale & Keyser's theory.

This modified system is explored in chapter 3, which examines the cross-linguistic variation in semantic structure and in the syntax-semantics mapping. It is this chapter that introduces the reader to the central concern of the book: the differences between English and Chinese with respect to locative verbs and causative constructions. The concept of CONFLATION refers to a situation where a set of semantic components is combined in a particular morpheme: for example, ACT, GO and STATE may be conflated into the same root morpheme in English, but not in Chinese. Juffs proposes that this is the lexical parameter that determines the syntactic behaviour of both locative and causative verbs, despite their surface differences. Conflation is instantiated in English, but not in Chinese. This parametric difference between the two languages has a number of ramifications. English allows both causative psych verbs, as in (1a), and causative change of state verbs, as in (1b), whereas Chinese does not permit these constructions, as shown in (2a) and (2b).

- (1) (a) The film disappointed Mary.
 - (b) The sun melted the ice.
- (2) (a) *Nei ben shu shiwang le Zhang San that-CL book disappoint ASP Zhang San
 - (b) ??Taiyang rong(hua) le xue sun melt ASP snow

Moreover, English allows two sub-classes of locative verbs: 'content' verbs characterized by the PATH-meaning component, which enter only the argument structure in (3a), and 'container' verbs characterized by the STATE-meaning component, which enter only the argument structure in (4a). A third group of verbs from both the content and the container classes (e.g. *spray*, *splash*) alternates between the two argument structures, as in (5a, b).

- (3) (a) John poured the water into the glass.
 - (b) *John poured the glass with water.
- (4) (a) John covered the bed with a blanket.
 - (b) *John covered a blanket onto the bed.
- (5) (a) John loaded the truck with apples.
 - (b) John loaded apples into the truck.

Chinese instantiates content verbs, which behave like their English counterparts, as shown in (6); unlike English, however, it allows alternations with a wider range of verbs, including the equivalents of English non-alternating container verbs, as in (7b).

(6) (a) Zhang San zai beizi li dao le shui Zhang San a cup in pour ASP water (b) *Zhang San yong shui dao le beizi Zhang San use water pour ASP cup Zhang San yong le chuang tanzi (7) (a) gai

bed

to

Zhang San use blanket cover ASP bed wang Zhang San chuang shang gai le tanzi Zhang San blanket

on

However, if a morpheme denoting STATE is added to a container verb to form a compound, the sentence becomes ungrammatical just like its monomorphemic English equivalent, as shown

cover ASP

gai-ZHU (8) (a) Zhang San yong tanzi le chuang Zhang San use blanket cover-STOP ASP ов*j*-bed gai-Zhu (b) *Zhang San wang chuang shang le. tanzi Zhang San to bed cover-stop ASP blanket

This confirms the reality of the abstract meaning component STATE, which has the same syntactic effects, whether it is conflated in a root verb morpheme, as in English, or incorporated in an overt morpheme, as in Chinese.

The acquisition of syntax-semantics correspondences is the concern of chapter 4. Both English and Chinese children appear to overgeneralize the conflation of ACT/CAUSE to non-causative intransitive verbs, producing forms such as 'I'm going to disappear my doll'. This type of error is unexpected in Chinese children, given that this language does not allow this pattern. English children also make errors with locative verbs which denote confusion as to whether a verb is specified for PATH/MANNER or STATE (i.e. *Ill fill the cookies into the jar). However, the possible links between the acquisition of locative and causative verbs have not been systematically investigated. Juffs demonstrates that neither 'semantic bootstrapping' nor 'syntactic bootstrapping' adequately accounts, by itself, for how children distinguish between alternating and non-alternating verbs, and for the precision with which children acquire the meaning of verbs, which could not be the result of either syntax or observation alone. Juffs' own position is that a multiplicity of factors conspire to point the child in the right direction. First, children are predisposed to notice only the linguistically relevant aspects of events; second, they may be biased to look for patterns in the input that correspond to binary choices of conflation patterns (e.g. they may expect that the ambient language may either allow or disallow the [ACT[GO[STATE]]] conflation pattern). Morphology has a key role in pointing children towards one value or another. Chinese children, for example, will hear a large number of resultative verb compounds, which may indicate the negative value for the conflation parameter and allow them to retreat from the non-target conflation of the CAUSE component. Juffs does not exclude the possibility that indirect negative evidence might play a role, although he is rather vague on this point. Finally, lexical learning does not rule out exceptions: syntax-semantic correspondences are rule-governed but also have a probabilistic nature. A great deal of learning of verbs on a one by one basis thus also takes place. This picture is probably 'realistic' given the current state of knowledge about acquisition, as the author suggests, but is a good deal less precise than one might have expected on the basis of the first part of the book.

Chapter 5 and 6 present the details and the results of an experiment which aimed to test the acquisition of locative and causative verbs in English L2 by Chinese-speaking learners. The prediction was twofold. First, it was predicted that the L1 conflation patterns would transfer in the initial stage of development. Transfer entails not only the avoidance and rejection of English transitive psych verbs, but also more problematic errors in the case of non-alternating container verbs, whose equivalents in Chinese alternate; this is a classic L1 superset - L2 subset situation, in which learners will assume that the English cover behaves like the Chinese gai 'cover' and not like gaizhu 'cover-STOP'

Second, the prediction was that learners would acquire psych verbs on the basis of exposure to direct positive evidence; in the case of container locatives, they would retreat from the initial overgeneralization on the basis of indirect evidence from psych verbs and change of state verbs. The pre-emption of this overgeneralization by positive evidence from other verbs included in the same lexical parameter is therefore the testing ground for the presence of UG constraints in L2 acquisition: if pre-emption were not to take place, this would constitute evidence that the

process of L2 acquisition is fundamentally different from that of L1 acquisition. This is a fairly well-established argument in L2 acquisition research: other studies (e.g. Neeleman & Weerman 1997) have argued that the inability to acquire properties of parameters in clusters may well be one of the characteristic limits of L2 acquisition. However, the validity of this argument depends crucially on the validity of the lexical parameter proposed by the author in L1 acquisition. As mentioned above (and as pointed out by the author himself in chapter 4), there is currently no persuasive evidence that locative and causative verbs are linked in L1 acquisition: in fact, errors with locative verbs seem to last longer than errors with causative verbs. Juffs argues, correctly, that this is not necessarily counter-evidence to the parameter; however, it is clear that more research is needed on the nature of the parameter in order to strengthen any argument about its existence and effects in L2 acquisition.

The study was conducted with 120 learners of English in the People's Republic of China, and a control group of native Chinese speakers. Learners had been exposed to English spoken by non-native speakers, and only in the classroom. Three tasks were used to determine the learners' knowledge of locative and causative verbs: a verb meaning task, a production task, and a grammaticality judgment task. The results of both tasks bear out the hypothesis of initial L1 transfer across the board. More advanced learners acquire knowledge of psych verbs, presumably on the basis of the limited positive evidence available in their learning setting; however, they do not seem to have determinate intuitions about container verbs, that is, stable knowledge that these verbs enter only the [ACT[GO[STATE]]] pattern. While learners do not judge alternating verbs and container verbs as completely equivalent, there is evidence of optionality (i.e. wavering between the L1 and the L2 conflation pattern). Moreover, individual results bear evidence of much variability with respect to these verbs: some learners seem to have reset the parameter, whereas others have not done so. Juffs speculates that the learners' inability to process morphological distinctions may underlie lack of success at parameter resetting, but he does not fully exploit the implications of this point (recent research has examined the role of morphology in depth - see Beck 1998). It may be concluded that the conflation parameter proposed in this book can be reset (even in the presence of limited evidence), but resetting of the parameter has not led to the pre-emption of L2 representations influenced by the L1. This result is in line with the assumption that even advanced non-native grammars are characterized by LIinduced optionality, and that optionality may indeed be regarded as a potentially permanent feature of late bilingual competence (see Sorace 2000).

This book is a fascinating window into the cognitive processes of L2 acquisition. It should find a place on the shelves of anyone interested in the relationship between linguistics and language acquisition.

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Anna Giacalone Ramat & Paul J. Hopper (eds.), *The limits of grammaticalization* (Typological Studies in Language, 37). Amsterdam & Philadelphia, PA: John Benjamins, 1998. Pp. 302.

Reviewed by Ulrike Claudi, University of Cologne

If grammaticalization is understood as a tool for explaining language structure by reference to its origin and typical development, it is not surprising that language should exhibit phenomena that put up resistance to such an explanation. Any theoretical attempt based on a limited bundle of parameters will sooner or later become confronted with data that do not fit into this always limited universe. The editors of the present volume, Anna Giacalone Ramat and Paul J. Hopper, call these cases 'borderline phenomena' and define them as historical processes that seem to share much in common with the classical type of grammaticalization and yet lack some perceived crucial component (1). Phenomena of this kind naturally evoke questions like: are they appropriately dealt with under the rubric of grammaticalization? Should they be included or excluded, and on what grounds? Or, in other words: what are the limits of grammaticalization?

The limits of grammaticalization is a selection of papers presented at a Symposium on Grammaticalization held at the XXVIII Annual Meeting of the Societas Linguistics Europaea at Leiden, Netherlands, in August 1995. The authors approach the problem of defining the limits of grammaticalization in various ways.

In the paper by Walter Bisang, the impact of language contact on grammaticalization – in addition to pragmatic and cognitive factors – is emphasized. Giving examples from languages of East and Southeast Asia, Bisang shows that situations of language contact may enforce processes of grammaticalization by transferring mechanisms like reanalysis, metonymy and metaphor from one language to the other.

Starting from an assumed sharp contrast between a lexical, or sentence-based approach and a discourse-based approach to grammaticalization, Sonia Cristofaro's typological perspective on the development of complementizers in Ancient Greek suggests that – not surprisingly – lexical elements as well as discourse played a role in the grammaticalization process.

Livio Gaeta expands the notion of grammaticalization to include cases of morphologization like the German Umlaut, which, being originally a phonological rule, developed into a derivational as well as inflectional rule after the original phonetic motivation had been lost. Such a development stands in contrast to the common grammaticalization feature of continuous desemanticization.

Anna Giacalone Ramat presents several test cases involving the boundaries of grammaticalization. One of the crucial domains is – as in Gaeta's paper – morphological material deprived of its original function and being employed for functions not linked to the previous one. Cases like the German Ablaut are considered as questioning the principle of unidirectionality in grammaticalization processes. It is stressed, however, that all counterexamples are regarded as idiosyncratic changes.

The article by Stefania Giannini deals with the interaction of spatial deixis, everyday conversational usage and dialect contact in the emergence of complex third-person pronouns in some Italian dialectal areas. Deviating from the usual direction of development, the grammaticalization of deictic and locative adverbs in a personal pronoun system translates a more abstract concept (space) into a more concrete one (person).

Paul Hopper's contribution – with the lyrical title 'The paradigm at the end of the universe' – deals with the 'ends' of grammaticalization processes, i.e. with their beginnings and their

finishes. Those stages are omitted from most treatments of grammaticalization. While in its 'incipient' stage, grammaticalization often has a specific, culturally determined source, the final stage of the process is often 'dissipating', one of its outcomes being meaningless phonological segments that may become part of lexical roots. Examples are taken mainly from Germanic.

Another challenge to the unidirectionality hypothesis is provided by Torsten Leuschner's investigation of clause linkage strategies (mainly) in English and German. While the development of those strategies proceeds from pragmatics to syntax it is argued that – contrary to this direction of development – concessive conditional expressions may receive additional pragmatic functions.

In Silvia Luraghi's paper, it is shown how discourse particles, unstressed pronouns, and reflexive and local particles in Hittite underwent a process of increasing obligatoriness and eventually assumed a new function: these items came to occur in virtually all sentences, defining the leftmost boundary of the clause and serving pragmatic purposes.

The topic of the paper by Juan C. Moreno Cabrera is the interrelations between grammaticalization and lexicalization. The author claims that both processes are characterized by the same conceptual hierarchy but constitute complementary aspects of language development. Grammaticalization (the creation of syntax out of the lexicon) involves metaphorical abstraction while lexicalization (the creation of lexical items out of syntactic units) involves metonymical concretion processes. The study is based on data from Spanish, Basque and Hungarian.

The major focus of the paper by Whitney Tabor & Elizabeth Closs Traugott is structural scope reduction, a parameter that had been suggested as characteristic of grammaticalization processes. Instead, the authors present several examples of language change that seem to involve structural scope increase. Although most cases presented are certainly not prototypical examples of grammaticalization, it is an interesting hypothesis that grammaticalization might persistently involve an increase of structural scope. As the authors note, there may also exist cases of grammaticalization 'for which we cannot say that constructional scope either increased or decreased' (262). So there might remain doubts whether it is a crucial parameter at all.

Barbara Turchetta's paper deals with grammaticalization processes in several varieties of West African Pidgin English spoken in Cameroon, Nigeria and Ghana. It is noted that these processes often do not follow the pattern of a grammaticalization chain properly but rather behave in a network manner: one morpheme may develop several new functions that are not necessarily interrelated. Plurifunctionality in grammaticalization processes is, however, quite typical for most of the mother tongues spoken by the people who created these pidgins. In general, the pidgin varieties described seem to mirror to a high extent structures (including tonality) that are characteristic for this African language area.

The volume thus assembles various types of 'borderline phenomena'. Some of them call for inclusion under the rubric of grammaticalization while others question or relativize well-established premises of grammaticalization theory. Some phenomena, however, seem to be inherently 'borderline'. With regard to the distinction between grammaticalization and lexicalization, the editors note: 'The ongoing dialectic between grammar and lexicon cannot be closed off, and we should not allow terminological constraints to govern our thinking to the point of excluding some higher synthesis of these two concepts' (8). This 'higher synthesis' might however be regarded as an intrinsic part of the concept of grammaticalization since the latter could well be defined as a permanent crossing of boundaries, including that between lexicon and grammar.

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Geoffrey Sampson, Educating Eve: the 'language instinct' debate. London: Cassell, 1999. Pp. 184.

Reviewed by James R. Hurford, University of Edinburgh

This is a paperback reprint, with minor changes, of a title which appeared in hardback in 1997. It is written at the 'serious pop' level, a welcome genre of writing typified by such classics as Dawkins (1976, 1986) and Pinker (1994). Indeed, this book of Sampson's is an explicit riposte to Pinker's book and to the Chomskyan nativist assumptions that have been dominant (though not to the exclusion of alternatives) over the past thirty years. As an empiricist counterblast, written at a popular, non-technical level, the book is an impressive tour de force. Its style is breezy British down-to-earth. Being familiar with its subject matter, it is hard for me to judge how easy a read an educated layperson would find it, but it does read very fluently and entertainingly. Sampson's goal is no less than to set out all of the principal arguments for linguistic nativism, and to demolish them all systematically. I know that the book violently irritates some who object to the triumphant tone in which Sampson claims to succeed in this task; but it is no more objectionable than many of the early polemics in favour of linguistic nativism.

In a short notice such as this, there is no space for a detailed evaluation of Sampson's arguments. For the most part, he represents the nativists' positions fairly, and he finds himself in agreement with some of their less central ideas. And many, if not all, of Sampson's criticisms of the standard arguments for nativism are persuasive. The book deserves to be read and discussed in tandem with Pinker's book. I shall recommend it to my students in this light.

Sampson belongs to the vintage of linguists who grew up in the early days of generative grammar, and have seen it develop over more than thirty years. Consequently, there is a (justifiable) emphasis on the earlier Chomskyan literature, but Sampson also gives reasonable space to later reworkings of the nativist position. When the book was written, however, he had not, apparently, caught up with Minimalism, which is ironic, in the light of the following quotation from a generative linguist normally associated with Chomsky's brand of Linguistics.

The advent of minimalism in the mainstream of syntactic theorizing highlights an interesting shift in scientific values. At least from the Aspects theory through Principles and Parameters theory it has often been remarked that the syntax of natural language has some surprising, or at least abstract, non-obvious properties. One example is the transformational cycle, another is rule ordering, another is the ECP, and so on. Such properties are not predictable on the basis of 'common sense', and do not appear in any way to be logically necessary. The fact that they appear to be true of natural language thus tells us something, albeit indirectly, about the architecture of the language faculty in the human mind/brain. Or so the argument goes. With the M[inimalist] P[rogram] we see a shift to a deep skepticism about formal devices of traditional syntactic theory that are not in some sense reducible to 'virtual conceptual necessity'. Such a perspective thus explicitly rules out precisely the major theoretical achievements of the past. All of them. (Culicover, 1999: 137–138)

So was all of the generative work of the last three decades largely a wild goose chase? Sampson certainly claims that it was, and to see Culicover apparently agreeing with him gives one great pause for thought. But even if the major theoretical achievements of the generativist era are now 'ruled out', one can hardly doubt that the flurry of activity which it engendered brought a mass of empirical achievements. We now know vastly more about languages than we did thirty years ago, and much of the stimulus for this discovery came from Chomsky's provocative proposals. For myself, I still believe that Sampson has not managed entirely to dismiss or demolish claims that humans are naturally disposed to learn languages of certain specific formal types, and not others. Sampson's own brand of empiricist learning theory is not spelled out in any satisfactory detail. His explicit espousal of mind/body dualism, where the immaterial mind (not the brain) is responsible for the human capacity for language, makes it impossible to imagine what kind of alternative account he could propose.

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