

provides a challenge for a particular theory. Sometimes Farrell gives a novel solution, though sometimes he leaves the issue unresolved.

According to Farrell,

[a] main goal of this book is to provide an overview of the treatments of grammatical relations in different modern theories of grammar and to bring out similarities and differences and strengths and weaknesses by showing how they have dealt with or might deal with a range of the interesting and challenging phenomena involving grammatical relations in different languages. (42)

Overall, the book achieves this goal in an accessible and efficient fashion. However, the book lacks a conclusion. Some more explicit comparison of the various theories would have been welcome. Comparative comments are made only in passing. Farrell could have taken one recurrent theme, for example, Icelandic dative subjects, and summarized the similarities and differences of the treatments in the three types of theories. The elements needed for such a comparison are all included in the book, though, so this exercise can be left up to the reader. It also would have been interesting to read Farrell's viewpoint on the role of grammatical relations from a twenty-first century perspective. Probably no scholar has studied GRs more thoroughly, especially as regards the oblique edge of the system, and thus Farrell is in a good position to advise us on the elements that a theory of language must have in order to handle GR phenomena insightfully. I hope that we will hear from him on this topic soon.

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Jeff Good (ed.), *Linguistic universals and language change*. Oxford: Oxford University Press, 2008. Pp. xv + 339.

Reviewed by SUSAN LIXIA CHENG, University of Nottingham & Dalian University of Technology

An increasingly popular approach in linguistics is to locate the causes of recurrent grammatical patterns in the historical process of language change,

claiming that all principled explanations for linguistic universals have a diachronic dimension. But then, are these recurrent grammatical patterns true universals? And what is the relation between synchronic and diachronic factors in accounting for linguistic universals? These questions are the main concern of the present volume, which collects specially commissioned work by leading scholars of generative and functional linguistics.

In addition to a summary of the individual contributions, Jeff Good's 'Introduction' offers an excellent overview of different ways of understanding and explaining universals. In response to this introduction, Johanna Nichols presents an overall conclusion in the final chapter, 'Universals and diachrony: Some observations', in which general background questions for further work are raised as well as questions for each contribution in the book. Apart from the introduction and conclusion, the book contains ten papers grouped into five parts, which except for part I, 'Universals and change: General perspectives', deal with universals on different levels of linguistic organization, viz. phonology, morphology, morphosyntax and syntax.

Part I begins with Paul Kiparsky's contribution, 'Universals constrain change; change results in typological generalizations'. Kiparsky makes a principled distinction between true universals, which 'constrain both synchronic grammars and language change', and typological generalizations, which are 'simply the results of typical paths of change' (52). True universals are identified by five criteria: they are exceptionless, process-independent, analogically generalized, encoded as constraints and manifested in contexts 'where higher-ranking constraints that override them are not in play' (49). Applying these criteria to a number of proposed typological generalizations and universals, Kiparsky argues that the 'D-hierarchy' (more usually known under the term 'animacy hierarchy'), which is relevant in the phenomena of split ergativity, number marking and number agreement, is a linguistic universal. In contrast, the binding properties of complex anaphors derive from a typological generalization with a historical explanation. Nichols offers additional evidence from Slavic languages that the D-hierarchy plays a role in areas of grammar other than case marking. However, she also raises the question of how we can falsify the claim that a hierarchy is available to all languages but not necessarily active in any language.

'On the explanation of typologically unusual structures' by Alice C. Harris is the only paper in the book that focuses on typologically rare instead of universal patterns. This does not render the paper irrelevant in the present context since a comprehensive theory of universals, according to Good, 'will necessarily also be a theory of rare patterns' (4). Tracing the sources of split case marking in Georgian and endoclitics in Udi, Harris observes that these constructions are rare because they require a convergence of historical circumstances that is very unlikely. She claims that a historical approach combined with a probabilistic account can explain both the fact that these constructions are unusual and the fact that they occur at all. Nichols in turn

suggests that endoclitics may arise in different ways in different languages and that a full investigation of typologically unusual structures should also attempt a calibration of the space of possibilities.

Part II, 'Phonological universals: Variation, change, and structure', consists of two papers: Juliette Blevins's 'Consonant epenthesis: Natural and unnatural histories' and Joan L. Bybee's 'Formal universals as emergent phenomena: The origins of structure preservation'. Both contributions adopt a diachronic perspective, offering historical explanations for universal patterns. Blevins approaches consonant epenthesis within the framework of Evolutionary Phonology (cf. Blevins 2004), and Bybee develops a historical, usage-based account of a well-attested pattern of phonological alternation known as structure preservation (cf. Kiparsky 1985). Blevins's exposition of the 'natural and unnatural histories' shows that synchronic consonant epenthesis cannot be fully understood 'by simply listing and formalizing every case which occurs' (107). Instead, the universal tendencies observed with respect to epenthesis can be explained by appealing to histories of sound change. Noting Blevins's long list of cases where epenthesis applies, Nichols proposes a general cross-linguistic survey of all the languages that do and do not use epenthesis.

Whereas Blevins admits that in some cases universal patterns may have a synchronic explanation, Bybee expresses serious doubts about this line of thought. Like Kiparsky, she draws a distinction between universals and typological generalizations, but in contrast to Kiparsky, she assumes true universals to be invariably diachronic in nature. Following a discussion of the relationship among synchronic universals, paths of change, and mechanisms of change with respect to the phonological changes that create structure preservation, Bybee argues that in an emergent, usage-based grammar, structural properties 'arise as language is used and find their explanations in the nature of the categorization and processing capacities of the human brain' (121). Responding to Bybee's chapter, Nichols raises the questions whether structure preservation also constrains language transmission or operates during acquisition, and how the claims that synchronic patterns are emergent, learned properties of grammars and that all universals are diachronic processes can be empirically falsified.

Dealing with similar data, Andrew Garrett and Adam Albright show in part III ('Morphological relationships: The shape of paradigms') how certain universal patterns are explained by different approaches. In 'Paradigmatic uniformity and markedness', Garrett looks at a set of levelings and extensions affecting verb paradigms in English and Ancient Greek. He observes that the emergence of paradigm uniformity is always the imposition of an existing pattern on a non-uniform paradigm. Garrett thus argues that paradigm uniformity is not an independent force in language change. Noting the systematic difference between English and Ancient Greek in the directionality of paradigmatic change, he draws attention to the need

for a more complex theory that takes account of all the factors contributing to morphological change. As pointed out by Nichols, designing an adequate cross-linguistic sample to test whether leveling always involves extension of existing paradigms is a priority for understanding mechanisms of language change.

In 'Explaining universal tendencies and language particulars in analogical change', Albright focuses on the same diachronic universals and introduces a synchronic 'confidence-based' (cf. Albright 2002) model of paradigm acquisition which can make correct predictions not only about individual cases but also about the typological aspects of language change. These predictions are based on the idea that analogical change will extend a base that more reliably predicts an entire paradigm over a base that is less reliable. That is, 'learners pay more attention to forms that are most helpful in predicting unknown forms, and analogical effects are rooted in this organization' (181). Unlike a probability-based approach, Albright's proposal offers an absolute prediction of the direction of analogical change, and his explanation of attested pathways is rooted in a synchronic model of the structure of grammar. As suggested by Nichols, further research will demonstrate whether it is Garrett's or Albright's model that has the stronger explanatory force.

Part IV, 'Morphosyntactic patterns: The form of grammatical markers', opens with Martin Haspelmath's article, 'Creating economical morphosyntactic patterns in language change'. Haspelmath provides a large number of examples of what he calls complementary and non-complementary expected associations (between particular values of grammatical properties that co-occur in a single expression, such as, for example, person and mood) to prove that all universal morphosyntactic asymmetries can be explained on the basis of frequency asymmetries – they are economically motivated in the sense that more frequent patterns are coded with less material. Economical patterns are manifested in the results of language change and need to be explained in diachronic terms. Haspelmath's explanation for diachronic change credits speakers with behaving rationally in selecting the most useful linguistic structures. However, Nichols provides a counterexample to Haspelmath's economy-based explanation and not only questions the criteria used here to identify universals but also draws attention to the problem of how speakers can decide the frequency of a given word.

Tania Kuteva & Bernd Heine's contribution, 'On the explanatory value of grammaticalization', investigates the postposed definite article in Bulgarian and double determination (i.e. the use of both a preposed and a suffixal determiner) in the Scandinavian languages – two seemingly exceptional situations of definiteness marking. Integrative grammaticalization theory (Heine & Kuteva 2006) is employed to explain grammatical exceptions, which the authors argue often become rules of developing grammars in both contact-related and non-contact-related situations. Examining both independently exemplified grammaticalization pathways and areal patternings of

definiteness marking, they conclude that grammaticalization theory can explain not only the regular patterns but also the exceptions. Here, Nichols's response is to draw attention to the problem of cross-categorial harmony and violations of it by borrowing, and she suggests that a larger survey of violations that occur only under areal pressure would strengthen the argument that areality explains non-harmonic patterns.

Part V, 'Phrase structure: Modeling the development of syntactic constructions', comprises John Whitman's 'The classification of constituent order generalizations and diachronic explanation' and Paul J. Hopper's 'Emergent serialization in English: Pragmatics and typology'. Whitman revisits the Greenbergian word-order universals (Greenberg 1963; Dryer 1992) to determine which patterns result from convergent patterns of change and which from the structure of grammar. Reclassifying them into three types, Whitman argues that cross-categorial universals are the product of language change and thus should be explained diachronically, while the other two – hierarchical and derivational universals – are determined by the nature of synchronic syntactic structure. Grammatical structure, in his view, plays an important role in explaining certain attested patterns. Nichols questions the necessity of adopting a generative framework here and suggests using a framework-neutral approach.

Hopper compares the English *take NP and* construction with serial verb constructions in West African languages and Chinese, and shows that if a pattern is part of the grammar of many languages, it may also exist in other languages, albeit in less obvious form. This can be explained in terms of the discourse environment from which a construction emerges: if a construction is grammaticalized across unrelated languages, the discourse patterns which are the source of the construction will also exist in languages that lack the construction in question. Hopper further argues that the way discourse requirements shape grammar contributes to our understanding of typologically identifiable classes of constructions. However, Nichols expresses doubt as to the validity of identifying the English *take NP and* construction with serial verb constructions in other languages and questions whether there exist constraints guiding the emergence of serial verbs. She also notes that the claim that serialization in *take NP and* is 'emergent', i.e. shaped by discourse, cannot naturally lead to the conclusion that grammar in general is emergent. More work is needed to verify the latter hypothesis.

As should be clear from the above discussion, the volume under review is rich in insightful theoretical interpretation, along with extensive examination of data and sophisticated statistical analysis. It is also cleverly organized and rigorously edited. Nevertheless, I have two reservations about the book. The first is about the labels given by the editor to the three approaches – structural, historical and external – for explaining the relationship between language universals and language change. While Hopper's discourse perspective is labeled 'external' because '[d]iscourse needs are not part of

grammar proper' in the sense that 'the communicative imperatives shaping a given stretch of discourse are what are taken to be external to grammar' (18), Bybee's neurocognitive principles are said to reflect a 'historical' mode of analysis. The criteria for deciding what qualifies as a structural, historical or external approach are not presented and not immediately obvious. My other reservation concerns the typographical errors in the fifteenth-century Chinese data (258): the verb meaning 'hit' is *da*, not *de*; and the tone marking of *ba* is falling-rising, not falling. Notwithstanding these minor flaws, *Linguistic universals and language change* is undoubtedly required reading for anyone interested in linguistic typology and universals, language change and historical linguistics.

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Paul de Lacy, *Markedness: Reduction and preservation in phonology* (Cambridge Studies in Linguistics 112). Cambridge: Cambridge University Press, 2006. Pp. xviii + 447.

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The purpose of this review is to provide an overview of Paul de Lacy's book and an illustrative novel example of a typological application of its model of markedness conflation. In addition, we would like to highlight three areas in which the theory may benefit from refinement and suggest possible avenues for future research.

Since at least Jakobson (1932), the notion that certain features, segments or structures may be asymmetrically MARKED in relation to other features, segments or structures has been significant in linguistic theory, and in ensuing research the term MARKEDNESS has been used in a number of different senses