

its valuable content and usefulness, to all those who are interested in quantitative linguistics in any way, as well as, of course, to all libraries.

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ROLAND NOSKE, *A theory of syllabification and segmental alternation. With studies on the phonology of French, German, Tonkawa and Yawelmani. (Linguistische Arbeiten.)* Tübingen: Max Niemeyer Verlag, 1993. x + 248 pp.

Reviewed by DOUGLAS C. WALKER

Roland Noske, already well-known for his detailed analysis of syllabification in French and German, turns in this work to a synthesis of a number of his descriptive studies (e.g. Noske 1985, 1988) with a view to developing a general theory of syllabification and of processes which alter syllable structure. As background, Noske contrasts two widely used approaches to the assignment of syllable structure: a rule, or bottom-up, method versus a template matching, or top-down, approach. Since Noske presents data which he claims show both bottom-up and top-down effects, neither system is fully satisfactory. As a remedy, Noske develops his *Syllable Assignment Theory*, incorporating a *True Constituent Model*, in which "syllable structure imposition is combined with the working of the general association conventions of autosegmental phonology. The conflict between a bottom-up and a top-down approach is thus avoided" (p. 2). Syllable Assignment Theory is formulated in a principles and parameters approach, where the main parameters involve the direction of syllable structure assignment, the number of subsyllabic nodes assigned, and whether or not syllable structure is assigned cyclically. In addition, and perhaps more controversially, Noske introduces a fourth parameter, differential interaction between the modules of the phonology: "the organisation of the grammar, i.e. the way in which the modules are configured with respect to each other, and not only the parametrically determined form of the modules, is claimed to be different for different languages" (p. 3). The remainder of the book is dedicated to a justification and exemplification of these proposals.

A theory of syllabification and segmental alternation . . . is organised as follows: after a brief Introduction (pp. 1–3), Chapter 1 (4–30) deals with Syllable Assignment and the True Constituent Model, discussing in particular the use of autosegmental principles (mapping, dumping, spreading and default value assignment) in syllabification processes, the role of empty nodes, and the implications of reduplication, leading to the parametric distinction between bi- and tri-positional syllables. Chapter 2, Moraic versus Constituent Syllables (pp. 31–63), provides a variety of arguments against moraic conceptions of syllable structure, particularly those advanced in the influential work of Hayes (1989). Here, compensatory lengthening and gliding provide Noske's primary evidence against models of the syllable in which the mora is a constituent part (or at least against Hayes' model) and in favour of the True Constituent Model, which can account for the same range of phenomena but which also is arguably more constrained than mora-based approaches, at least insofar as the potential development of appropriate linking or association mechanisms is concerned.

The next four chapters analyze syllabification and syllable-related phenomena in four specific languages: (1) vowel deletion and vowel shortening in Tonkawa (Chapter 3, pp. 64–89), where the complexities of vowel deletion which originally were used to motivate derivational constraints or iterative rules (Kisseberth 1970, Phelps 1975) can be elegantly handled by the True Constituent Model; (2) epenthesis and syncope in Yawelmani (Chapter 4, pp. 90–140), where that language's notorious conspiracies lend themselves to an insightful solution in terms of syllabification; (3) lexical and post-lexical schwa/zero alternations in German (Chapter 5, pp. 141–83), where the lexical alternation in inflectional categories is analyzed as a direct consequence of syllabification coupled with differential underlying representations (with and without schwa) for the morphemes in question; and (4) schwa/zero and vowel/gliding alternations in French (Chapter 6, pp. 184–234).

In this last chapter, Noske first presents a taxonomy of schwa deletion in French and contrasts what he calls structuralist and generativist approaches, although the latter group is far from homogeneous. Against this background, Noske then analyzes stable, unstable and alternating schwas, attempting to resolve the structuralist-generativist conflict by showing the degree to which the behaviour of schwa is predictable when a staged approach to syllabification is employed. This staged approach leads to the conclusion that "syllabification in French is organized differently from the syllabification in the other languages treated . . . lend[ing] support to Huang's, Muysken's and Lefebvre's view that

languages may differ in the way that modules are organised and configured with respect to each other" (p. 233). Finally, vowel/glide alternations submit to a treatment where both right-to-left and left-to-right syllabification plus the effects of well-known phonotactic constraints against consonant-liquid-glide sequences are involved. Following these analyses, a general set of Conclusions (Chapter 7, pp. 235–8) and a Bibliography (pp. 239–48) close the work.

A Theory of syllabification and segmental alternation . . . is a well-informed and well-argued study¹ of the importance of syllabification in the functioning of a variety of languages. The detailed criticism of mora-based analyses, in particular, will no doubt have significant implications for the future development of approaches which attempt to incorporate the mora into syllabic structure. In terms of its efforts to develop a new theoretical model, however, *A theory of syllabification and segmental alternation . . .* is likely to have less long-lasting effect, in part because Noske is, on occasion, required to refer to ad hoc or language-specific solutions which are the bane of virtually every theoretician; and in part because the advent of Optimality Theory appears to have led to the conquest of much of the theoretical territory with which he is concerned. But because his work is often formulated in terms of constraints that are also central to the Optimality approach, Noske is well-positioned to adapt and contribute to current developments in that domain as well (as his most recent works, e.g. Noske 1996a and b, make abundantly clear).

ENDNOTE

¹The book is clearly written, the argumentation easy to follow, but a significant number of typographical errors could have been prevented with a closer proofreading.

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