

**The Logical Structure of Linguistic Theory.** By Noam Chomsky. Plenum Press, New York, 1975, 573 pp., \$35.00.

It is remarkable that a lengthy manuscript written by a graduate student under the assumption "that it would never be published or read by anyone"

(Chomsky, 1975, p. 61) would appear in print 20 years after it was written. That manuscript, entitled *The Logical Structure of Linguistic Theory* (henceforth *LSLT*), was completed by Chomsky in 1955, partially revised in 1956, and finally published in 1975.<sup>1</sup>

It is customary to say that the major turning point in modern linguistics occurred when Chomsky's *Syntactic Structures* (henceforth *SS*) appeared in 1957. But this work presents Chomsky's ideas only "schematically and informally" and therefore should be viewed only as a "helpful introduction" to *LSLT* (p. 59). *LSLT*, moreover, is Chomsky's only truly comprehensive discussion of syntactic theory, and indeed nothing else comparable in scope has ever been written on the subject.

The fact that *LSLT* remained unpublished for 20 years has meant that most linguists have had no access to a complete formalization of the theory of generative-transformational syntax, with the result that if the theory can be said to have been understood at all it has been understood very differently by different linguists. The situation has been aptly described by Kimball:

The theory of linguistic structure first presented in Chomsky's monumental unpublished *The Logical Theory of Linguistic Structure* [sic], and modified later in his *Aspects of the Theory of Syntax*, has never received published treatment in its full form. Rather, this theory of syntax has seeped through the seams of various papers on syntax and the theory of syntax, and has been passed by word of mouth from linguist to linguist, receiving variously accurate renderings at each retelling. Linguistics has become in several essential respects like the oral tradition of the Indian grammarians, except that the attention to detail of Panini is nowhere evidenced. (Kimball, 1973, p. xv)

However, it is unlikely that the belated publication of *LSLT*, by itself, will do much to correct this situation, because the presentation of the formalization of that theory in *LSLT* is both forbiddingly complex and in many respects outdated.<sup>2</sup>

*LSLT* is divided into nine chapters, plus a 900-word preface (pp. 57-59) that can profitably be compared to the preface of *SS* (pp. 5-7 of that work).<sup>3</sup> Chapter I, pp. 61-75, is entitled "Summary," while the next four chapters, pp. 77-155, discuss various aspects of general linguistic theory. The last five

<sup>1</sup>See pp. 2-5 for discussion of the various forms of the manuscript. Certain sections of the original were omitted from the published version. On the other hand, the latter contains a 53-page introduction, written in 1973, about which more is said below.

<sup>2</sup>As Chomsky himself points out (p. 1): "It is hardly necessary to point out that a great deal has been learned about the topics discussed here in the intervening years. If I were to rewrite it today, I would naturally introduce quite a few modifications, though I still regard the general approach and much of the specific substance as valid."

<sup>3</sup>The table of contents mentions that an index appears, starting on p. 575, but the book ends on p. 573.

chapters, pp. 157-570, are devoted to a study of the various levels of grammatical analysis, and analysis of English at several of those levels. Chapter VI, pp. 157-169, describes the "lower levels of grammatical structure": phonetics, phonemics (yes, phonemics), morphophonemics, words, and syntactic categories. Chapter VII, pp. 171-221, is devoted to the level of phrase structure, and Chapter VIII, pp. 223-291, gives a "description [of English] in terms of phrase structure." Chapter IX, pp. 293-399, provides a formalization of transformational analysis, and Chapter X, pp. 401-570, is devoted to a transformational analysis of English. Thus over half of the book is concerned with the level of transformational analysis, and the chapters on the phrase-structure and transformational analysis of English (totaling well over 200 pages) constitute the most extensive treatment of English syntax ever published by Chomsky, a treatment that is certainly comparable in depth and interest to any other published account of English syntax from the generative-transformational point of view, including such classics as Lees (1960) and Rosenbaum (1967).<sup>4</sup> I will not comment here further on that treatment except to remark that it reveals that Chomsky was well aware, when he wrote *LSLT*, of many of the problems that were to erupt so spectacularly on the grammatical scene in the late 1960s, and that remain un(re)solved to this day.<sup>5</sup>

The first five chapters are particularly helpful in providing amplification of many of the sometimes rather cryptic statements made in *SS* and elsewhere concerning such matters as the independence of syntax from semantics (or the autonomy of syntax), the relation of linguistic theory to the "theories" represented by grammars of individual languages, the significance of the notion "grammaticalness," and the role of simplicity in evaluating alternative grammars. It is interesting and important to note that Chomsky continues to maintain to this day his position on these matters,<sup>6</sup> so that the discussions in *LSLT* are of particular importance to anyone interested in assessing Chomsky's thinking on general linguistic theory.

<sup>4</sup>Both of these are essentially unrevised doctoral dissertations written at MIT under Chomsky's direction. The most extensive transformational-generative analysis of the syntax of any language is Kayne (1975), which also originated as a MIT dissertation under Chomsky.

<sup>5</sup>For example, we find on pp. 567-568 the remark that "[t]hese cases also suggest the need for a more far-reaching analysis of adverbs, negation, and quantificational words. There is no doubt, on quite independent grounds, that these troublesome words require a great deal more study." More than one syntactician has been heard to remark: "It's all in *LSLT*."

<sup>6</sup>Except perhaps for his views on levels of grammaticalness, expounded in Chapter V and in Chomsky (1961), which were shown to be inadequate by Katz (1964). A revision of his views on this matter is sketched in Chomsky (1965, pp. 148-153).

In the 1973 introduction, pp. 1-53, Chomsky discusses some of the ways in which the theory of transformational-generative syntax has been modified since *LSLT*, and he reconstructs what he had in mind when he wrote *LSLT*. This account will be of interest to many people, as Chomsky himself notes:

There has been a fair amount written recently about the origins of transformational generative grammar, along with a number of complaints that more complete information has not been made available, and I have repeatedly been asked to discuss the matter. (p. 2)

The question that is most often raised is the extent of Chomsky's indebtedness to Zellig Harris, and more precisely the relation of Chomsky's theory of transformations to that of Harris's. In his preface to *SS*, p. 6, Chomsky simply indicates that Harris's work on transformational structure "proceeds from a somewhat different point of view from that taken below." On pp. 41-45 of the introduction to *LSLT*, Chomsky carefully sets forth the basic differences between his and Harris's point of view, and remarks in this connection that "it probably would have been preferable to select a different terminology instead of adapting Harris's in this rather different context" (p. 43).

For those who seek a somewhat more "personal" history of the origins of transformational-generative grammar, the introduction to *LSLT* may be disappointing.

## REFERENCES

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D. Terence Langendoen  
 Graduate Center, C.U.N.Y.