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Volume 1

E. F. K. Koerner, ed.

The Transformational-Generative Paradigm
and Modern Linguistic Theory

**THE
TRANSFORMATIONAL-GENERATIVE
PARADIGM
AND
MODERN LINGUISTIC THEORY**

edited by

E. F. K. KOERNER

with the assistance

of

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PROLEGOMENA TO 'PROLEGOMENA TO A THEORY OF WORD FORMATION'

A REPLY TO MORRIS HALLE

LEONHARD LIPKA

1.1. Research within the TG Paradigm has contributed a great deal to a new awareness of problems of methodology in linguistics. Such a statement will be disputed by nobody. It seems, however, that certain methods of traditional scholarship have been largely abandoned by many researchers who work in the TG framework, and have been replaced by other less commendable procedures. It used to be an accepted principle that reading should come before writing and publishing, i.e., one had to make sure before claiming to have discovered something, whether others, working in the same field, had not already come to the same or similar conclusions. Admittedly, this is much more difficult today than it was fifty years ago. But it seems to me that it is even more important now, at least to attempt to follow this principle, precisely because this is the only way to improve the quality of the terrifying flood of published and semi-published literature in linguistics, and at the same time reduce its quantity.

1.2. The purpose of publication is to prevent duplication of research and effort, but also to allow for equally public criticism which ideally should advance the progress of scholarship and increase general knowledge. To achieve this effect criticism does not necessarily have to be sympathetic, but may also cast doubt on very fundamental assumptions. A case in point is the so-called Chomskyan revolution itself. Strangely enough, however, once a revolution has been successful, the revolutionaries turned establishment themselves rarely accept basic

criticism but only admit 'constructive' comments. The following remarks may serve as an illustration. An earlier and shorter version was submitted for publication in *Linguistic Inquiry* immediately after Halle's (1973) article had appeared in the same journal. Publication was declined - as an anonymous referee put it - because: "This appears to be inappropriate as a squib since it is indirectly an attack on the significance of Halle's work. The tone is not at all constructive."

2.1. After excluding and then reintroducing semantics in its earlier stage of development, TG theory later neglected the morphological component (cf. Kastovsky 1971:3), and now seems to be in the process of rediscovering another aspect of language: word formation. Halle's (1973) article *Prolegomena to a Theory of Word Formation* is symptomatic of this phase. He believes that this field "has been studied only to a very limited extent" and hopes "to attract others into research on this topic" (p.3). One wonders if this invitation is addressed to certain researchers who have already accomplished a considerable amount of basic work in the field. Amongst those names which immediately spring to mind in this context one might mention several, beginning with Botha, Brekle, Coseriu, including Dokulil, Erben, Fleischer, Gauger, Gruber, Hansen, Hatcher, Henzen, Kastovsky, Koziol, Lees, Ljung, Malkiel, Marchand, Morciniec, Motsch, Neuhaus, Rohrer, Stein, and finishing with Weinreich and Zimmer. This research has been openly published in book-form or journals and is not confined to mimeographed papers which are only available within a closed circle. The above list can easily be augmented from the extensive bibliography in Marchand (1969) and from Stein (1973). Halle only mentions Chapin, Jespersen, and an unpublished paper by Siegel. Apparently, he completely ignores the fact that Marchand (amongst others) has developed a comprehensive theory of word-formation, and has applied this theory to a full-scale description of English word-formation. The first edition of this standard work appeared in 1960 and was reviewed in a number of journals. Cf. Brekle-Lipka (1968), Marchand (1969), Lipka (1971), Pennanen (1972), Kastovsky (1974).

2.2.1. Halle starts off with the claim that speakers of English know that adjectives such as *transformational* are "composed of the morphemes" *trans - form - at - ion - al* and that "facts like those" have to be formally represented in a theory of word-formation. The proposed segmentation is by no means a 'fact' but must be based - either implicitly or explicitly - on a theory, as is the case with any analytical procedure in linguistics, of which segmentation of utterances or words into morphemes (morphs) is one of the most important instances characterizing a whole era of linguistics, viz. structuralism. For example anyone only slightly familiar with the methods of structural descriptive linguistics would probably question treating - *at* - in *transformational* (or - *i* - in *serendipity* which Halle discusses later) as a morpheme or an allomorph¹ but would prefer a segment *-ation* as a linguistic sign. It is true, though, that "structuralism" was not a monolithic block, and that various "structuralists" held different views at different times. This is a point that is often forgotten when "transformationalists" talk about 'taxonomic structuralism'. Of course, it also applies to unspecified general statements about 'TG grammar'. Any improvement on standard work and the great mass of informed opinion is certainly to be welcomed. However, one might expect such developments to be justified against other work in the field. For a sketch of my views on the 'morpheme' (cf. 3.2.2.). Halle further suggests that, for example, the entry for *write* must contain the information that it belongs to the 'non-Latinate' part of the vocabulary. This observation is handled on a higher level of generalization by Marchand's distinction between word-formation on a native and on a foreign basis.

2.2.2. The "idiosyncratic characteristics of individual words" are discussed at length by Halle. This topic is the subject of a whole book (Botha, 1968) on the function of the lexicon in a transformational-

¹ Of course this is not to be confused with *-ate* as in *consultate*, *passionate*, *acetate*, *hyphenate*; cf. Marchand (1969:254-59). For *-ation* see Marchand (1969:259-61).

generative grammar. Starting from Chomsky's hypothesis about the lexicon as "the full set of irregularities of the language". Botha treats nominal compounds in Afrikaans in great detail and postulates a phonological dictionary and a phonological matching rule. The theoretical model proposed by Botha is strongly influenced by Weinreich's thought (cf. Botha 1968:245; Weinreich 1966:445; 1969:59, 74). Halle (4f.) distinguishes three types of idiosyncrasy in word-formation: a) semantic, b) phonological, and c) restrictions of productivity, and suggests accounting for them with 'a special filter' through which words have to pass after being generated by word-formation rules. This solution exactly corresponds² to the postulation of an 'idiom comparison rule' (later 'matching rule') for a) in Weinreich's 1969 model and the 'phonological matching rule' for b) in Botha (1968). The restrictions under c) - or more precisely all three types of restrictions on rules: semantic, phonological, productivity - can be accounted for in another theoretical framework by Coseriu's concept of 'norm' (cf. Marchand 1969:17, 57; Stein 1971; Neuhaus 1971). Although Weinreich does not claim that his theory, published in 1969 but developed and proposed earlier (lectures delivered during the 1966 Linguistic Institute at UCLA), solves all the problems of word derivation, his concepts of a 'simplex dictionary', a 'complex dictionary', an 'idiom list', 'familiarity ratings', and a 'matching rule' seem to be extremely useful and important. They are consistently applied in Lipka (1972; esp.84ff., 128ff.).

2.2.3. Discussing the distinction between "derivational morphology" Halle (6) states: "I know of no reasons why the list of morphemes should not include also the inflectional affixes". At least two reasons might have been found in Motsch (1962): the place of inflectional mor-

² Cf. Weinreich (1969:74): "The role of the *filtering device* is to differentiate, among possible words, those that are established from those that are not" [my emphasis, LL]. Cf. the notions 'possible lexical items' and 'gap in the lexicon', both used currently in Generative Semantics.

phemes in the constituent structure of complex lexical items, and the different degrees of combination potential of lexical and grammatical morphemes. Inflectional morphemes in English and German are usually placed at the end of words, after all derivative morphemes have been added. Combination with the former is much less restricted than with derivational suffixes. Motsch (1962:39) also sets up rules exactly like the "word formation rules" suggested in Halle (16). The relationship between inflexion and word-formation is treated in great detail within the framework of Chomsky-Halle's *Sound Pattern of English* in Wurzel (1970:15-104). Halle mentions that word-formation rules will have to include information on selection restrictions. He seems hardly aware of the difficulties of establishing the correct selection restrictions even for very simple everyday words, or of the problem whether 'selection restriction' as such is a justifiable concept in linguistics. See the review of various linguistic judgments on the selection restrictions of *eat* in Lipka (1972:48-51). The possibility of treating such restrictions with the notion of 'presupposition' is not mentioned by Halle.

3.1. A theory of word-formation must include an explanation of the fact that complex lexical items differ semantically from the sum of their components. This could be done with the concept of 'lexicalization' which entails the addition of semantic features. Such an approach is sketched in Lipka (1971). The term is not used here in the way it is used now within the framework of Generative Semantics, i.e. for the insertion of lexical items, or the surface realization of a configuration of atomic predicates. It is rather meant to indicate that complex lexical items, once they are created from smaller elements and used repeatedly, can become lexemes in their own right, with a loss of motivation (and perhaps also analysability), and acquire certain specific semantic features. Lexicalization is tied up very closely with 'hypostatization', but the latter process also affects simple lexical items. The lexical item *lexicalization* itself may serve as an example. As I use it here, I follow the tradition established in Marchand's *Catego-*

ries in 1960. Both this meaning of *lexicalization* and the one found in Generative Semantics can be said to go back to an underlying sentence 'Something becomes (a) lexical (item)' or probably better from its causative derivative 'Someone causes something to become (a) lexical (item)'. However, in Generative Semantics, the underlying pro-form *something* refers to prelexical elements, or atomic predicates, while in Marchand's and my own one it refers to the morphemes as elements of surface structure which make up a new lexical item that becomes a semantic unit. 'Surface structure' is not used here in the specific technical sense as defined in some transformational-generative model, but referring to anything directly observable as opposed to a more abstract 'underlying structure'.

3.2.1. It is no secret that the process of lexical insertion is a mystery far from being solved in the framework of Interpretative or Generative Semantics. Since McCawley's article "Lexical Insertion in a Transformational Grammar without Deep Structure" (1968) - which despite its title does not clarify but only raises the issue - relatively little progress has been made. I suggest that the concept of lexical insertion should be supplemented or replaced by the notion of MORPHEMIC INSERTION. For various reasons it is impossible for me to describe here my views on this problem, or to develop an alternative theory of word-formation. A few hints have been given above. As a sketch, I can add that I largely agree with the conclusions drawn in Kastovsky (1973), and therefore - as in Lipka (1972) - embrace many of the assumptions of Generative Semantics. If, however, as Kastovsky and I believe, prelexical semantic elements such as CAUSE DO BECOME NEG MILITARY are converted into complex lexical items such as *demilitarize*, and the prelexical element (or atomic predicate) "MILITARY is replaced by the adjective *military*, the feature BECOME NEG by the prefix *de-*, which is attached to *military*, and the features CAUSE DO by the suffix *-ize*" (Kastovsky 1973:290), then it must be morphemes that are inserted, not

lexical items.³ This, of course, means a return to surface structure, although, not at the expense of neglecting underlying structure (cf. Kastovsky 1971:8f.). As opposed to Chomsky and Halle, one need not re-discover surface structure if one has never given it up.

3.2.2. At this point I should like to sketch briefly my views on the 'morpheme'. I believe that morphemes are the smallest linguistic signs, i.e., meaningful observable segments in which elements of content (e.g., semantic features) are related in an arbitrary way to elements of expression. As opposed to some varieties of structuralism I do not require allomorphs, i.e., phonologically or morphologically conditioned variants of a morpheme, to have identical or even similar phonic shape. Thus, /iz, z, s, ən/, and \emptyset are all considered allomorphs of the same plural morpheme in English (cf. Lipka, 1969). In my view 'morphemes' are, therefore, essentially semantic units. This also becomes evident from my adoption of the concept of 'zero' in linguistics, since 'zero-allomorphs' and 'zero-morphemes' have no phonic expression at all (cf. Kastovsky 1968, esp.31-53). Following Weinreich (1966:432f.), I believe it is useful and descriptively adequate to distinguish between 'major' and 'minor classes of morphemes', which roughly corresponds to the more traditional distinction between 'lexical' and 'grammatical' morphemes. I disagree with Weinreich (1966:433) on the nature of categorial features such as [+Noun, +Adjective] which he believes to be "semantic in the full sense of the word". Both classes of morphemes then, in my view, can be represented as a triplet of features, which could be termed 'phonological', 'categorial' (also including syntactic information), and 'semantic' features. I am fully aware of the fact that this is not sufficient for a complete specification of lexical entries for morphemes in some type of dictionary or lexicon.

³ Kastovsky's particular analysis in which *de-* replaces BECOME NEG may be questioned if one believes that in the inchoatives *black/en, redd/en, warm/θ* (which are homonymous with the corresponding causatives) the suffix *-en* and the zero-morpheme represent BECOME.

3.3. The distinction between the transformationalist and the lexicalist hypothesis (not to mention Chomsky's conversion from the former to the latter position) is not mentioned once in Halle's article. This is all the more surprising, since the reasons why Chomsky adopted the lexicalist position for "derived nominals" (which are never explicitly defined) in 1968 (first in print as Chomsky, 1970) are exactly the same as those which led Halle to put forward in his *Prolegomena*: semantic and syntactic idiosyncrasy and restrictions on productivity. Chomsky's article had circulated in mimeographed form as Chomsky (1968) but is labelled Chomsky (1972) in Halle's *Prolegomena*, thus inducing the naive reader to believe this to be a recent paper. While stating that word-formation processes "are typically sporadic and only quasi-productive" (Chomsky 1965:184f.), Chomsky in *Aspects* still derives *refusal*, *destruction* from the respective verbs by a nominalization transformation, because the process is said to be productive. This is a solution which is truly within the generative-transformational spirit, as it accounts both for creativity in language and irregularity in the superficial surface structure. It shows the greatest possible generalization, and, at the same time, assigns secondary importance to surface phenomena. But even for "quasi-productive processes" such as the formation of *horrify*, *terrify*, *telegram*, *phonograph* Chomsky in *Aspects* arrives at the conclusion: "it is clear that from the point of view of both the semantic and the phonological interpretation it is important to have INTERNAL STRUCTURE [my emphasis, LL] represented in these words" (186). In *Remarks on Nominalization*, however, Chomsky abandons his earlier approach to "derived nominals". Halle neither mentions this change of position nor the problems for the theory involved.

4.0. An explanation of the phenomena mentioned in 3.1. and 3.2.1. is never seriously attempted in Halle's article. The ambiguity of *lexicalization*, or rather, the derivation of the two different, but closely related, lexical items by the same very general derivative process could never be explained by anything resulting from Halle's *Prolegomena*.

Certain extremely productive word-formation processes are not even touched upon in his paper, such as compounding, prefixation, and zero-derivation (cf. Marchand 1969:11-127, 129-208, 359-89; Kastovsky 1968).

5. Two questions must be raised with regard to Halle's article. Firstly, did he take into consideration the large amount of basic research which had previously been done on the subject of word-formation? Secondly, has Halle brought up any problems which have not already been treated, or proposed any solution for such problems which have not been offered elsewhere? It seems that the answer to both these questions is no, and for this reason Halle's remarks cannot be regarded as "Prolegomena to a Theory of Word Formation".

REFERENCES

- Adams, Valerie. 1973. *An Introduction to Modern English Word-Formation*. (= *English Language Series*, 7.) London: Longman.
- Botha, Rudolf P. 1968. *The Function of the Lexicon in Transformational Generative Grammar*. The Hague: Mouton.
- Chomsky, Noam. 1965. *Aspects of the Theory of Syntax*. Cambridge, Mass.: MIT Press.
- . 1970. "Remarks on Nominalization". *Readings in English Transformational Grammar* ed. by Roderick A. Jacobs and Peter S. Rosenbaum, 184-221. Waltham, Mass.: Ginn & Co. (Repr. in *Studies on Semantics in Generative Grammar* by Noam Chomsky, 11-61. The Hague: Mouton, 1972.)
- Halle, Morris. 1973. "Prolegomena to a Theory of Word Formation". *Linguistic Inquiry* 4.3-16.
- Kastovsky, Dieter. 1968. *Old English Deverbal Substantives Derived by Means of a Zero Morpheme*. Dissertation, Univ. of Tübingen. (Printed., Esslingen/Neckar: B. Langer, 1968.)
- . 1971. *Studies in Morphology: Aspects of English and German Verb Inflection*. (= *Tübinger Beiträge zur Linguistik*, 18.) Tübingen: G. Narr.
- . 1973. "Causatives". *Foundations of Language* 10.255-315.

- Kastovsky, Dieter, ed. 1974. *Studies in Syntax and Word-Formation: Selected articles of Hans Marchand*. Munich: W. Fink.
- Lipka, Leonhard. 1969. "Assimilation and Dissimilation as Regulating Factors in English Morphology". *Zeitschrift für Anglistik und Amerikanistik* 17.159-73.
- _____. 1971. "Grammatical Categories, Lexical Items, and Word-Formation". *Foundations of Language* 7.211-38.
- _____. 1972. *Semantic Structure and Word-Formation: Verb-particle constructions in Contemporary English*. Munich: W. Fink.
- Marchand, Hans. 1969. *The Categories and Types of Present-Day English Word-Formation: A synchronic-diachronic approach*. 2nd rev. & enl. ed. Munich: C. H. Beck. (First ed., 1960.)
- McCawley, James D. 1968. "Lexical Insertion in a Transformational Grammar without Deep Structure". *Papers from the Fourth Regional Meeting of the Chicago Linguistic Society* ed. by Bill J. Darden, Charles-James N. Bailey, and Alice Davison, 71-80. Chicago: Univ. of Chicago; Dept. of Linguistics.
- Motsch, Wolfgang. 1962. "Zur Stellung der 'Wortbildung' in einem formalen Sprachmodell". *Studia Grammatica* 1.31-50.
- Neuhaus, H. Joachim. 1971. *Beschränkungen in der Grammatik der Wortableitungen im Englischen*. Diss., Univ. of Saarbrücken.
- Pennanen, Esko. 1972. "Current Views on Word-Formation". *Neuphilologische Mitteilungen* 73.292-308.
- Stein, Gabriele. 1971. *'Primäre und sekundäre Adjektive im Französischen und Englischen*. Diss., Univ. of Tübingen. (Printed, Tübingen: Narr, 1971.)
- _____. 1973. *English Word-Formation over two Centuries: In honour of Hans Marchand on the occasion of his sixty-fifth birthday*. (= *Tübinger Beiträge zur Linguistik*, 34.) Tübingen: G. Narr.
- Weinreich, Uriel. 1966. "Explorations in Semantic Theory". *Current Trends in Linguistics* ed. by Thomas A. Sebeok, vol.3.395-477. The Hague: Mouton. (Sep. ed., with a preface by William Labov, 1972.)
- _____. 1969. "Problems in the Analysis of Idioms". *Substance and Structure of Language* ed. by Jaan Puhvel, 23-81. Berkeley & Los Angeles: Univ. of California Press.
- Wurzel, Wolfgang Ullrich. 1970. *Studien zur deutschen Lautstruktur*. (= *Studia grammatica*, 8.) Berlin: Akad.-Verlag.

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