

Some Problems of Word-Formation within the Framework of
a Generative Grammar

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Word-formation has not yet received due attention in generative grammars, probably because it is an interim problem between that of the more-or-less clearly established morpho-phonological possibilities and the problem of the lexicon, which has not yet been worked out (regarding word-formation see the productive attempts of Chomsky, Worth, Motsch, Volotskaia, Zimmer).

My intention is to examine word-formation from a generative approach, i.e. to trace the possibilities of generating derivatives. I shall base my attempts on examples drawn from word-formation in Hungarian, a language exceptionally rich in formative devices.

1. The first step is the separation of grammatical and lexicological derivatives. This is necessary in order to show what belongs to the lexicon and what does not. To make this delimitation we can use a relatively simple transformation: derivation (D) \longrightarrow syntactic construction (SC). Here the meaning of the stem (StM) and of the suffix (SuM) is carried by different elements of the syntactic construction, e.g. StM: predicate, word qualified

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(by an adjective) and SuM: adverb, adjective. Its formula :

D (StM + SuM) \longrightarrow SC (StM and SuM)

If this transformation can be carried out, the derivative is grammatical; it does not belong to the lexicon. Derivatives of great semantic complexity have to be made ~~su~~ subject to a complementary and at the same time also controlling transformation. (see my paper: La délimitation de la dérivation lexicologique et grammaticale du hongrois à l'aide de l'analyse transformationnelle. *Cahiers de linguistique théorique et appliquée*, Bucarest, 11, 1965).

2. The generating of grammatical or even of productive lexicological derivatives can be carried out with relative ease in the manner in which N.Chomsky demonstrates the formation of, e.g., the past tense. Accordingly, the generating of the derivatives in question: dob 'throw' + frequentative \longrightarrow dobál 'throw one after the other'.

And even if some difficult cases are to be found, they can be resolved by applying a nominalization (or negation etc.) transformation at the appropriate stage of derivation to the generalized Phrase-marker.

The productive grammatical or even lexicological derivatives will not be entered in the lexicon (N.Chomsky: *Aspects of the Theory of Syntax* 184).

3. Derivational processes discussed before raise no serious difficulties, for generative grammars. But there are a lot of derivatives that create much more problems. Consi-

sider first of all the quasi-productive processes or the great variety of sporadic, single cases. It is pretty difficult to find rules of any generality that produce derivatives of such types. There are, however, some wide classes of cases with varying degrees of productivity which require non-adhoc solutions. The solutions that can be achieved are characteristic of derivation as a typical morpho-semantic process.

The most difficult task is the generating of derivatives of great lexicological and morphological complexity, e.g. asztalos 'cabinet maker' (asztal 'table'+ -os: asztalos).

In the case of such words as asztalos one might seek syntactic justification for a transformational analysis from an underlying construction so that "he is a table maker" or "he makes table" would be derived from the more general and more abstract structure "he is the maker of F" or "he makes ~~the~~ F". This generation raises many semantic objections because the asztalos is not a 'table maker', but a 'furniture maker'. The solution must be therefore in any case semantic. The generation of derivatives of this sort proceeds by expansion of the meaning of the stem:

$$(1) \sum_{i=1}^n O_i \quad \longrightarrow \quad F$$

table+ chair+ bed+ ... furniture

If and only if $f \in [O_i]$; where O_i is an optional object, f is the semantic distinctive feature 'furniture' and $[O_i]$

is the set of semantic distinctive features of the object O_i . Therefore semantically $[O_i] \rightarrow [F]$, i.e. the set of the semantic distinctive features of any individual O_i can be replaced by the set of semantic distinctive features of F. Accordingly $[F]$ is the expanded meaning of the StM (formulated with the help of Hetőfi S. János).

(2) StM + SuM \longrightarrow D
'furniture' 'maker' 'furniture-maker'

There are still further possibilities.

One of the most important conclusions that can be drawn points out also the remote task: the generating of derivatives requires a semantical solution, such as can be worked out only by mathematical means.