MINDING ONE'S METATHEORY IN DOING MORPHOLOGY*

Rudolf P. Botha

Department of General Linguistics
University of Stellenbosch

1. INTRODUCTION

In this paper, I would like to address the question of (1) from a metatheoretical point of view:

(1)   Are syntax and word formation governed by similar rules or principles?

In the past, many linguists believed that one could answer this question by letting the so-called facts speak for themselves. If the facts --- facts about syntactic phrases and morphological words --- did not speak sufficiently clearly at the outset, one simply had to get hold of some better, more articulate, facts. And one should not muffle the voice of the facts by resorting to theoretical speculation. Or so it was believed.

This approach to the question of (1) is no longer defended by any large number of linguists. Specifically, linguists working within the framework of generative grammar reject it. They insist that both the question of (1) and the answers to it are theory-bound. Syntax and word formation, including morphology, do not exist in a theory-independent sense like post boxes and lamp posts, there for everyone to see.[1] Whether one considers the principles, rules and other entities of syntax and word formation to be identical, similar, different or completely distinct is partly determined by the linguistic theory one adopts. These assumptions will determine, amongst other things, what one takes linguistic categories, rules, principles, levels of representation, subsystems of grammar and so on to be.

The view that the drawing of a distinction between syntax and word formation is essentially a theoretical matter is, I believe, entirely correct. But many linguists who hold this view do not seem to realize sufficiently that the drawing of such a distinction is a metatheoretical matter too. So, the general point that I will argue in this paper is that of (2).

(2)   Whether one considers the principles of syntax and word formation to be similar or different is codetermined by one's metatheoretical beliefs (which may be held implicitly only).

This point becomes quite clear when one takes a close look at the different ways in which the question of (1) has been answered within the framework of lexicalist and syntacticist theories of word formation. The point of (2) is substantiated both by work that I have done on synthetic compounding and by related work by Cecile le Roux on verb-particle combinations.[2] In this paper I will focus on Le Roux's work because it is less widely known.

2. VERB-PARTICLE COMBINATIONS

Before proceeding, we have to get some idea of what verb-particle combinations are. In (3), I list some examples of the forms that have standardly been denoted by the term:[3]

(3)   (a)   *look up* (Anne *looked up* the answer.)

      (b)   *clean out* (Tom *cleaned* his room *out*.)

      (c)   *catch on* (Bill *caught on* fast.)

      (d)   *pass by* (Sally will *pass by* on Monday.)

      (e)   *drop out* (John *dropped out* months ago.)

      (f)   *turn on* (Sue *turned on* the light.)

Verb-particle combinations have been considered interesting in that they exhibit both phrase-like and word-like properties. The phrase-like properties of verb-particle combinations include the two listed in (4):

(4)   (a)   syntactic separability of the parts: compare *Anne looked up the answer* to *Anne looked the answer up*.

      (b)   internal inflection: consider *Tom cleanED his room out* and *Sue turnED on the light*.

The word-like properties of verb-particle combinations include the four listed in (5):

(5)   (a)   semantic noncompositionality: *'looked up'*, in *Anne looked up the answer*, means 'searched for'.

       (b)   idiosyncratic subcategorization: compare *He caught the ball really fast* with **He caught on the problem really fast*.

       (c)   ability to serve as bases of word formation rules: consider *onlookERs*, *passERs-by*.

       (d)   syntactic cohesiveness with respect to certain syntactic rules: compare *John looked up the information, and Mary the figures* with **John looked up the information and Mary over the figures*.

Notice, incidentally, that verb-particle combinations exhibit the properties of (4) and (5) not only in English but in languages such as Dutch and Afrikaans too.[4]

3. LEXICALISM AND CONCEPTUAL REDUNDANCY

3.1. The lexicalist position

This brings us to the lexicalist answer to the question of (1), i.e. to the lexicalist position on the relationship between syntax and word formation. The essence of this position --- of which there are various versions --- may be formulated as (6):

(6)   The categories, rules and constraints involved in word structure are distinct from those involved in syntactic structure.

The general position of (6) has been fleshed out with the aid of various more specific hypotheses and constraints, central among which are those of (7):

(7)   (a)   The Lexical Integrity Hypothesis: syntactic rules are allowed neither to analyze nor to change word structure.

       (b)   The No Phrase Constraint: morphologically complex words cannot be formed (by WFRs) on the basis of phrases.

       (c)   The Lexical Component Hypothesis: word structure rules apply exclusively in a separate, lexical, component of the grammar.

Different variants of these hypotheses have been proposed in the literature, the specifics of which are not relevant to our concerns.[5]

Let us consider two of the lexicalist analyses of verb-particle combinations that have been proposed within the framework of (6)-(7), specifically those by Simpson (1983) and Selkirk (1982).[6]

3.2. Simpson's analysis

The central claims of Simpson's (1983:8) analysis are represented as (8)(a) and (b):

(8)   (a)   Verb-particle combinations have the internal structure of verb phrases $(\bar{V})$.

            (b)   These $\bar{V}$-structures are, exceptionally, generated by a morphological rule in the word-formation component.

By assigning verb-particle combinations the status of verb phrases, Simpson tries to account for the properties they share with phrases: their syntactic separability and their ability to take inflectional affixes internally.[7]

By assuming that verb-particle constructions are generated by a rule of morphology in the word-formation component, Simpson (1983) tries to account for properties they share with words: their noncompositional meaning, unpredictable subcategorization and ability to serve as bases for other rules in the word-formation component. The hypothesis (8)(b) is consonant, moreover, with the lexicalist position formulated in (6) and (7).

But, and this is important from our perspective, Simpson has to pay a price for keeping the lexicalist position intact: She has to postulate a morphological rule for generating $\bar{X}$ categories in the word-formation component. This rule duplicates in regard to function and content a phrase structure rule required independently in the syntax. Simpson's morphological rule, thus, constitutes a conceptual redundancy. And her postulation of this rule, alongside its counterpart in the syntax, results in a loss of generalization.[8]

3.3. Selkirk's analysis

Let us next take a look at Selkirk's (1982:27-28) analysis of verb-particle combinations. Though this analysis is not worked out in detail, its main claims, represented as (9)(a) and (b), are clear:

(9)   (a)   Continuous verb-particle combinations such as *look up* (in *look up the number*) are compound verbs with the structure $[V\ P]_V$.

        (b)   Discontinuous verb-particle combinations such as *look ... up* (in *look the number up*) are constituents of verb phrases with the structure $[V\ ...\ PP]_{VP}$.

By assigning continuous verb-particle combinations the status of compound verbs, Selkirk tries to account for their word-like properties: their ability to serve as bases of word-formation rules and their cohesiveness with respect to rules such as Gapping. By assigning discontinuous verb-particle combinations the status of constituents of verb phrases, Selkirk tries to account for their phrase-like properties: in particular their separability. Selkirk's dual structure analysis, moreover, allows her to maintain the lexicalist construal of the relationship between syntactic structure and word structure.

But notice the price that she has to pay for adhering to the latter construal: Selkirk needs a 'lexical' rule that has to relate corresponding continuous and discontinuous verb-particle combinations. This rule duplicates in regard to function and content a significant part of the syntactic rule Move α. Selkirk's lexicalist position makes the latter rule unavailable to her, however. She is therefore forced to postulate the so-called lexical rule, even though it represents a conceptual redundancy. And there is a concomitant loss of generalization.9

3.4. A first tendency

We can now get back to our concern with the way in which answers to the question of (1) are tied up with specific metatheoretical beliefs. In this connection, the lexicalist analyses by Simpson, Selkirk and others of verb-particle combinations provide evidence for the existence of the tendency formulated in (10).

(10)   The lexicalist assumption that word structure and sentence structure are governed by distinct principles leads to analyses characterized by conceptual redundancy and a concomitant loss of generalization.

This tendency is manifested by other lexicalist analyses of verb-particle combinations too --- e.g. Van Riemsdijk's (1978), Stowell's (1981) and Baayen's (1986) --- as well as by various lexicalist analyses of synthetic compounding.[10] The tendency of (10) implies that linguists who hold the metatheoretical belief that theories should be free from conceptual redundancies will not be much attracted to a lexicalist position in a strong form such as (6). Notice, incidentally, that there is a principled reason why lexicalists are forced to postulate redundant devices: they underestimate the extent to which morphological words are similar to syntactic phrases.

4. SYNTACTICISM AND AD HOC MODIFICATION

4.1. The syntacticist position

We come now to the syntacticist answer to the question of (1), i.e. the syntacticist position on the relationship between syntax and word formation. The essence of this position --- i.e. the core of the syntacticist answer to the question of (1) --- may be formulated as (11):

(11)   The categories, rules and constraints involved in word structure are the same as those involved in syntactic structure.

As developed by, for example, Lieber (1984, 1988) and Sproat (1985, 1987), the syntacticist position does not incorporate the Lexical Integrity Hypothesis (7)(a), the No Phrase Constraint (7)(b) or the Lexical Component Hypothesis (7)(c). In this regard, syntacticists have argued for the claims of (12):

(12)   (a)   The Lexical Integrity Hypothesis follows from principles that are independently required in the grammar.

(b)   Either the No Phrase Constraint does not hold or, in those cases where it does hold, it follows from general principles such as those of theta assignment.

(c)   No special word-formation component or independent theory of the morphosyntactic well-formedness of words is required in the grammar. The well-formedness of morphosyntactic representations assigned to words is determined by syntactic principles such as $\overline{X}$-theory, binding theory, Case theory and theta theory.[11]

4.2. The Lieber/Le Roux analysis

Let us now consider one of the most detailed syntacticist analyses of verb-particle combinations. This is Le Roux's (1988) analysis of Afrikaans verb-particle combinations, an analysis that assumes Lieber's (1988) syntacticist view of compounds. In typical syntacticist spirit, Le Roux (1988:241) makes the two basic claims of (13)(a) and (b) about Afrikaans verb-particle combinations:

(13)   (a)   Afrikaans verb-particle combinations are compound verbs.
        (b)   Compound verbs are syntactic constructs, the morphosyntactic properties of which are determined by syntactic rules and constraints.

Incidentally, because the characteristic properties of Afrikaans verb-particle combinations are so similar to those of English and Dutch verb-particle combinations, the claims (13)(a) and (b) should carry over to these other combinations as well.

The kind of syntacticist analysis proposed by Le Roux has a merit that is of more than passing interest to us: it does not need recourse to conceptually redundant devices such as those required by lexicalist analyses of verb-particle combinations. Her analysis invokes only notions, rules, principles and so on that are independently required for the description of the syntactic properties of phrases. And such lexicalist hypotheses as The Lexical Integrity Hypothesis need not be specially stipulated in the framework of this syntacticist approach.

But for eliminating conceptual redundancy --- and ultimately for maintaining the syntacticist position (11) --- a rather steep price has to be paid: core syntactic notions, principles and rules invoked by Lieber and Le Roux have to be modified in an ad hoc way. Without such ad hoc modifications the kind of syntacticist analyses proposed by Lieber and Le Roux predict that verb-particle combinations will have more basic properties in common with phrases than they in fact have.[12]   Thus, in order to

maintain that compounds are structurally governed by principles of $\overline{X}$ theory, Lieber (1988:209) has to propose modifications such as those of (14) to these principles:

(14)   (a)   *The rewrite rule for X^n has to be modified to allow for the head of X^n to be at the same bar level as the mother node.*

        (b)   *The principle that nonhead constituents are maximal projections has to be modified to allow for nonhead constituents of the category level X^0.*[13]

And, as Le Roux (1988:260ff.) has noted, Lieber presents no independent evidence for these modifications. That is, these modifications are ad hoc. And, of course, it does not make much sense to invoke an independently motivated principle if it has to be modified in an ad hoc way.

Le Roux herself has to propose additional modifications to general syntactic notions and principles in order to account, firstly, for the syntactic cohesiveness of compound verbs with regard to deletion and movement rules and, secondly, for the differential behaviour exhibited by verb-particle combinations with regard to movement rules such as PP-preposing and V-second. These modifications affect the definition of such fundamental notions as, for example, 'minimal', 'nonminimal projection', 'barrier' and so on.[14] And, as Le Roux herself notes, these modifications are ad hoc too.

4.3. A second tendency

Let us now return once more to our concern with the way in which answers to the question of (1) are tied up with specific metatheoretical beliefs. Syntacticist analyses of compounds such as that by Lieber (1988) and of verb-particle combinations such as that by Le Roux (1988) provide evidence for the tendency of (15):

(15)   The syntacticist assumption that word structure and sentence structure are governed by identical principles leads to analyses characterized by false generalization and concomitant ad hoc modification.

The tendency of (15) implies that linguists who hold the metatheoretical belief that theories have to be free from ad hoc modifications will not be much attracted to the syntacticist position in a pure form such as (11). Interestingly, there is a principled

reason why syntacticists are forced to resort to ad hoc modifications: they overestimate the extent to which morphological words are similar to syntactic phrases.

5. CONCLUSION

In a nutshell, then, in regard to the general point of (2), I have argued two main points with reference to analyses of verb-particle combinations. On the one hand, to believe in the complete distinctness of the principles of word structure from those of syntactic structure, one has to be able to live with conceptual redundancy. On the other hand, to believe in the total identity of the principles of word structure to those of syntactic structure, a linguist has to be tolerant of ad hoc modification. One's choice of either a purely lexicalist or a purely syntacticist answer to the question of (1), then, is codetermined by the metascientific values that one lives by. [15]

The main point of (2), however, is more general than I have argued here. It does not apply to lexicalist or syntacticist construals of the relation between syntax and word formation only. It applies to all construals that are based on choices between alternative analyses of morphosyntactic phenomena. Without an appeal to appropriate metascientific beliefs or standards such choices simply cannot be made in a non-arbitrary way. So, to conclude: in arguing their pet theories about the relation between syntax and word formation, morphologists should mind their metatheory.

NOTES

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1.   In this paper, I will not draw a distinction between word formation and morphology. The term 'word formation' will, for the sake of convenience, be used in the place of the expression 'word formation and morphology'.

2.   Cf. Botha 1984 and Le Roux 1988.

3.   As noted by Le Roux (1988:17), forms such as (3) have also been called 'separable-prefix verbs', 'phrasal verbs', 'particle verbs', 'two-word verbs', 'separable verbal compounds', 'separable verbs', and 'discontinuous verbs'.

4.   For data bearing on this cf. Le Roux 1988:18ff.

5.   For some details of these variants cf. Botha 1984:135ff. and Le Roux 1988:5ff.

6.   Cf. Le Roux 1988 for a critical discussion of other lexicalist analyses of verb-particle combinations, including those by Baayen (1986), Van Riemsdijk (1978) and Stowell (1981).

7.   Simpson (1983:8) has to assume in addition that $\overline{X}$ categories formed in the word-formation component are analogous to $\overline{X}$ categories generated in the syntax in that their internal structure is visible, i.e. accessible to all rules which may subsequently apply to these categories.

8.   Simpsons's analysis has various other shortcomings that are not relevant to the present discussion. Cf. Le Roux 1988:56ff. for a discussion of these.

9.   Selkirk's analysis has other flaws as well, discussed in some detail by Le Roux (1988:120ff.). These flaws, however, are immaterial to the present discussion.

10.   For a discussion of the former analyses cf. Le Roux 1988 and for a discussion of the latter cf. Botha 1984.

11. For (12)(a) cf. Lieber 1984:195-197 and Sproat 1987:194; for (12)(b) cf. Lieber 1988:215-217 and Sproat 1985:202ff.; for (12)(c) cf. Lieber 1988:204 and Sproat 1985:12. For more detailed discussion of (12)(a)-(c) cf. Le Roux 1988:235ff.

12. For example, it is predicted that, like verb phrases, phrasal compounds are left-headed.

13. For other modifications of the same kind proposed by Lieber cf. Le Roux 1988:260ff.

14. Cf. Le Roux 1988:320.

15. There are construals of the relationship between morphology and syntax that are 'mixed' in the sense of being neither purely lexicalist nor purely syntacticist. The morpho-syntactic theories of Fabb (1984) and Baker (1988) are cases in point. The 'mixed' nature of these theories in no way, however, implies that their basic claims have not been codetermined by metascientific beliefs. Treatment of this point falls outside the scope of the present paper.

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