

BOOK REVIEW

Geert Booij: The Morphology of Dutch. Oxford University Press, Oxford, 2002, 253 pp.

Geert Booij, the author of a new treatise on Dutch morphology is a professor at the Free University (Vrije Universiteit) in Amsterdam and one of the leading European experts in the field of generative linguistics and morphology. The aim of this book is to offer the international readership a contemporary description of the morphology of the Dutch language based on numerous descriptive and theoretical studies written in the past several decades. This is in fact Booij's second book on the subject, following on *Dutch morphology: A study of word formation in generative grammar* (1977) which has exerted a considerable influence on the development of generative morphology. In the past three decades theoretical morphology, and especially generative morphology, has advanced rather dramatically, and Booij's latest book endeavours to show how new insights can be effectively applied to the empirical material of one language, in this case Dutch. At the same time Booij tries to show that detailed analyses of various problems of Dutch morphology can make an important contribution to contemporary theoretical disputes about the syntagmatic and paradigmatic structure of language, the interfaces of morphology with phonology, syntax and semantics, the controversy over whether rules or constraints are of primary importance in the description of a language, and perhaps most importantly, about the structure of the lexicon. The excellent view of contemporary developments which the author possesses as editor-in-chief of the influential journal *Yearbook of Morphology* makes this book not only a clear overview of Dutch morphology, but also a small encyclopedia of theories and methods of contemporary generative morphology and, to an extent, of general linguistic theory. There are numerous examples of the author's considerable analytical skills, which make this book useful reading for anyone interested in morphology or theoretical linguistics.

The book consists of seven chapters. In the first, Booij sets out his theoretical assumptions about the nature of morphological rules, the lexicon and productivity. The second deals with verbal, nominal and adjectival inflection in Dutch, the third

with derivation and conversion and the fourth with compounding. In the fifth chapter Booij examines the interface between morphology and phonology and in the sixth that between morphology and syntax. The last, seventh chapter sums up the principal results and indicates the implications for general linguistic theory, especially for the relation of morphology to other linguistic disciplines.

According to Booij, morphology is a central discipline of linguistics because it explores the structure of words, and the word is the link connecting phonology, syntax and semantics. In this scheme morphology has two basic tasks. The first is to describe the notion of “possible complex words of a language” and the other to describe the forms of words in various syntactic constructions. Morphology, therefore, comprises word formation as well as inflection. Booij strongly opposes the “split morphology” view which sharply divides morphology into two separate fields of study: inflection and word formation. The main argument against “split morphology” is that inherent inflection, the part of inflection that is not dependent on syntax, may feed word formation.¹ The basic morphological operations are derivation, compounding and conversion.

Morphology is based on words because native speakers discover morphological processes by comparing words “with systematic form–meaning differences”. By comparing the words *denk* ‘think’ and *denker* ‘thinker’, the native speaker may conclude that adding *-er* to the verb stem would form a noun denoting the subject of the verb. This example shows the connection between the paradigmatic and syntagmatic structure of the language: the starting point is a paradigmatic comparison and the result is the syntagmatic operation of adding a suffix to the stem of a word. Morphology must be “word-based” because words are elements from which new words are made. Booij specifies that the building elements of new words are stems of words as they appear in their underlying form. Booij accepts the thesis of Aronoff (1976; 1994) that morphology is based on words, but rejects the representation of morphological operations by rewrite rules (e.g., $V + er \rightarrow N$), because “this specific format [...] is not very insightful”. More convenient means of representation are templates—constructions which have specific meaning.² Booij assumes that “the morphological module contains a number of these templates, one for each productive morphological process” (5).

Booij explicitly takes the position that paradigmatic relations between words are the foundation that morphological operations are built on—this position represents a particular mark of the Dutch tradition in morphology (cf. Marle 1985). The feminine nouns in Dutch with the meaning of an agent are often formed by substituting the suffix in the masculine nouns. For example, the noun *arbeidster* ‘woman-worker’ is derived from the noun *arbeider* ‘worker’ by substitution of the suffix *-er* with the suffix *-ster*, and this can also happen in cases in which no verbal root exists (e.g.,

¹ In inherent inflection Booij includes nominal plural, comparison of adjectives and verbal participles. In Serbian, for example, from comparative forms of adjectives we get verbs such as *poboljšati* ‘to improve’ < *bolji* ‘better’, *pogoršati* ‘to make worse’ < *gori* ‘worse’, *prol(j)epšati* ‘to become more beautiful’ < *lepši* ‘more beautiful’, *produbljavati* ‘to deepen’ < *dublji* ‘deeper’, *odebljati* ‘to gain weight’ < *deblji* ‘fatter’, etc.

² This notion of constructions is close to the notion of formation models used in Slavistic literature (cf. Barić 1980; Ćorić 1982). Introducing the term ‘construction’, Booij brings into his description of the morphology of Dutch the elements of cognitive linguistics developed by Goldberg (1995).

reiziger ‘traveller’ – *reizigster* ‘woman-traveller’). The direction of derivation is sometimes shown by the transmission of the idiosyncratic meaning to derived nouns (e.g., *betweter* ‘pedant’³ – *betweetster* ‘woman-pedant’). Paradigmatic relations are especially important when analysing meanings of words borrowed from Latin or Greek. So the meaning of the word *filosoof* ‘philosopher’ follows from the meaning of the word *filosofie* ‘philosophy’.

In this introductory chapter Booij discusses the notion of productivity of morphological rules and the notion of the lexicon. Booij defines productivity as a qualitative notion in the following way: “a morphological pattern is productive if in principle new words can be formed according to that pattern in an unintentional way” (10). Following Schultink (1961), Booij includes in the definition of productivity the condition of unintentionality, a condition which Plag (1999) explicitly excludes. Unintentionality is surely not a necessary condition because productive rules can also be applied intentionally as Plag has shown, but it may be a sufficient condition to justify the inclusion of this condition in the definition of productivity as a qualitative concept.

The quantitative productivity of morphological processes depends very much on restrictions which may affect their realization. Booij discusses the influence of semantic, pragmatic and stylistic restrictions, and particularly the blockage which may be brought forth even by syntactic structures. For example, phrasal combinations of Adjective + Noun are used more often in Dutch than in German (cf. *harde schijf* ‘hard disk’ in Dutch with *Festplatte* in German). The measures of productivity, proposed in several variants by Baayen (see Baayen 1991; 1992; Baayen–Neijt 1997), make it possible to rank morphological processes. In the discussion of the notion of productivity it remains somewhat unclear what relation there is between the qualitative and quantitative notions of productivity. It is obvious that restrictions are important only in identifying the domain of productive morphological processes.

The lexicon as an abstract category of grammar contains only simplex words and those complex words which have some idiosyncratic formal or semantic property. Booij notes that this abstract notion of the lexicon must not be confused with the mental lexicons of particular speakers because the particular lexicons usually contain a smaller number of lexical units and, unlike the abstract lexicon, may include completely regular, frequent combinations of words which have been remembered by individual speakers (cf. Baayen et al. 1997). The lexicon is extended by derivation, compounding and conversion—a change of word class accomplished without being marked by some phonological change. The lexicon is also extended by acronyms (*bh* < *bustenhouders* ‘bra’), clipping (*ordi* < *ordinair* ‘vulgar’) and blending (*botel* < *boot* ‘boat’ and *hotel* ‘hotel’). Booij does not think that these latter formations should be included in the subject matter of morphology because they do not show a systematic connection between form and meaning.

The lexicon is also extended by the lexicalization of word sequences. In that way, for example, the adverb *tegelijkertijd* ‘simultaneously’ is derived from the preposition *te*, the adjective *gelijker* ‘same’ and the noun *tijd* ‘time’. The grammaticalization of nouns, verbs, adjectives or adverbs into prepositions or conjunctions falls into the same category. For example, the preposition *gedurende* ‘during’ has developed from the present participle of the verb *geduren* ‘last’, while the conjunction *hoewel* ‘although’ arose through the combining of words *hoe* ‘how’ and *wel* ‘well’. A number of complex

³ The literal meaning is ‘one that knows/can (do) better’.

prepositions in Dutch developed from prepositional phrases. Booij concludes that not all complex words can form the subject matter of morphological investigation, but only those for which we can assume the existence of a systematic connection between form and meaning. According to this interpretation, morphological operations refer only to word categories which have particular lexical meaning: nouns, verbs, adjectives and adverbs. Another view has been taken by Plag (2003) and Adams (2001), who include prepositions as targets of morphological operations because, in English, prepositions appear as components of compounds (e.g., *playback*, *upkeep*, *inborn*, *onlooker*, *outfall*, *afterbirth*).⁴ This difference comes from Booij's assumption that such compounds are reduced phrases for which no productive connection between form and meaning can be detected. It seems, however, that it is not possible to exclude reduced phrases in general as a topic for morphological investigation because many new words are continuously being created by the reduction of parallel syntactic structures. Some important morphological and phonological restrictions may be revealed in precisely that way.

An important consequence of the lexicalization of complex words is that, although their bases are no longer recognized as independent words, native speakers may nonetheless recognize their complexity because they contain other known elements. In Dutch, there are many verbs which begin with prefixes, but whose bases have ceased to exist as independent words. For example, in the verb *begin* 'id.' one can recognize a prefix *be-*, but not the segment *gin*. Such words Booij labels as "formally" complex because their structure is recognized as complex by native speakers. Thus, the past participle from the verb *begin* is *begonnen* without the prefix *ge-* which is otherwise obligatory in such forms of simple verbs. Likewise, compounds whose bases are lost as independent words can still behave as compounds with respect to accent. The author terms such words 'formally' complex because their parts cannot be identified with existing lexical words. The complexity of such words is one of the arguments which Booij raises against the theory of amorphous morphology which denies that the morphological structure of derived words is at all available for further morphological operations (see Anderson 1992).

In the second chapter Booij studies the plural of nouns and establishes the rule for the selection of plural endings which in Dutch may be *-s* or *-en*. The general rule is that *-en* is added to bases which end in stressed syllables, and *-s* to bases which end in unstressed syllables. This rule may be expressed in short as a morpheme structure rule—the plural of nouns in Dutch end in a trochee. Booij argues that such a formulation of the rule is well-founded because it follows from the general statements on the structure of the prosodic word and the foot in Dutch,⁵ and a similar

⁴ Serbian grammarians (Stevanović 1981; Klajn 2002) tend towards a different view absorbing reduced phrases into the notion of compounds. Klajn duly emphasizes that reduced phrases are quite different from compounds, but still includes their investigation in his monograph dealing with compounds. Croatian grammarians (Barić et al. 1997, 298) similarly consider reduced phrases as a special kind of word formation, but do not exclude the possibility that reduced phrases may be understood as a special kind of compound.

⁵ The preferred syllabic structure in Dutch is a trochee which consists of a stressed syllable followed by an unstressed one. The sequence of two unstressed syllables is avoided.

rule applies also to the inflection of adjectives (46). For the problem of inheritance of alternating verb bases with prefixes, Booij proposes a paradigmatic solution as more adequate than the lexical solution proposed by Lieber (1992). The discussion about the conversion of past and present participles into adjectives shows that the pertinent categorial difference may be expressed by stress differences. For example, *nádenkend* is the present participle of the verb *nádenken* 'to think over, reflect', and *nadénkend* is an adjective meaning 'absorbed (in thought)'. This explanation raises the question of whether the author's tenet that conversion is a change of word class which takes place without any phonological change is generally tenable.

In the second chapter, Booij develops his key argument against the hypothesis of split morphology according to which inflection and derivation belong to different modules of grammar—derivation precedes syntax, while inflection belongs to a post-syntactic module in which special rules spell out the morphosyntactic properties of every word. The main argument for "split" morphology is the generalization that in the structure of words inflection always follows derivation. Booij does not refute this generalization, but does not think that it must be expressed through the organization of grammar by positioning derivation and inflection in two different modules of grammar. The main argument against split morphology is that some inflection feeds derivation. Thus some present and past participles can be converted into adjectives, although this process of lexicalization is not a general one. The nominal suffix *-heid* deriving abstract nouns is freely applied to passive participles,⁶ and plural forms of nouns in *-en* may be used as bases for deriving collective nouns, or appear as constituents of compounds.⁷ The regular forms of comparatives may in some cases appear as bases for the formation of other word classes, and similar examples with infinitives can also be found.⁸ On the other hand, contextual inflection cannot feed derivation because it does not express independent semantic and grammatical information. The interaction of inherent inflection and derivation shows that the hypothesis of "split" morphology cannot be true. Inflection and derivation form a functional continuum, although there is a good formal reason for keeping these notions separate: bases, but not inflected words, take part in word formation.

In the third chapter Booij discusses the derivation of new words by affixes and conversion. Word classes providing bases for derivations are nouns, verbs and adjectives, and the results are new nouns, verbs, adjectives or adverbs. Therefore, adverbs can be derived from adjectives by adding suffixes, but they themselves do not take part in the derivation of other word classes. The inventory of possible changes shows that there is no symmetry between prefixes and suffixes, because the scope of change produced by prefixes is considerably smaller, and prefixes even show a tendency not to change word classes. On the other hand, suffixes always determine word classes and nominal suffixes also the gender of nouns. Booij also considers the problem of polyfunctional suffixes which can apply to different kinds of bases. Thus, the adjectival suffix *-achtig* can be productively applied to nouns, adjectives and verbs, but with different meanings, and the same holds for the suffix *-er* which derives nouns denoting people. Booij concludes that the polyfunctionality of some affixes may be connected with polysemy, but this connection is not necessary.

⁶ E.g., *aangepast* 'adapted' > *aangepastheid* 'adaptation'.

⁷ E.g., *leerlingen* 'pupils' > *leerlingendom* 'group of pupils'.

⁸ E.g., *weten* 'to know' > *wetenschap* 'science'.

Beside restrictions concerning the nature of the bases to which an affix may be applied, there are also special phonological, morphological, semantic and pragmatic restrictions characteristic of particular affixes. For Dutch, particularly important restrictions are those concerning the division of the lexicon into two layers—Germanic and Romance. For the suffixes of Romance origin there is a general restriction that they can be added only to bases of Romance origin, while for the suffixes of Germanic origin such a restriction does not exist—they can usually apply to bases of both origins. Many complex words of foreign (Romance) origin have been adopted in a complex form, whereas it is only on the basis of analogy that other complex words containing foreign components could have been derived.

Foreign suffixes are particularly active in paradigmatic derivation because here one foreign suffix is replaced by another. Booij especially emphasizes that native speakers do not need to know the etymology of bases and suffixes because these suffixes may be distinguished by their phonological properties. Foreign bases usually comprise two full, nonreduced vowels, and foreign suffixes usually begin with a vowel, comprise one full, nonreduced vowel and bear the main accent of the word. In cases where a word comprises both foreign and domestic suffixes, the foreign suffixes usually precede the domestic ones. The last suffix determines the character of the whole word, i.e., Booij assumes that the feature $[\pm \text{native}]$ percolates to the main node of a complex word. When the last suffix is $[+ \text{native}]$, the whole word is also $[+ \text{native}]$ and no foreign suffix can be added to it. Booij estimates that this approach solves the long-standing bracketing paradox that prefixes do not determine the category of words, only suffixes do (101).

Prefixes can also be divided into foreign (Romance) and native (Germanic), but most foreign prefixes can also be applied to native bases. Booij explains this nonselective behaviour of foreign prefixes by the fact that they form a separate prosodic word; the combinations of prefixes and bases are therefore similar to compounds which can also contain a mixture of native and foreign elements.

In the same chapter Booij considers concurrent derivational processes and critically evaluates the thesis that there always exists one general suffix and a set of other suffixes which are specifically determined by the base. Booij argues that this condition need not be met; concurrence may also exist between suffixes which are equally determined by some special property of the base. Booij begins with the assumption that there is a particular meaning corresponding to every affix, but admits that this condition is rarely completely satisfied. According to the author, we are more entitled to speak of the meaning of a particular derivational process in which a specific affix is added to a base of a particular type.

Booij considers conversion to be a special derivational process, and determines the direction of conversion from the meaning of the corresponding words. In Dutch the conversion of nouns into verbs is productive—almost every noun can be converted into a verb. A special characteristic of this process is that all derived verbs belong to the same default paradigm. Besides the irregular verb *prijzen* ‘to praise’, there is also a noun *prijs* ‘price’ which corresponds to the verb *prijzen* ‘to determine a price’ whose paradigm is regular (without ablaut). The other indicator of conversion is phonological composition: simple verbs in Dutch comprise one or two syllables of which the second obligatorily contains a schwa. Almost all examples of converted nouns in Dutch are morphologically simple words or compounds whose heads are simple words (e.g., *voetballen* ‘to play football’). In Dutch we also have conversion of verbs into

nouns, and adjectives into nouns and verbs, but these processes are less productive. In Dutch there is no conversion of verbs and nouns into adjectives.⁹

In the fourth chapter Booij analyzes compounds in Dutch which he defines as a union of two lexemes into a new lexeme. He adds that the first component may have a special connecting form with additional [s] or [ə] at the end as in *schaapskop* ‘the head of a sheep’ and *schaapewol* ‘wool of a sheep’. Compounds are distinguished from phrases by stress because in compounds the main accent falls on the first component, and in phrases on the second component (word). In Dutch the compounding of nouns and adjectives is productive, and that of verbs is nonproductive. The head of a compound is the right-hand constituent which determines its semantic interpretation and syntactic category, and in nouns also its gender. In nominal compounds the left-hand constituent may be a noun, verb, adjective, adverb, quantifier or even a phrase (e.g., *[[oude mannen]_{NP} huis]_N* ‘old people’s home’). The fact that phrases may be constituents of compounds shows that word formation cannot be included in some grammatical module preceding syntax as was proposed in the theory of lexical morphology. Booij argues that if nominal phrases may figure as first constituents, it follows that nouns in the plural may also appear as first constituents. Such a conclusion does not seem to be unavoidable—it is logically possible that only noun phrases in the singular can take the position of first constituents. That in Dutch compounds the plural of nouns may figure in first constituents is just an empirical fact.

Dutch nominal compounds have another interesting property—their left-hand constituents may not exist as independent words or in any other context (150). This observation leads to the somewhat awkward assumption that potential words, i.e., words which do not exist independently, may be constituents in a word formation process.

The author’s claim that there are no exocentric compounds in Dutch is particularly interesting. Compounds of the type *redskin* are interpreted as a special kind of endocentric compound based on metonymy: a part is used for denoting a whole (143). The fact that *bleekneus* ‘a pale person’ is not a nose does not mean that this is an exocentric compound, but only reveals a special semantic interpretation of this word. There is in Dutch a number of bahuvrihi compounds whose gender is not neuter, although such is the gender of the formal head (e.g., *de spleet oog* ‘split eye’—*het oog* ‘eye’).¹⁰

Copulative compounds of the type *minister-president* ‘prime minister’ and *tuinman-chauffeur* ‘gardener-driver’ are not a conjunction of words because they agree with a verb in the singular. In these compounds there is a special relation between a head and a modifier—*tuinman-chauffeur* is a driver who is at the same time a gardener. That compounds of this type are endocentric is also shown by compounds whose constituents belong to different genders. For instance, the compound *kindster*

⁹ In Rakić (2001) absence of conversion of nouns and verbs into adjectives in Serbian and many other Indo-European languages is explained by the contextual (dependent) inflection of adjectives. Booij’s thesis that only inherent inflection may feed derivational processes provides theoretical support for the observation that in many (or most) Indo-European languages there is no conversion of nouns and verbs into adjectives.

¹⁰ In Dutch the gender of nouns is determined by the article—*het* is the article denoting the neuter gender. Such circumstances prompt Booij to claim that gender is not a morphological category in Dutch.

‘child-star’ is not neuter, although the noun *kind* is neuter, which clearly shows that the head is the right-hand constituent.¹¹ From this type Booij clearly distinguishes compounds of the type *station Amsterdam* ‘Amsterdam station’, which are syntactic constructions in which the left constituent is the head, and the right one functions as an apposition. Another example supporting this observation is the expression *de heren Booij* ‘the Messrs Booij’ in which only the first component is in the plural.

The subject of the fifth chapter is the interaction between morphology and phonology. Booij distinguishes three main domains of this interaction in Dutch:

- (1) The morphological structure of a word influences its prosodic structure.
- (2) In Dutch, both bases and affixes may have allomorphic forms. Their analysis should discover to what extent these forms are phonologically conditioned and provide the relevant generalizations.
- (3) There are phonological restrictions which restrict the attachment of affixes to particular bases.

Here Booij describes the phonological structure of prosodic words, suffixes and prefixes in Dutch. Booij distinguishes two classes of suffixes according to whether they form one prosodic word with the base or not. Non-cohering suffixes constitute a prosodic word of their own in the same way as the constituents of compounds do. The deletion of identical elements of compounds shows that non-cohering suffixes behave in the same way as the constituents of compounds. These facts suggest the conclusion that prosodic words, but not grammatical words, may be left out if the condition of identity is satisfied. If we are dealing with cohering suffixes, deletion is not possible (e.g., **rood- of groenig* ‘reddish or greenish’ because *-ig* is a cohering suffix). Deletion is possible in the coordination of compounds *wiskunde* ‘mathematics’ and *natuurkunde* ‘physics’ in *wis- en natuurkunde* ‘mathematics and physics’, although the words *wis* ‘certain’ and *natuur* ‘nature’ belong to different word classes because they are constituents of compounds of separate prosodic words. In this case it is not possible to explain the deletion through the coordination of non-heads because it is impossible to coordinate constituents of different categories. The shortening of the noun *wiskunde* is a consequence of gapping prosodically identical words. Booij also shows that morphologically simple words may consist of two prosodic words if they have a particular syllabic structure (e.g., *áálmôes* ‘alms’, *óórdèel* ‘verdict’). These examples also show the asymmetry between the morphological and prosodic structure of words.

In the fifth chapter Booij also discusses the status of linking elements in noun compounds. The left constituents of noun compounds of the type N+N may be extended by the segments *-s*, *-e*, *-en* or *-er*, and extensions with *-e* and *-s* are also possible with verbal first constituents as in *drinke-broer* ‘drink brother, drunkard’. The author tries to show that “linking elements” are just extensions of the first constituents and not “linking elements that belong to neither the first nor the second part of a compound” (175). Booij argues that such elements are paradigmatically linked to the first constituent. From his discussion it is not clear why the functions of these elements must be mutually exclusive, i.e., why these segments cannot be the extensions of the first constituents and, at the same time, perform a linking function (Krott et al. 2002).

¹¹ Serbian and Croatian copulative compounds are not possible with constituents that differ in gender; this shows that in these languages the righthand rule for the position of a head is not firmly established.

A section of the fifth chapter is devoted to phonological restrictions in word formation. For Dutch, an important restriction is the ban on the sequence /rər/, which in fact is a consequence of a more general restriction which bans the appearance of the same consonants on both sides of a schwa. This restriction can be understood as a special case of the OCP—the principle which forbids the occurrence of identical segments on the same tier.¹² In Dutch, the suffixes *-der* or *-aar* are used instead of the suffix *-er* in cases when the use of *-er* would lead to the appearance of the sequence /rər/ (e.g., *vereer* ‘worship’ > *vereerder* ‘believer’, *luister* ‘listen’ > *luisteraar* ‘listener’, *Bijlmermeer* > *Bijlmermeerder* ‘inhabitant of Bijlmermeer’, *Diemen* > *Diemenaar* ‘inhabitant of Diemen’). The choice between the suffixes *-der* and *-aar* is also phonologically conditioned: a syllable with a schwa is followed by *-aar*, and one with full a vowel by *-der* because in Dutch two adjacent syllables with schwas are avoided. This constraint also applies to other suffixes which may lead to a sequence of schwas in adjacent syllables. On these grounds, *grondig* ‘thorough’ is a possible derivation, but **bergig* is impossible—instead of *-ig*, *berg* goes with *-achtig* giving *bergachtig* ‘mountainous’. The constraint imposed by the OCP can eventually be violated if there is no other possibility. For instance, in *eenogig* ‘one-eyed’ the prohibited sequence /gəg/ appears because the alternative suffix *-achtig* is not used for the derivation of compound adjectives. Two adjacent identical consonants are reduced to one within prosodic words in Dutch, whereas at the boundary of two prosodic words their reduction is possible, although not necessary. Thus, *adel-lijk* ‘noble’ is reduced to [ɛdələk], and *breed-te* ‘width’ to [bre:tə]. This type of examples leads to an important conclusion: the OCP is an output constraint which does not block the formation of words like the adjective *adellijk*.

The selection of prefixes is regulated by a constraint requiring the avoidance of syllables beginning with a vowel, if at all possible. Thus we have *a-theoretisch* ‘atheoretical’, but *an-organisch* ‘inorganic’; *de-motivatatie* ‘demotivation’ but *des-informatie* ‘disinformation’. Booij concludes that phonological constraints have a decisive role in the selection of affixes. We can, however, notice that in this discussion it remains unclear how phonological constraints cooperate with the division of affixes as cohering vs. non-cohering. For example, in *de.sin.for.ma.tie* the syllable boundary does not coincide with the morpheme boundary.

In the sixth chapter Booij discusses the relation between morphology and syntax, which is reflected in the change of argument structure of verbs and other word classes, and also in the participation of phrasal syntax in word formation. Booij assumes that the lexical representation of words consists of Lexical-Conceptual Structure (LCS) from which as a projection follows their Predicate-Argument Structure (PAS).¹³ Morphological rules may apply to LPS (and thus indirectly to PAS) or directly to PAS. For example, the attachment of the prefix *be-* to a verbal base produces a transitive verb with causative meaning (e.g., *klimmen* ‘climb’ > *iets beklimmen* ‘climb onto sg.’). On the other hand, the formation of passive participles is an operation which directly affects PAS because it affects the argument structure of a verb, but its meaning remains unchanged.

¹² The OCP (Obligatory Contour Principle) was proposed by Leben as a constraint on a sequence of identical tones in tone languages. McCarthy (1986) extended this constraint to segments and distinctive features.

¹³ The lexical representation of words is described in a similar way by Baayen–Lieber (1994) and Sadler–Spencer (1998).

Booij interprets argument inheritance of deverbal nouns as a consequence of the compositional semantics of bases and suffixes. In the phrase *Jans weigering van het aanbod* 'John's refusal of the offer', both arguments of the verb are expressed because the meaning of the suffix *-ing* may be defined as 'the event such that' LCS of the base verb. For such cases no formal mechanism of inheritance is needed because it is a natural consequence of the compositional meaning of the base and the suffix. There are, however, cases of verbs with prepositional objects in which the choice of preposition is lexically determined, and a deverbal noun keeps the same complement (e.g., *vertrouwen op...* 'to trust in...' > *vertrouw op...* 'trust in...'). In such cases, it is necessary to specify which affixes keep the prepositional object of a base—these are the inheriting affixes. Booij does not try to show what difference in meaning there is between affixes which are inheriting and those which are not. Simply defining some affixes as inheriting does not seem to be a very satisfactory solution.

In this chapter Booij defines the notion of 'constructional idioms'—syntactic constructions with specialized meaning. An example of such constructions is the combination of an auxiliary verb and a participle which in Dutch expresses perfective aspect. This construction can be represented by the following form: $[[hebben, zijn]_V \text{ [perfect participle]}]_V$. The forms *hebben* 'have' and *zijn* 'be' are auxiliary verbs, but the perfect participle position is a slot open for diverse verbs. Such a construction is not a lexical idiom but a constructional idiom which makes the production of new forms possible. The positioning of constructional idioms in the lexicon implies that there is no longer a sharp distinction between lexicon and syntax. According to the theory of construction grammar (Goldberg 1995) the lexicon contains not only words and idioms, but also constructional idioms with special meaning. An example of constructional idioms is the use of the verb *laten* 'to let' with other verbs in constructions which express passive, inchoative and causative meanings. Booij shows that the notion of constructional idioms may be applied for general representation of complex verbs. An advantage of such a representation is the possibility to express the role of some prepositions or particles in the conversion of adjectives and nouns into verbs (215).

In the last, seventh chapter Booij summarizes the results of his research into some general conclusions about the structure of grammar and the nature of morphological analysis. In numerous examples throughout the book Booij shows that paradigmatic relations among words are a necessary starting point for morphological analysis. Therefore, he proposes a theory of morphology very different from the theory of morphology as a syntax of words and morphemes developed by Selkirk (1982) and Lieber (1992). A special theoretical contribution of this monograph is the use of the notion of 'construction idiom' for the representation of complex derivational processes. In this representation, the lexicon becomes a part of the grammar which connects syntax and word formation pointing to the way in which new words and expressions may be formed by syntactic operations in a completely determined way. On several occasions Booij shows that neither Anderson's theory according to which the internal structure of words is not available for morphological operations, nor Beard's (1995) theory which sharply divides form and meaning, can be true. The author's arguments on the role of inherent inflection in word formation, on the structure of compounds in Dutch, and on the role of phonological constraints in word formation are also important theoretical contributions. The author takes care to define the key notions so that this book on the morphology of Dutch is an important contribution to making basic notions and methods of contemporary morphology and linguistics accessible to a wider circle of readers.

interested in the subject. The author's objective of showing that the study of a single language can provide empirical basis for a general characterization of language systems succeeds to a considerable degree. The book is provided with indices of subjects, authors and affixes and contains, as far as the writer of this note can see, no misprints.

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