[Review]

The Oxford Handbook of Compounding


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1. Introduction

The book under review is the seventh handbook in the series of Oxford Handbooks in Linguistics. The editors, Rochelle Lieber and Pavol Štekauer, are representative morphologists in the American generative tradition and the European non-generative tradition, respectively, and their collaboration has already made substantial contributions to the field of morphology and word-formation, including the publication of Štekauer and Lieber eds. (2005). Compared with previously published handbooks and “review” books on morphology, such as Matthews (1991), Spencer (1991), Carstairs-McCarthy (1992), Spencer and Zwicky eds. (1998), and Booij et al. eds. (2000, 2004), Štekauer and Lieber eds. (2005) is innovative both in its focus on word-formation and in its combination of generative and non-generative strands of study.

Lieber and Štekauer eds. (2009) is more innovative than Štekauer and Lieber eds. (2005) in at least two respects: namely its exclusive focus on one particular type of word-formation process, i.e. compounding, and its empirical coverage of typologically diverse languages. The aim of this handbook is “to give a variety of pictures of compounding that both complicate and deepen our understanding of this important means of extending the lexicon of a language” (Lieber and Štekauer eds. (2009: 3)). With 34

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chapters comprising about 620 pages of text, this book is divided into two parts. Part I (chapters 1–16) is devoted to theoretical discussions about compounding based on disparate frameworks, both generative and non-generative, and also from different methodological perspectives, synchronic, diachronic, psycholinguistic, and developmental. Part II (chapters 17–34) describes varying types and possibilities of compounding in 17 languages in a consistent and reader-friendly manner, using ample examples and tables. As far as I am aware, no other handbook or collection of articles has ever treated one specific type of word-formation process with the depth and diversity of perspectives contained within this book.

This review aims to present the rich content of Lieber and Štekauer eds. (2009) in a concise manner and to provide a clear evaluation of the book. Section 2 will summarize the main points or noteworthy arguments of each chapter, while Section 3 will comment on the chapters and present an overall evaluation of this book. Section 4 will conclude the review. Below, A, N, P, and V stand for Adjective, Noun, Preposition, and Verb, respectively.

2. Summary of the Content

2.1. Part I: Chapters 1–16

In Ch. 1, entitled “Introduction: status and definition of compounding,” Rochelle Lieber and Pavol Štekauer attribute the difficulty of arriving at a universally applicable definition of compounds to two factors: the cross-linguistic variation of units composing “compounds” and the difficulty of distinguishing compounds from derived words or phrases. Standard phonological, syntactic, and inflectional criteria for the latter distinction are shown to be unreliable when applied to cross-linguistic data.

In Ch. 2, “Compounding and idiomatology,” Stanislav Kavka claims that compounds are idiomatic expressions that are defined in terms of their degree of syntactic and lexical variance, literalness, and compositionality. According to the author, what definitely distinguishes compounds from free combinations is their lack of compositionality.

In Ch. 3, “The classification of compounds,” Sergio Scalise and Antonietta Bisetto develop a classification system for compounds based on the existence of the head (endocentric and exocentric) and the grammatical relations between the compound constituents (subordinate, attributive/appositive, and coordinate). These two criteria intersect with each other. This classification is intended to be consistently available for different languages
and different types of compounds; in English, for example, neoclassical compounds (e.g. *anthropology) are placed in the subordinate class, while phrasal compounds (e.g. *[floor of a birdcage] taste) are classed as attributive compounds.

In Ch. 4, “Early generative approaches,” Pius ten Hacken defines the “early period” in the generative research on compounding as begun by Lees (1960) and ending with Allen, Levi, and Roeper and Siegel (all 1978), explaining how the analysis of English compounds was closely interconnected with the development of generative linguistics, specifically the introduction of recursive phrase structure rules, the lexicon, and the condition of the recoverability of deleted material in transformations.

In Ch. 5, “A lexical semantic approach to compounding,” Rochelle Lieber applies Lieber’s (2004) lexical semantic framework employing semantic features (e.g. [+ material], [+ dynamic]) to the interpretation of compounds and finds that endocentric attributive compounds (e.g. *dog bed) based on the Scalise-Bisetto classification (Ch. 3) constitute a default semantic type. Exocentricity is shown to be a non-unitary phenomenon.

In Ch. 6, “Compounding in the Parallel Architecture and Conceptual Semantics,” Ray Jackendoff views compounding as a protogrammatical phenomenon in light of its “fragile” productivity, rudimentary grammatical structure, blindness to syntactic category, and semantic interpretation highly dependent on pragmatics. This property of compounds is claimed to justify the separation of the generative capacity of semantics from that of syntax.

In Ch. 7, “Compounding in Distributed Morphology,” Heidi Harley claims that not only synthetic but also modificational and primary compounds are instances of syntactic incorporation. Compounds such as *drugs-pusher and *to truck-drive are impossible due to bans on incorporation by DPs and incorporation into a v^0 head. Phrasal compounding (e.g. stuff-blowing-up effects), however, is possible because when affixed by a zero head, i.e. zero-derived into N, a phrase XP is “reified” and behaves syntactically like a Root.

In Ch. 8, “Why are compounds a part of human language? A view from Asymmetry Theory,” Anna Maria Di Sciullo attributes the asymmetric properties of compounds, which are observed in the impossibility of reordering (e.g. a *football team / a [ballfoot] team), for example, to their derivation in the morphological workspace by the recursive operation of the language faculty, claiming that it is this operation that makes compounds a part of human language. Compounds satisfy interface legibility conditions differently from phrases.
In Ch. 9, “Compounding and Lexicalism,” Heinz Giegerich critically re-examines the two premises of Lexicalism, the lexicon-syntax divide and the stratification of the lexicon, in terms of English A+N and N+N constructions (e.g. white board, dental decay, beautiful dancer, woman doctor, tooth decay, watchmaker). While maintaining the lexicon-syntax divide itself as a way to explain the differences between compounds and phrases, he emphasizes that the divide is not as sharp as predicted by Lexicalism, showing that the phonological and semantic criteria for distinguishing compounds from phrases do not necessarily correlate with the syntactic criteria for lexical status provided by the Lexical Integrity Principle.

In Ch. 10, “Compounding and construction morphology,” Geert Booij argues that compounding is a construction in the sense of Construction Grammar. He applies the notion of a constructional idiom to affixoids (morphemes intermediate between lexemes and affixes), Romance right-headed compounds, Dutch compound verbs, and lexical phrases such as particle verbs. The constructional analysis of Dutch compound verbs accounts for their being productive only when embedded in synthetic compound nouns (e.g. [[N][V]]_{V} er{N}).

In Ch. 11, “Compounding from an onomasiological perspective,” Joachim Grzega reviews the history of the study of compounding in onomasiological models, which analyze word-formation from the viewpoint of the speaker’s need to denote extralinguistic entities. Six such models are compared with respect to their varying definitions of compounds.

In Ch. 12, “Compounding in Cognitive Linguistics,” Liesbet Heyvaert reviews how cognitive linguists have addressed compositionality, creativity, and the “online” processing of compounding. Concluding that the cognitive approach to compounding thus far shows a strong bias toward the semantic analysis of compounds, the author calls for the “formalization” of the analysis.

In Ch. 13, “Psycholinguistic perspectives,” Christina L. Gagné surveys experimental psycholinguistic studies dealing with the mental representation and processing of compounds and factors that influence processing. It has been reported that representations of both a compound itself and its constituents become available during processing.

In Ch. 14, “Meaning predictability of novel context-free compounds,” Pavol Štekauer identifies 14 linguistic or extralinguistic factors underlying the language user’s selection of a particular meaning from among all possible meanings upon encountering novel compounds. He claims that meaning predictability can be quantified via a specific method of calculation.
In Ch. 15, “Children’s acquisition of compound constructions,” Ruth Berman compares children’s acquisition of English and Hebrew in terms of their use of innovative and established compounds and their developmental patterns regarding compound acquisition. English-speaking children produce compounds much more productively and earlier than Hebrew-speaking children. Comprehension comes earlier than production in both groups.

In Ch. 16, “Diachronic perspectives,” Dieter Kastovsky explains how compounds in IE (Indo-European) developed from attributively used syntactic phrases through the univerbation and lexicalization processes. The adjectival bahuvrihis (possessive or exocentric compounds, e.g. barefoot), the oldest layer of IE compounds, paved the way for this development, while the karmadhārayas (determinative compounds, e.g. blackbird), tatpuruṣas (synthetic compounds, e.g. church-goer), the nominal bahuvrihis (e.g. pale-face), and the nominal pickpocket type are younger types and also ultimately have adjectival origins with subsequent nominalization.

2.2. Part II: Chapters 17–34

Part II begins with Ch. 17, entitled “Typology of compounds,” wherein Laurie Bauer surveys the parameters along which compounds may vary cross-linguistically: (i) the existence and definition of compounds, (ii) formal marking of compounds, which is subdivided into phonological marking, linking elements, and internal inflection, (iii) headedness, (iv) the order of elements in compounds, (v) recursion in compounds, and (vi) the semantics of compounds. He warns, however, that such cross-linguistic variations in compounds are not necessarily correlated with language types. Moreover, typological conclusions depend on the definition of what constitutes a compound.

The remainder of Part II consists of 17 chapters, each of which is titled with the names of the target language and the language family to which it belongs. First come four IE Germanic languages: English (Ch. 18, by Rochelle Lieber), Dutch (Ch. 19, by Jan Don), German (Ch. 20, by Martin Neef), and Danish (Ch. 21, by Laurie Bauer). In all the four Germanic languages, compounding is productive, with the N+N type exhibiting a particularly high productivity level. Their compounds, mainly fore-stressed, can include linking elements and internal inflection and are basically right-headed when endocentric. A+N forms can be ambiguous between compounds and phrases. Compound verbs are divided according to the category of their nonhead (particle vs. N, A, or V) and their separability (except in English). The nonheads of compound nouns are structurally unconstrained
in German and English, which Neef relates to the possibility of phrasal compounding. The semantic relationship between constituents is free in root compounds but is syntactically restricted in synthetic compounds.

French (Ch. 22, by Bernard Fradin) and Spanish (Ch. 23, by Laura Malena Kornfeld), both IE Romance languages, have the V+N, P+N, N+N, A+A, N+A/A+N, N+de+N forms as their possible types of compounds, but the authors show that most of them pose problems in terms of the morphology-syntax distinction. They both claim that the only type whose lexical status is established is that of V+N compound nouns (e.g. French abat-jour, lit. weaken light, ‘lampshade’). In general, the V is an action verb, the N corresponds to its argument, and the compound as a whole denotes an agent or instrument, but a wider range of V-N relationships and compound denotata seems to be possible. The morphological nature of the V and the overall exocentricity also constitute important issues for this type.

The other IE languages studied in this book are Modern Greek, a Hellenic language (Ch. 24, by Angela Ralli) and Polish, a Slavonic language (Ch. 25, by Bogdan Szymanek). Modern Greek has a stem-based morphology and produces compound nouns, adjectives, and verbs with a right-headed or nonheaded structure [stem + stem/word] where the two elements are often linked by the vowel /o/ as a compound marker. Notably, V+V coordinate compounds are observed. The existence of bound stems leads Ralli to postulate the existence of a morphological continuum along which affixes, stems, and words are placed. Polish also has a stem-based morphology and produces compound nouns and adjectives with a right-headed structure [stem + stem] where the stems are typically linked by a linking vowel. Recursion is impossible except in A+A coordinate compounds. Where English tends to use N+N compounds, Polish tends to use NPs with a modifier.

The non-IE language families studied in this book are each allotted only one language example. In Mandarin Chinese, a Sino-Tibetan language (Ch. 26, by Antonella Ceccagno and Bianca Basciano), compounding is the most productive means of word-formation, yielding endocentric or exocentric compound nouns, adjectives, and verbs. The authors claim that Mandarin Chinese does not have a canonical head position; endocentric subordinate compounds are right-headed when nouns and left-headed when verbs. Endocentric attributive compounds are always right-headed, and coordinate compounds are two-headed. It is also claimed that seemingly exocentric compounds (e.g. [A+V]N) result from a phenomenon called “metacompounding” (e.g. [A]+[V+N]N).

It is shown that in Hebrew, an Afro-Asiatic Semitic language (Ch. 27, by
Hagit Borer), not only do the N+N combinations that form prosodic words divide into compounds (e.g. beyt (ha-)sefer, lit. house (the-)book, ‘(the) school’) and syntactic constructs, but also, the latter should be divided into Modificational(M)-constructs (e.g. beyt (ha-)’ec, lit. house (the-)wood, ‘(the) wooden house’) and Referential(R)-constructs (e.g. beyt (ha-)mora, lit. house (the-)teacher, ‘(the) teacher’s house’). Compounds differ from M/R-constructs in their structure and semantic non-compositionality, but M-constructs (though not R-constructs) are similar to compounds in the non-referentiality of the non-head N. The author argues that M/R-constructs result from phonological liaison in PF, while compounds are formed by syntactic incorporation, denying the necessity of an independent word-formation component.

Japanese, an isolate language (Ch. 28, by Taro Kageyama), exhibits compounding in both lexical and syntactic domains, and the most productive and most widespread are verb-based compounds. The existence of W + (Word Plus) compounds (e.g. booeki-gaisya | syatyoo, lit. trading-company president, ‘president of a trading company,’ ‘|’ standing for a short pause) leads the author to argue for the necessity of distinguishing “syntactic indeformability,” or the ban on the syntactic deletion/replacement of a part of a word, from “syntactic analyzability,” or the visibility of word-internal structure to syntax, as two aspects of lexical integrity. It is shown that lexical V-V compounds (e.g. osi-akeru, lit. push-open (tr.), ‘to open by pushing’) and syntactic V-V compounds (e.g. kaki-hazimeru, lit. write-begin, ‘to begin to write’) share the former property but differ regarding the possibility of the latter.

The productive compounding patterns in Hungarian, a Uralic Finno-Ugric language (Ch. 29, by Ferenc Kiefer), are right-headed and formed by the mere concatenation of the categories N and A: N+N, A+N, N+A, and A+A. A special feature of the compounding in this language, the author shows, is that deverbal compounds allow the nonhead to satisfy the subject (Actor or Patient) argument of the base in their event reading; additionally, the derivational morphology of the deverbal head is regular, always employing the same suffix.

Slave, an Athapaskan language (Ch. 30, by Keren Rice), has compound nouns of the types N+N, N+Stem, N+Postposition, and Postpositional Phrase+N and compound postpositions of the type Postposition+Postposition. Right-headedness is the norm, though the N+Stem and N+Postposition types are left-headed. N+N compounds are divided into subordinate and “composed of” compounds, while N+Stem compounds are attributive compounds. Fricative voicing affects a stem-initial fricative in the second member of a sub-
ordinate or attributive compound, in which the author finds the potential for phonology-morphology mismatching.

In Mohawk, an Iroquoian language (Ch. 31, by Marianne Mithun), morphological verbs, which constitute the largest portion of the lexicon, serve not only as predicates but also as syntactic nominals and adverbials and as complete sentences. While virtually no V+V compounding is observed, N+V compounding or noun incorporation is pervasive. According to the author, N+V compounding is a word-formation process (rather than a syntactic one) in that the N and V show non-systematic relationships, the output shows lexicalization and idiomaticity, and also, productivity varies depending on constituent stems.

The name Maipure-Yavitero (Ch. 32, by Raoul Zamponi) refers to three Arawakan languages: Maipure, Yavitero, and Baniva. In these agglutinating languages, compounding is unproductive, with the existing compounds consisting of a small number of word-level compound nouns and lexicalized possessive/adjectival NPs. New words are coined by derivation. The author observes that the lingering of compounds among Ns rather than Vs and the productive derivation are characteristics shared with other languages with few compounds.

Mapudungun, an Araucanian language (Ch. 33, by Mark C. Baker and Carlos A. Fasola), features productive compounding, the most prominent types of which are V+N, N+N, and V+V. The authors argue that the structure of compounds is determined not by category but by semantics in that the V+N, N+N, and V+V compounds with a modificational interpretation are right-headed, while those with a function-argument interpretation are left-headed. They reduce the differences between the modifier-head compounds and the head-argument compounds to the component differences in such a way to conclude that the former are built in the lexicon, while the latter result from syntactic incorporation.

In Warlpiri, a Pama-Nyungan language (Ch. 34, by Jane Simpson), the two main open classes of words are nominals and preverbs. New nominals come not from compounding but from borrowing and derivation. The author claims that defining compounding as an independent word-formation process is very difficult in this language because one element of the presumed “compound” is bound, because it is not a minimal phonological word, and/or because there is no categorical way of distinguishing a complex word from a phrase.
3. Evaluation of the Content

3.1. Evaluation of the Chapters

Presenting an overview of the entire book in Ch. 1, Lieber and Štekauer identify three main themes that are repeatedly touched upon by its contributors, namely (i) the definitional problem, (ii) the problem of interpretation, and (iii) the component problem. These themes are essential to the study of compounding, so they manifest themselves in one way or another in every chapter, but I find the following chapters are especially important for these respective themes.

First, for the definitional problem, Chs. 1, 3, 16, and 17 provide readers with a basic understanding of the issue from synchronic, diachronic, and typological perspectives. Chs. 2, 6, 7, 8, and 10 can be compared with one another for their unique theoretical definitions of compounds. Chs. 2 and 10 define compounding as a gradient phenomenon that has a blurred boundary with other phenomena, while Chs. 6, 7, and 8 view it as an independent morphological process that can be defined in terms of the presence (Chs. 7 and 8) or absence (Ch. 6) of a specific internal structure. The theoretical definitions put forth in these five chapters are based on compounds in Germanic languages (and English in particular), but Chs. 22, 23, 24, 27, 30, and 34 make it clear that the size of the compound constituents can differ rather substantially among languages and also that the criteria used to distinguish compounds from phrases in Germanic languages have no universal applicability.

Next, regarding the problem of interpretation, reading Chs. 5, 6, and 14 successively in this order will be helpful because the first two discuss in detail the formal systems necessary to account for “standard” semantic interpretations of English compounds, whereas the last reports the possible deviations from such interpretations as a result of competition among various potential interpretations in language use. These three chapters put an emphasis on the internal semantics of compound constituents, accounting for interpretations of compounds as a whole in terms of the relationship between the semantic features of the constituents. Such an approach could be more controversial if applied to the issues of compound interpretation raised in Chs. 29 and 30, where it is shown that the interpretation of certain compounds depends crucially on formal rather than semantic aspects of their constituents.

Finally, readers interested in the component problem and particularly the morphology-syntax interface problem will substantially benefit from Chs. 7,
9, 27, 28, 31, and 33. Chs. 7 and 27 both suggest that compounding is a syntactic process, while Chs. 9 and 31 pursue a basically lexicalist analysis of compounds. Chs. 28 and 33 pose a challenge to both of these approaches, adducing evidence of the independent formation of compounds in both lexical and syntactic components. Chs. 9 and 28 are also significant in that they properly identify and restrict the role of the Lexical Integrity Principle. The phonology-morphology interface is explored in Ch. 30.

Apart from the three main themes, I find Chs. 4 and 18 especially valuable for anyone interested in English word-formation. The former helps one to understand how research on English compounding relates to the development of a linguistic theory, while the latter presents a comprehensive catalogue of compounds found in present-day English, including rarely discussed types such as identical-constituent compounds (e.g. *Nervous nervous*, ‘really nervous,’ with the capital showing stress) and dummy compounds (e.g. *(that) Enron thing*, used to refer to the trials involving accounting fraud in the Enron Corporation in a context where both speaker and hearers are aware of the situation being referred to).

An evaluation of the chapters of this book can also be profitably made based on its Part I–Part II division. First, the chapters in Part I can be compared with one another from the viewpoint of to what extent a particular theoretical or methodological framework, with its own predictions and consequences, has contributed to the study of compounding. It is clear from Chs. 3–9 that since its early period as identified in Ch. 4, the generative framework has brought to light various facts and concepts related to compounding that would otherwise have remained in obscurity, and the examination of compounding under the Lexicalist Hypothesis has uncovered a great deal about the architecture of grammar. In contrast, Ch. 12 gives the impression that the cognitive framework has thus far made no contribution of comparable magnitude to the study of compounding, merely accounting for the generativists’ findings in its own terms.

Next, the chapters in Part II can be read not only as preliminary reference points for the basic information about compounding in particular languages but also as the testing grounds for the claims and predictions made in the chapters in Part I. Each of Chs. 18–34 tells how the title language behaves in terms of the parameters of compounding established in Ch. 17, including phonological marking, internal inflection, headedness, recursion, and semantics. These chapters, however, are not merely descriptive catalogues. They analyze the nature of compounding in their title languages in the generative framework and reach observations and claims that can be highly significant
and even problematic with regard to the observations and claims made in Part I. Because the chapters in Part I discuss compounding on the basis of the data taken from Germanic languages (English mostly), Part II is essential for gaining a deeper and broader understanding of the nature of compounding.

3.2. Overall Evaluation

Returning to the aim of Lieber and Štekauer eds. (2009) mentioned in Section 1, I find that this book will surely “complicate and deepen” anyone’s understanding of compounding with its theoretical and empirical richness. The text presupposes a fairly high level of theoretical sophistication and serves as a sourcebook for morphologists or a guide for linguists in general who wish to develop a grasp of recent developments in compounding research and morphological theory. With this in mind, I think that this book should be taken less as a textbook-type handbook intended to inform non-specialists of what morphologists have uncovered about compounding and more as a sequel to the special issue of the journal Rivista di Linguistica entitled “The Morphology of Compounding” (volume 4, number 1, 1992).

Just as the organizer of this special issue, Sergio Scalise, intended it to be, this collection of articles discussing compounding in 10 languages in a comparable manner has been called “the most complete overview of compounding from both the theoretical and empirical points of view” (Scalise (1992: 4)). Although Lieber and Štekauer do not mention this work, certainly the book under review has inherited both its spirit and its editorial style and has substantially benefited from the advances in compounding research that it has provoked, including the MorBoComp project, a cross-linguistic research project on compounds directed by Scalise (see the project website at http://morbocomp.sslmit.unibo.it).

Lieber and Štekauer eds. (2009) constitutes the largest collection of up-to-date information about compounding. The theoretical and empirical comprehensiveness of this book is particularly welcome to the linguistic community in Japan, where morphological theories in the non-generative tradition (e.g. the onomasiological theory) and the compounding data for non-IE languages other than Japanese are relatively unknown.

As for the three main themes of this book as discussed in the previous section, the book as a whole does not offer any conclusions about them but does help readers to understand their complexity. Some might desire to see a chapter that attempts a systematic comparison between or reconciliation
of this diverse set of perspectives and data, but in my view, that would run counter to the above-mentioned aim of this book.

Although it does not affect my evaluation of the book, I should note that I have found at least 20 typographical errors in the text, including the use of the word *adjunct*, which should be *complement*, on p. 51, line 11; the example number (13d), which should be (12d), on p. 69, line 5; the confusion between *ni-zukuri* and *bou-dati* on p. 176, lines 16–17; the N+A, which should be A+N, on p. 311, line 22; the *and*, which should be *on*, on p. 312, line 26; the unnecessary use of *while* on p. 346, line 8; the subscript SV in (1b), which should be VP, on p. 439; the example number (10), which should be (12), in Table 28.3 on p. 522; and the lack of an *of* in Figure 32.1 on p. 585.

4. Conclusion

In summary, I conclude that Lieber and Štekauer eds. (2009) is a must-read for all those interested in word-formation and morphology; I predict that from now on, it will indeed serve as “the most complete overview of compounding from both the theoretical and empirical points of view” and “a point of reference for the study of both compounds and, more generally, the relationship between morphology and syntax” (Scalise (ibid.)).

REFERENCES


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