## **Book Review**

Laurie Bauer, *Compounds and Compounding*, 2017. Cambridge: Cambridge University Press, pp. 208. £19.99 ISBN 9781108402552.

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Over the last decades, compounding and the compounds of several languages have witnessed an increasing interest (see, for instance, the publication of *The Oxford Handbook of Compounding*, edited by Lieber and Štekauer 2009), and among the most renowned linguists who have been working on this topic for more than forty years is Laurie Bauer. The publication of his recent book *Compounds and Compounding* is very timely, not only for the prominence of the subject, but also because it shifts the focus towards a thorough deliberation of data and a valuable assessment of what has been said and been done in the field of compounds, particularly in that of English compounds.

Bauer discusses most of the existing proposals and at the same time raises a lot of questions. Although he does not offer clear-cut answers, he encourages the debate on several issues and shows that there are "several avenues" for further developments in the study of compounding, even in that of one of the best investigated languages, that is, English. All scholars may not agree with some of the possible explanations put forward by the author (see, for instance, the delineation of headedness in exocentric compounds, pp. 64–70). However, a variety of alternative views are discussed, questions range from the most fundamental (e.g. what is a compound) to minor ones (the status of the internal -o- in neoclassical compounds), solid argumentation is provided in favor of one or the other solution, and doors are open to further investigation. There is no specific framework which explicitly governs the theoretical position that seems to be preferred by the author and he does not go into detailed formal analyses of the data. Nevertheless, it is obvious that he is influenced by cognitive theory and construction grammar in his attempt to raise questions and articulate theoretical views about compounding.

The book consists of seven chapters and a big part of the comprised information has been obtained from already published literature by Bauer himself. The contents are illustrated by a number of figures and tables, an Appendix deals with the lexical nature of *one*, and the usual additional material is found, that is, a list of abbreviations and notational conventions, a rich section of references and two indexes, a language index and a general index. The chapters often focus on specific issues of compounding, but also lead to general conclusions on the diagnosis and function of compounds.

The introductory chapter, where Bauer clearly sets out his goals and offers a presentation of the content of the book, already reveals a thorough planning and contemplation of what is conferred and how it is discussed.

In the chapter following the introduction (Chapter 2), a particularly useful investigation of the closely-related notions of 'compounding' and 'wordhood' is provided and several criteria are given that serve to distinguish compounds from phrasal constructions (e.g. orthographic, phonological, structural/grammatically related, semantic). By referring to well-known studies on this issue (e.g. Bloomfield 1935; Lyons 1977; Di Sciullo and Williams 1987; Giegerich 2015), important questions are raised, such as whether a word can be defined independently of the language in which it occurs, or whether compounds are words, the second question being particularly difficult since the criteria for wordhood vary from language to language. The notions of 'lexeme', 'stem' and 'root' are also considered, although for most of the data which come from the inflectionally poor English these notions do not really matter. Nevertheless, inflection in compounding is not ignored, and Bauer shows the complexity of the situation (p. 25) by using examples from other languages (e.g. Hebrew, Hungarian, Finnish). Admittedly, the issue of inflection and its relation to compounding would have required a more thorough investigation, but for data other than English. As far as the relation of compounds and other constructions is concerned, the concepts of idiomaticity and listedness are explored, and Bauer correctly states that a possible "definition of compounds as subtypes of idioms seems poorly founded" (p. 13). Moreover, by approaching the issues of structural integrity and compound-internal accessibility, he considers the possibility of compounds allowing independent coordination of their components – the discussion is also restricted to English-based exemplification - and compounds viewed as syntactic constructions are examined in the light of older proposals like those of Lees (1960) and Levi (1978). Several weaknesses of these approaches are pointed out and the author correctly concludes that compounds are rather morphological constructs.

Chapter 3 deals with some important matters concerning the grammar of compounds (headedness, binarity, recursion, the interpenetration of syntax and morphology), without providing any formal analyses and any clear definition of what a compound can be on formal grounds. By avoiding to assume a precise definition of compounding – admittedly, this can be done only in language-dependent terms – Bauer is forced to include in his investigation instances which are dubious as for their compoundhood (see, for instance, the *go-go* (dancer) or *fifty-pounds* (charge) examples on p. 70), although he clearly

expresses his skepticism about their exact status, and he is obliged to appeal to the notion of (non)canonicity (pp. 168–170), raising questions about how canonicity is delimited. The discussion is mostly illustrated with English data, where the basic compound structures are close to those of phrases, at least superficially. As a result, some important points which may be crucial for defining the structure of compounds in general are missing. For instance, in a language like Modern Greek, the wordhood status of compounds can be determined both phonologically and morphologically by a single stress, the presence of a stem (the part of the word without its overt inflection) as the first constituent of the formations, and the compulsory existence of a linking element/compound marker (Ralli 2013).

After giving a very useful account of the criteria which regulate headedness in syntax (mainly proposed by Zwicky 1985), Bauer tries to apply them in both derivation (another word-formation process) and compounding, pointing out several shortcomings. For instance, he shows that a syntactic head is not the same as a head in derivation and compounding and that it is imperative to distinguish between a semantically-defined head – he calls it 'centre' – determined by hyponymy, and a grammatical centre, defined by word-class inheritance. By referring to the notion of binarity, he correctly remarks that if all compounds are not necessarily made of a head and a non-head, binarity cannot universally apply to compounding. Bauer is also skeptical about the application of recursion in compounding, and highlights the important role of constraints and productivity in compound structures (p. 46).

Admittedly, the issues of headedness and interpenetration of syntax and compounding are the best examined ones in this chapter, with the other sections referring to argument structure of synthetic compounds and to incorporation seen as a special type of compounding. The fixed expressions and generally phrasal-like (multi-word) units, occasionally mentioned as belonging to compounds, are also tackled and their usefulness into determining the extent of the compounding process in specific languages is emphasized (p. 48). The chapter concludes with some remarks on the grammatical function of compounds, which constitutes one of the least explored sections of the book.

An important aspect which constructively characterizes many of the chapters of this volume is the keen interest in the semantics of compounding. More particularly, Chapter 4 lays the foundations for how the semantic interpretation of compounds is variable, particularly in N N compounds, a preferred topic in the author's work, the older of which goes back to Bauer (1978). Chapter 4 is meticulously written and the most extensive chapter of the book. Several issues are examined, but I will mention those which seem of most value to me. Given that headedness is difficult to determine in

structural terms (see also Section 3.2.3), in Section 4.3, the distinction between endocentricity and exocentricity is not viewed as a grammatical one but as matter of semantics, in that endocentric compounds are hyponyms of their centre, while exocentric ones are not (see also Bauer 2008a on this matter). By accepting exocentricity to be related to the figurative interpretation, Bauer rightly observes that its distinction from endocentricity is not clear and correctly argues that exocentricity cannot be reserved to compounding, contra Bisetto and Scalise (2007). In the same spirit, Ralli (2013) has shown that exocentricity may apply to the derivational process of prefixation as well. Building on his previous work (e.g. Bauer 2008a, 2016), Bauer lists five types of exocentric compounds, defined in semantic terms, although he admits that there may be more.

One of the most elaborated sections of the book is Section 4.4, on the variable semantics of centred N N compounds, like *fire-bomb* or *rain snake*. He questions how the semantic relationships of their internal constituents can be classified and what mechanism allows this type of compounds to be generated. This section also contains an interesting discussion on the relation of compounds and phrases. Bauer contrasts competing patterns of compounds (e.g. *bull nose*) and genitive phrases (e.g. *bull's nose*), or those of compounds like atom bomb and phrases with adjectives like atomic bomb (pp. 76–77). He argues that syntactic structures and compounds can show the same semantic variability in their internal relationships and that the variability of the interpretation of the constructions has to be searched in the general area of semantics and/or pragmatics. Interestingly, he proposes that pragmatic factors determine the interpretation at the point of the creation of compounds and that this interpretation is not directly related to their grammar. I would add that the interpretational variability also relates with the structural variability: a language with many productive compound patterns has an increased possibility to show a greater degree of variability than the language where the compound patterns are not so many.

The case of verb-based compounds is examined in Section 4.5, where Bauer shows that the non-verbal element is not always the direct object of the verb, contrary to what is usually claimed by some linguists (Roeper and Siegel 1978, among others) dealing with synthetic compounds, and that adjuncts may also be involved in the structure. The same topic is also approached in Chapter 6, where Bauer criticizes views which consider synthetic compounding to strictly involve an argument structure and treat it as a separate type from free compounding.

Bauer also challenges proposals as to what are structurally and semantically coordinative compounds (Section 4.6), raising the question of whether the

semantic relations holding between the elements of coordinative compounds are different from those displayed by subordinative compounds. On the basis of previously published work (e.g. Wälchli 2005; Bauer 2008b), he provides a thorough survey of many coordinative types of compounds and draws evidence from many languages of different typologies. However, in stating that Western European languages do not have some types of coordinative compounds (p. 83), he forgets a renowned exception, Modern Greek, which productively contains almost all categories found in oriental languages, even the v v ones (Ralli 2009, 2013). Special attention is also paid to the controversial appositional compounds (multifunctional for Renner 2008), like the French *boucher-charcutier* 'butcher-pork.butcher', to color items (e.g. *red-white*), and to those used attributively as compound adjectives (e.g. *father-daughter* (dance)).

The semantics of A N compounds (e.g. *blackbird* vs. *black bird*) are the subject of Section 4.7. Unfortunately, the exemplification from the Germanic languages, where the structures of the two constructions do not diverge, does not allow Bauer to consider cases from other languages (see the Modern Greek *mavropúlia* 'types of birds which are black' compared to *mávra puliá* 'black birds'), where different structures imply slightly different meanings.

I do not understand why Section 4.8 on the semantics of compound verbs does not follow or has not been unified with Section 4.5 about the relatively fixed semantics of verb-based compounds. In this section, verbal compounds are distinguished from Aux V constructions, from those involving serial verbs, or even from those with prepositions/particles (as in Germanic). A very informative table with examples is given on page 98, where, again, Modern Greek, the only European language with many v v compounds is missing.

Finally, Section 4.9 deals with the semantics of compound adjectives involving an adjective, or a participle at its centre, and the chapter concludes with some particularly in-depth remarks on how meanings are assigned to nominal compounds on the basis of the relevant literature (among others, Gagné 2009).

Chapter 5 focuses on well-known attempts to classify compounds, such as Whitney (1889) and Scalise and Bisetto (2009). Bauer starts by discussing the prominent Sanskrit classification and then explores Scalise and Bisetto's claims. He correctly observes that the existing classifications are either language specific (the Sanskrit case) or not sufficiently fine-grained (Scalise and Bisetto's proposals), concluding that a classification of compounds depends upon the goals of the classifier. For him, the weaknesses of the proposed classifications (see also Chapter 4, p. 73, on this matter) can be resumed into the following points: the limitations of the features used, which may be unary, binary or even multi-valued, and the drawbacks of notions, such as subordination and endocentricity, considered to be values of a hierarchical classification of compounds.

Interestingly, Bauer proposes an 'exploratory' non-binary feature system (pp. 113–115), which follows from a summary of all possible ways of classifying compounds and contains values drawn from domains, such as syntactic (subordinative vs. coordinative, argumental vs. free, right/left/both-headed), functional (attributive vs. relational), semantic (endocentric, exocentric), grammatical (word class, such as verb, noun, etc.). He uses this system to classify English compounds in an Appendix (pp. 120–125), which, although meticulously built, proves that a good definition of compounding in the individual languages is still a desideratum, since one is forced to classify as compounds units, the status of which is dubious (see, for instance, the category of names).

The facets of English compounding constitute the topic of Chapter 6. A number of cases, which are said to belong to English compounding in various studies, are overviewed, proposals are re-evaluated and valuable observations are put forward. Crucially, Bauer shows that even in the well-described area of English compounding, there are still matters which need further investigation. More particularly, by using data from several varieties of English, he examines stress as one of the defining features of compounding (pp. 126–132), phrasal verbs as candidates for being compounds in specific theories (pp. 132–136), and the continuously growing production of compound verbs created by conversion or back formation (pp. 136–140). One of the intriguing topics of the chapter is the compound-internal plural marker < s > as an emerging linking element, for which Bauer admits that good evidence in favor of a compound-marker status is still missing (p. 143), and that in spite of its increasing use, plural marking within nominal compounds is rather exceptional, not the norm.

The question on whether neoclassical formations are really compounds is examined in Section 6.5, and several issues are investigated in this context, such as the status of the internal constituents, that is, whether constituents like *–ograph* and *photo–* are affixes or lexemes, or whether these elements belong to word classes with their own meanings. In examining the form of some well-known examples (Section 6.5.2) and how they are derived, Bauer focuses on certain problematic points which render the analysis of neoclassical formations difficult, such as:

- a) the presence of the Greek linking vowel -o-, which in English can be analyzed as a linking element (e.g. *phot-<u>o</u>-graph*), or part of one of the constituents (e.g. *photo-graph* vs. *phot-<u>o</u>graph*).
- b) The presence of English affixes in neoclassical formations and where they structurally belong (e.g. *philosoph(y)-er* vs. *phil-<u>osopher</u>).*
- c) The different occurrences for the same internationalisms, depending on the language (e.g. French *philosophe* vs. English *philosopher*).

- d) The difference between the neoclassical combining forms and true affixes (prefixes and suffixes), since only the first can combine together (e.g. *photograph* or *phot-ograph*).
- e) The emergence of clippings (e.g. *auto* from *automobile*) and splinters (e.g. *scape* from *landscape*) from certain neoclassical formations.

Bauer is right to point out that neoclassical formations – I would add: of languages other than Modern Greek – do not meet the rules of a synchronic grammar and that for providing a classification and an analysis, there is need to know the etymology of the formation and to use specific criteria of what is or what is not a neoclassical compound. This section, based for the most part on Bauer's previous work (e.g. Bauer 1998; Bauer and Tarasova 2013), belongs to the most well-elaborated ones of the book. However, two crucial references for neoclassical formations are missing: Lüdeling et al. (2002) and Baeskow (2004).

Chapter 6 ends with a reflection on blends (Section 6.6), where Bauer provocatively wonders whether, broadly speaking, compounding and probably all word formation are a matter of blending. He admits that there is room for further research on this matter, he suggests that their distinction may be mainly one of style, with blends being "lighter hearted" (p. 163), less formal and wittier formations than compounds. From the entire discussion, it follows that in order to define blends and distinguish their structures from compounds, we need a clear definition of the two processes and draw a list of what is excluded, for example clippings and lexicalizations. In my opinion, the admittedly blurred border between the two constructs in English is, among other things, due to the difficulty for this language to adopt strict formal criteria for their delimitation.

In the last part of the book (Chapter 7), Bauer summarizes his views throughout the contents on what he considers to be a compound, which can resume in the following: (i) a compound involves non-canonical modification of the head; (ii) compounds are often treated as words, although some of them are less words than others; and (iii) compounds share certain aspects of both morphology and syntax, depending on the language, and often act as the intermediate between the two. Thus, they can receive a syntactic or morphological treatment, depending on the language, and the theoretical stance of the analyst.

The author is right to state that languages vary in their compound types (for example, some languages have only nouns) and on the means they employ to create structures expressing the function of compounds. Moreover, on the basis of the investigated data, he attempts to put forward some predictions, such as, for instance, the fact that compound nouns are expected to be more common than verbs, since nouns in languages are more numerous than verbs. Moreover, given the relative markedness of adjectives and exocentricity, he predicts that it would be surprising to find languages with only compound adjectives, or with only exocentric compounds to the exclusion of endocentric ones.

To sum up, I would say that the present volume gives a representative picture of the best of what Bauer's work has to offer in these days. It puts forward a solid case for the need to reconsider compounds, as well as their properties and their various theoretical analyses proposed in the last decades. Most of the explored data are drawn primarily from English, while German and Danish also receive special attention. This is not necessarily wrong because well-based studies are those for which the authors are either native speakers of the language where the investigated data come from, or have extensive work on them. Nevertheless, it is also true that for the general argumentation and for formulating theoretical proposals, some aspects may be missed because other languages could contain phenomena which do not appear in English or in the Germanic languages in general. For instance, one of the basic questions that Bauer explores is whether there is a distinct category of 'compounds' or whether there is a series of various construction types which share some features, the traditionally called compounds being part of them. Throughout his book, Bauer seems to be in favor of a position lumping constructions together rather than splitting them into sub-categories, although he recognizes that the splitting position has some advantages (p. 173). In my view, his specific choice depends on the language he has dealt with in most of his work, that is, English. I believe that if his study data were drawn from another language where compounds display their own specific structures and clearly diverge from other word-like constructions, he would have been more hesitant to take such a position.

In spite of the language limitation (admitted by Bauer himself on pages 2 and 173), *Compounds and Compounding* aims to guide the reader through the central features and phenomena of compounding. The book is useful in various contexts: it addresses issues which may be of wider interest to researchers; it criticizes and evaluates a considerable number of theoretical statements and offers a wealth of examples to illustrate them; it has raised the methodological standards of discussions about compounding in general, that is, theoretical suppleness and empirical coverage (at least for English). This work deals with a very specific subject and for this it may be seen as a highly specialist work, designed primarily for experts in compounding. However, even non-specialist readers will find its broad linguistic conception particularly rewarding. Indeed, the volume's impulse to move beyond theoretical stringency and to evaluate

with critical spirit well-known theoretical proposals holds both fascination and significance for non-specialists. Several investigated topics drawn from its chapters will undoubtedly enable researchers to include them with confidence in their studies. *Compounds and Compounding* is an essential reference for linguists, stimulates their own reflection on compounds and constitutes a major contribution to the wider field of morphology.

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