Compounds and multi-word expressions in German

1 Introduction

This chapter reviews multi-word expressions, compounds, and their mutual relation regarding their status in grammar and lexicon in contemporary German.\(^{1}\) Both multi-word expressions and compounds are lexical units and morphosyntactically complex. That is, they are made up of a minimum of two words or stems,\(^{2}\) which sets them apart both from simplex lexemes and from morphologically complex words derived by other word-formation processes, in particular derivation and conversion.\(^{3}\) As lexical units, they have the common function of providing labels for all kinds of concepts. This apparent similarity – which becomes immediately obvious from the existence of parallel units such as *Frischluft* / *frische Luft* ‘fresh air’ – raises various questions concerning the status, the function, and the division of labor between multi-word expressions (henceforth: MWEs) and compounds, but also regarding the identification and demarcation of these forms. These questions will be discussed in this chapter. To start with, it has been noted time and again that the dividing line between MWEs and compounds cannot always be clearly drawn. While many of the problems that are discussed in the following – such as the theoretical considerations concerning MWE formation and the status of MWEs and compounds in the mental lexicon – have cross-linguistic implications, the question of identification and demarcation of the forms is language-specific. Therefore, we will start our overview with a brief survey of the relevant properties in German. The chapter is organized as follows: Section 2 defines the central terms in the context of the object of investi-

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1 I would like to thank Geert Booij, Jesús Fernández, Rita Finkbeiner, and Katerina Stathi for very valuable comments on earlier versions of this chapter.

2 Although the notion of word is known to be notoriously problematic, it is used in most definitions of multi-word expressions, relying (usually without further discussion) on orthography as the defining criterion. In addition, one also finds other (unspecified) terms such as ‘element’ (Gries 2008). The term ‘stem’ is mentioned here because stems rather than words form the basic constituents in compounds.

3 Strictly speaking, conversions, although derived by a morphological process, are not morphologically complex.
gation of the study, in particular the scope of the units known as MWEs. This section covers general aspects such as the relation between morphology and the lexicon, as well as MWE formation, the proportion of compounds and MWEs in the German lexicon, and the relation between both processes with respect to their function as providing lexical units. Section 3 gives a more detailed overview of German MWEs and compounds classified according to lexical category. Section 4 discusses the theoretical implications of the findings. The chapter ends with a brief conclusion in Section 5.

2 General aspects

2.1 Identifying compounds and MWEs in German

In his chapter “Idioms and other fixed expressions: Parallels between idioms and compounds”, Jackendoff (1997a: 164) writes:

Another part of the goal is to show that the theory of fixed expressions is more or less coextensive with the theory of words. Toward this end, it is useful to compare fixed expressions with derivational morphology, especially compounds, which everyone acknowledges to be lexical items.

The main reason for investigating MWEs and compounds and their interrelation is the fact that they are quite similar with respect to (i) their status as lexical units and their function of providing labels for concepts and (ii) their form, as both are morphosyntactically complex, i.e. consisting of a minimum of two words or stems. What follows from this first description is that if MWEs and compounds are similar in being both lexical units and consisting of two (or more) words/lexemes, the crucial difference lies in the way these words are combined. Gaeta/Ricca (2009) have made this point very clear, distinguishing strictly between the properties of being [± lexical] and [± morphological], where “lexical” means that a unit has a stable referent, a unitary meaning and possibly a non-negligible frequency of occurrence (ibid.: 39). While both MWEs and compounds are [+ lexical], compounds are [+ morphological] but MWEs are [− morphological]. This means that only lexical units can be regarded as compounds that are the output of the morphological operation of compounding, which in turn must clearly differ from the syntactic operations of the language in question. For this reason, we will start with a concise description of compounding.

In German, nominal and, to a more limited extent, adjectival compounding are productive word formation patterns, whereas verbal compounding is regarded
as either non-existent or highly restricted (e.g., Motsch 2004; Fleischer/Barz 2012). Compounding is generally right-headed. In direct comparison with parallel phrases, compounds can best be characterized by the following properties:

(i) Stress, which is on the left (modifier) constituent in compounds but on the head in phrases (Fríschluft – frische Lúft ‘fresh air’).

(ii) The stem form of the modifier, i.e. the absence of inflection (FríschØluft – frische Luft).

(iii) Inseparability, i.e. compounds cannot be interrupted by any intervening material which is perfectly possible for phrases (frische, angenehme Luft ‘fresh pleasant air’).

(iv) Linking elements, although they do not occur in all subkinds of compounds, for instance Geigenbogen ‘violin bow’.4

(v) Spelling, as compounds are consistently written as one word (or are hyphenated), contrary to phrases.5

In addition, there are several properties that apply only to specific subtypes of compounding. To the extent that they are relevant to the present issue they will be discussed in Section 3.

The properties mentioned distinguish compounds not only from phrases but also from univerbations in the strict sense (“Zusammenrückung”), such as zulasten (lit. on burden of, ‘account of’), demzufolge (lit. as a result of this, ‘accordingly’) or Möchtegern (‘would-be, wannabe’). These lexical units are inseparable and written in one single word. They are, however, not the result of a word formation process but rather fossilized phrases. This can be seen in the fact that they can contain inflected material instead of stem forms, such as lasten (pl.dat.) in zulasten, dem (dat.sing.) in demzufolge or möchte (1./3.pers.sing.pres.act.) in Möchtegern. Also, they retain phrasal stress. Contrary to compounding, the formation of such units is unsystematic and cannot be predicted. Thus, they are lexical but not morphological units. Accordingly, if we rely on the properties of [± lexical] and [± morphological] only, univerbations are no different from MWEs (see below). However, due to their inseparability and solid spelling they are generally considered words.6

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4 Linking elements in German are not inflectional elements although some of them have evolved diachronically from inflectional affixes, cf. footnote 6.

5 It can be observed that German language users sometimes write compounds as two separate words (cf. Scherer 2012, for instance) and it has been speculated that this might be an increasing tendency due to influence from English. This breaks the official German spelling rules, however.

6 From a diachronic perspective, it can be seen that a particular type of univerbation forms a close link between MWEs and nominal compounds. In addition to compounds proper that can be
MWEs, according to this first sketch, are [+ lexical] and [− morphological] which means that they are formed syntactically. Following definitions of MWEs as advanced by Gries (2008) or Burger (2015), for instance, MWEs are characterized as syntactic patterns that consist of a minimum of two words (but not longer than a sentence), forming either a lexical or a grammatical pattern. They may but need not exhibit idiosyncratic semantic and/or syntactic properties, i.e., MWEs may but need not have a non-compositional meaning and the constituent parts may but need not be in a fixed order, immediately adjacent or syntactically deficient. For example, the MWEs in (1a) have a non-compositional meaning, but fully regular syntactic properties (that is, the VP *ein Fass aufmachen* can be inflected as with any other VP, and can be passivized or modified, e.g., *ein großes Fass aufmachen* (lit. to open a big barrel, ‘make a big fuss’). The examples in (1b), on the other hand, have a fully compositional meaning. Finally, the examples in (1c) have a non-compositional meaning and they exhibit special syntactic properties, that is, the order of words is fixed and they cannot be separated, determiners are lacking and the adjective *gut* ‘good’ is uninflected (a historic relic) which is, according to present-day syntax, ungrammatical.

(1a) *ein Fass aufmachen* (lit. to open a barrel, ‘make a fuss’),7 *um ein Haar* (lit. by a hair, ‘very nearly’)

(1b) *Dank sagen* (lit. say thanks, ‘thank’), *leere Menge* (‘empty set’), *in Zusammenhang mit* (‘in connection with’)

(1c) *Knall auf Fall* (lit. bang on fall, ‘suddenly’), *auf gut Glück* (lit. on good luck, ‘on the off chance’)

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7 The German MWE is the result of folk etymology relating to the English verb *fuss*, due to the phonological similarity of English *fuss* and German *Fass* ‘barrel’ and the equivalence between German *(auf)machen* and English *make*. 

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found since Old High German (and before), a second type of compounds, the so-called ‘genitive compounds’, or, in Grimm’s terminology, “uneigentliche Komposita” (‘false compounds’) arise sporadically in Old High German and Middle High German times and become more frequent later on. They are univerbations of a prenominal genitive construction and, for this reason, contain genitive case marking. In Early High German, this pattern becomes productive and collapses with the older compound type. As a result, the former case markings are reanalyzed as linking elements, and the newly coined forms are no longer conceived of as univerbations, thus (former) syntactic patterns, but as word formation proper (cf. Pavlov 1983, for instance). For instance, the genitive construction *(des) menschen herz* (‘(the) human’s heart’) is reanalyzed as a nominal compound *Menschenherz* (‘human heart’) and the former suffix -*en* (SING GEN) is reanalyzed as a linking element.
As formal and semantic irregularities are not defining criteria of MWEs, their identification hinges crucially on (a) the function of the combination of words as a semantic unit and (b) the frequency of occurrence, which means that the frequency of occurrence of the particular combination of words is larger than expected.\textsuperscript{8,9}

This definition (and many similar approaches in the literature) have led to a rather broad view of MWEs that encompasses many different types of lexical phrasal units, some of which are not regarded as MWEs in older and more traditional phraseological theory. In particular, collocations which may have a fully compositional meaning, are nowadays usually regarded as MWEs, e.g., \textit{billige Kopie} (‘cheap copy’), \textit{den Kopf schütteln} (‘to shake one’s head’), \textit{eine Entscheidung treffen} (lit. to hit a decision, ‘to make a decision’). Presumably, they make up a large part of all MWEs in German. Another group are partially fixed (or: lexically filled) patterns, that is, patterns that contain open slots that can be filled with various lexical items to produce new MWEs, cf. (2):

\begin{align*}
\text{(2a)} & \quad [X \text{ um } X] ‘X by X’: \text{Stein um Stein} (‘brick by brick’), \text{Jahr um Jahr} (‘year by year’)
\text{(2b)} & \quad [\text{Wer } X (\text{der}) Y] (‘he who X, Y’): \text{Wer rastet, der rostet} (‘He who rests, rusts’), \\
& \quad \text{Wer suchet, der findet} (‘He who seeks, finds’), \text{Wer schreibt, der bleibt} (‘He who writes, remains’)
\end{align*}

The observation that some phrasal patterns are systematically and productively used to form lexical units can already be found in early traditional German phraseological research (cf. Häusermann 1977; Fleischer 1982). Quite influentially, the idea of productive syntactic patterns in the lexicon has been discussed in detail in cognitive and constructionalist frameworks (cf. Fillmore/Kay/O’Connor 1988; Jackendoff 1997b; Kay/Fillmore 1999, among many others), often in connection with the term ‘constructional idiom’ (Jackendoff 1997a; Jackendoff 2002; Booij 2002). Finally, and especially in connection with recent developments in usage-based and corpus linguistics and rapidly increasing corpus sizes, the idea emerged that the vast majority of MWEs are indeed realizations of abstract

\textsuperscript{8} The first criterion can serve to exclude frequently co-occuring sequences such as \textit{and the}, which obviously do not form a semantic unit. Yet, it is not clear what exactly a semantic unit is; Gries (2008: 6), for instance, defines it as “to have a sense just like a single morpheme or word”. This, however, seems too narrow given the meaning of proverbs or (some) verbal idioms such as \textit{ein Fass aufmachen / make a fuss}.

\textsuperscript{9} Other properties which are in principle compatible with these properties make use of the psycholinguistic dimension, e.g., psycholinguistic stability or retrieval as a whole.
patterns, with numerous relations between these patterns (e.g. Steyer 2015, 2016). Crucially, the idea of abstract MWE patterns implies that there are also occasional MWEs, that is, nonce-MWEs that are formed ad hoc, and even potential MWEs that might be formed according to these patterns but have yet to do so, just as is the case with occasional and potential compounds. Obviously, such ideas challenge the original idea of MWEs as idiosyncratic stored items in the lexicon. We will come back to this issue in Section 4.

For the purpose of the present chapter, some constraints on the range of MWEs to be discussed are in order. First, MWEs are usually also thought to encompass proverbs, sayings, quotations, and routine formulas, e.g. Good Morning or Happy Birthday. However, these kinds of MWEs do not denote referents (either objects or events), but rather have a propositional function due their sentence character, or, in the case of routine formulas, a purely pragmatic (communicative) function. As the present discussion focuses on MWEs that parallel compounds, they are excluded in what follows. Similarly, as will be discussed in more detail in Section 3, we will not be concerned with MWE patterns that systematically lack equivalent compound forms.

2.2 Proportion of MWEs and compounds in the German lexicon

Given the potential functional overlap between MWEs and compounds, the questions of what share they hold in the (German) lexicon and whether any regularities can be observed concerning their distribution arise. Obviously, the answers are determined by various factors: first, they crucially hinge on the definition of MWEs and the question of which combinations are considered MWEs. Furthermore, we might ask how to deal with occasional and possible/potential formations, i.e. concrete patterns that might be instantiated from abstract MWE patterns.

Most remarks in the literature on the distribution of MWEs and compounds relate to lexical categories. It has often been assumed that verbal MWEs make up the largest part of German MWEs (e.g., Burger 2001: 34). Nominal MWEs are usually considered much less frequent (e.g., Barz 1996: 131, 2007: 28; Donalies 2008: 308). According to Fleischer (1996a: 152, 1997a: 17–20), MWEs are most frequent in the verbal and least frequent in the adjectival domain, with the nominal and the adverbial domain in between. Fleischer (1996b: 336) and Barz (2007: 28) relate this distribution to differences in productivity of compounding (or word-formation in general) in the respective lexical categories: whereas nominal compounding is highly productive in German, there are considerably less word-formation patterns in the verbal domain and verbal compounding in particular is consid-
Composunds and multi-word expressions in German

75

ered marginal or non-existent. In addition, it has been observed that the distribution also depends on register: nominal MWEs seem to be much more frequent in terminology, e.g., medical language or professional titles, than in general usage (Möhn 1986; Fleischer 1996a; Barz 2007).

However, these assessments about the distributions among the lexical categories crucially depend on what counts as an MWE. “Classical” verbal idioms such as *jdn. auf die Palme bringen* (lit. bring so. on the palm, ‘drive so. nuts’) stand out for their semantic and morphosyntactic idiosyncrasies and are therefore more often perceived as MWEs. Collocations, on the other hand, in particular nominal ones, have not always been recognized as fixed units, as many of them have a fully compositional meaning. They have often not been included in dictionaries or phraseological lists. However, inclusion in such dictionaries or lists usually forms the basis for the sort of assessment mentioned above. Thus, given a broader view on MWEs like that introduced in the preceding section, it seems hard to say whether (or to what extent) a distribution of compounds and MWEs by lexical category can be established at all.

2.3 Relation between MWEs and compounds in the German lexicon: complementarity or competition?

An old and widespread idea about the lexicon is that it usually does not contain real synonyms or doublets which means that the co-existence of compounds and MWEs with identical meanings and grammatical function/distribution is not expected (for discussion cf. Haiman 1980, for instance). It has also been assumed that real doublets only exist between terminology and general vocabulary (Barz 1996: 132). However, this view is probably too strict. Obviously, there are also examples of “real” doublets within the general lexicon, some of the (often cited) examples being *Schwert des Damokles / Damoklesschwert* (‘sword of Damocles’), *Grüntee / grüner Tee* (‘green tea’), *schwarzer Markt / Schwarzmarkt* (‘black market’), *halbherzig / mit halblem Herzen* (‘half-hearted’), although in some cases there are clear differences in the frequency of use of both forms.\(^{10}\) Also, there might be regional variation concerning the use of an MWE vs. compound.

As to the differences, MWEs are often assumed to be more expressive than parallel morphological units, e.g., *jdn. übers Ohr hauen* (lit. hit so. across the ear)

\(^{10}\) For instance, Schuster (2016: 195) shows that the distribution of *schwarzer Markt* vs. *Schwarzmarkt* (‘black market’) has changed considerably in the period of 1946–2009 [ZEIT corpus], with an initial proportion of the compound of about 10% and 90% at the end.
vs. *jdn. betrügen*, both meaning ‘cheat so.’. Expressivity is often due to metaphorical meaning, e.g. *grüne Welle* (lit. green wave, ‘phased traffic lights’), *blondes Gift* (lit. blond poison, ‘blonde bombshell’), but it may also arise from phonological-prosodic properties, like rhyme or alliteration, as in binomial constructions such as *null und nichtig* (‘null and void’), *hegen und pflegen* (‘nurture’) (cf. Fleischer 1997b: 164 f.). However, although expressivity and imagery might be the initial driving forces for the coinage of an MWE, these properties might wear out over time and the forms are no longer perceived as particularly expressive (cf. Fleischer 1997a). Furthermore, compounds might also have a metaphorical meaning, such as *Dickmops* (lit. fat pug, ‘fat person, fatty’), *Baumdiagramm* (‘tree diagram’), *Kuchenhimmel* (lit. cake heaven, ‘place that serves excellent cake’).

The question of whether the relation between compounds and MWEs is to be characterized as complementary or competitive depends on the ideas about the status and the formation of MWEs. According to the traditional view, MWEs are not formed by abstract patterns (or rules) in the way compounds are. Rather, their emergence has been regarded as a secondary, purely semantic process of idiomatization (e.g. metaphoric or metonymic) of syntactic units, which might in turn have an effect on the morphosyntactic properties of the unit in question (e.g., Fleischer 1997a: 11; Barz 2007: 31). Barz (1996: 132, 2007: 30) regards MWEs as less economic than complex morphological units due to their complexity, i.e. the number of constituent parts, although they are often semantically more explicit since the relation between the constituents is morphosyntactically expressed, unlike with compounds. A typical example is an adjectival phrasal simile such as *so rot wie Blut* (‘as red as blood’) and the corresponding adjectival compound *blutrot* (‘blood-red’) (cf. also Section 3.4). The comparison between ‘blood’ and ‘red’ is expressed explicitly in the phrase while this relation is implicit in the compound and must be inferred by the reader. At the same time, the morphological counterpart is structurally less complex than the phrasal unit.

According to this view, MWE formation can be regarded as complementary to compounding and is employed if compounding is not available (cf. Section 2.2) or (at least in some cases) for the purposes of increasing expressivity (e.g., Fleischer 1997b). However, on a broader view on MWE formation that acknowledges – in addition to sporadic, secondary idiomatization of phrases – the (widespread) existence of more abstract MWE patterns, both with or without a compositional meaning, MWE formation is not complementary to compounding but rather competing or at least on an equal footing. If this is indeed the case, we ought to question whether more can be said about the distribution of MWEs and compounds in the lexicon than the preferences concerning lexical category. In other words: Are there more (or other) factors influencing or determining the choice between both patterns?
In recent years, several studies have approached this question for German with a focus on nominal units, both A+N and N+N. The study by Schlücker/Plag (2011) adopts an analogical approach, investigating the idea that the choice between MWEs and compounds depends on the individual lexemes involved. The study examines the formation of new A+N combinations. It shows that there are no general preferences for coining new A+N lexical units as either MWE or compound, but that the choice depends on the way the individual adjectives and nouns have been used before, i.e. either as a compound (e.g. voll (‘full’): Vollbart ‘full beard’, Vollmond ‘full moon’) or an MWE (e.g. offen ‘open’, offenes Geheimnis ‘open secret’, offenes Ohr ‘sympathetic ear’) or both (e.g. rot (‘red’): Rotwein ‘red wine’, Rotkohl ‘red cabbage’; rote Bete ‘beetroot’, rote Grütze ‘red fruit jelly’). Put simply, constituents that have previously been used in compounds tend to be realized as compounds when coining new combinations, and those that have previously been used in MWEs tend to be realized as MWEs. Thus, the choice between the forms is determined by the existence and number of related similar constructions in the mental lexicon of the language users. This analogical effect has been shown to be stronger for adjectives than for nouns. There is also evidence for the co-existence of both patterns as well as for analogical effects from the diachronic perspective. Studying the diachronic development of German A+N sequences since 1700, Schuster (2016) shows that both patterns have continuously co-existed and that there is no clear trend towards either of the patterns or the disappearance of the other. Again, the choice for either an MWE or a compound seems to depend on individual adjectives. Thus, some adjectives consistently form A+N phrases whereas others always occur in compounds. A third group is productive in both patterns which also leads to the formation of doublets, e.g. rotes Wild – Rotwild (‘red deer’) which both can be found in 19th century dictionaries (cf. Schuster 2016: 278). It is only for the third group of adjectives that a diachronic tendency towards compounding can be observed, as in the case of Rotwild which is the only acceptable form in present-day language.

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11 The same holds for the noun; examples are not provided for reasons of space.
12 In addition, morphological and semantic properties also play a role in the determination of the form, cf. Schlücker/Plag (2011); Schlücker (2014). Regarding semantics, there is a complementary distribution of metaphorical and metonymic A+N combinations such that the former are always realized as MWEs (e.g., roter Faden: lit. red wire, ‘thread’) and the latter (almost) always as compounds (e.g., Blauhelm ‘Blue helmet’). However, the bulk of A+N combinations have neither a metaphorical nor a metonymic meaning and are found in both forms.
13 To be sure, the phrase rotes Wild is fully grammatical, as it is formed according to the syntactic rules for a nominal phrase with an adjectival modifier in present-day German. It is however not a conventional lexical unit denoting the concept of red deer, and thus no MWE.
Presupposing the existence of doublets in present-day language, Schlücke/Hüning (2009) (on A+N combinations) and Roth (2014, 2015) (on A+N and N+N combinations) examine the factors that determine the choice of use of either of the forms. Based on corpus data, these studies show that, among other things, the context may influence the choice of use of either form. For instance, if an A+N unit is preceded by another adjectival modifier, speakers prefer compounds over MWEs, obviously to avoid the immediate sequence of two syntactic adjectival modifiers (e.g., heißer Grüntee vs. heißer grüner Tee ‘hot green tea’). Similarly, sequences of two postnominal genitive attributes are avoided in favor of compounds. On the other hand, in a compound the modifier cannot be specified. Specification of the modifier thus forces the speaker to use the phrase, cf. sehr extreme Position vs. *sehr Extremposition (‘very extreme position’), Abbau von 500 Stellen vs. *500 Stellenabbau (‘reduction of 500 jobs’).

Furthermore, Roth (2014, 2015) also demonstrates the influence of sentence length. It is known that long sentences generally contain more long words than shorter sentences. In accordance with this idea, compounds are shown to be used more often than phrases in longer sentences. Also, compounds appear more often in the context of other long words in the same sentence. Finally, within the same text consistence of use seems to play an important role, thus speakers tend to consistently use either the compound or the MWE.

In sum, it seems that there are competing abstract patterns as well as specific doublet forms and that, in addition to factors such as expressivity or register, the actual use in a particular context as well as analogical relations are also factors determining their distribution of use.

3 Overview of German MWEs and compounds

This section provides an overview of MWEs and compounds in German, classified according to lexical/syntactic category and syntactic function, respectively. Although it is doubtful whether a reliable general assessment of the quantitative

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14 Schlücke/Hüning (2009) deal for the most part with Greek- and Latin-based relational adjectives such as sozial ‘social’ and optimal ‘optimal’. Roth’s (2014, 2015) choice of comparable patterns (i.e. compounds and collocations) relies on the quantitative method of distributional semantics which determines the meaning of an expression on the basis of its context in an automatical procedure. Expressions with very similar or identical lexical constituents in the context are considered semantically equivalent, although it is obvious that subtler meaning differences cannot be detected in this way.
distribution of MWEs and compounds according to lexical category can be made (cf. Section 2.2), it seems justified to say that at least some categories differ greatly with respect to the productivity and the use of MWEs and compounds. Thus, there are categories where either compounding or MWE formation prevail, and other cases where they co-occur. Contrary to other languages, however, in most cases German allows a clear demarcation between MWEs and compounds on formal grounds.

3.1 Prepositions and conjunctions

German has various prepositional MWEs, such as auf Grund ‘due to’, in Anbetacht (‘in consideration of’). Some of them have morphological counterparts, in particular derivatives formed by the suffix -lich (‘belonging to X’), e.g. in Bezug auf – bezüglich (‘pertaining to’), in Hinsicht auf – hinsichtlich (‘regarding’). There are also morphological counterparts that resemble compounds, often consisting of a P+N sequence, e.g. aufgrund (lit. onP groundN, ‘due to’), anhand (lit. atP handN, ‘on the basis of’). They are, however, not the output of compounding but the result of univerbation, that is, they are former phrases that have become fixed and, as a result, are now written as one word (cf. Section 2.1). This is also obvious from the phrasal stress pattern of these forms (stress on the nominal head, e.g. aufgrund), in contrast to genuine P+N compounds which have modifier stress, e.g. Vórdach (lit. in front ofP roofN, ‘porch roof’). In many cases, this transition is still in progress which means that both writing norms officially co-exist, e.g. zu Gunsten – zugunsten (‘in favor of’). They are, for the reason just mentioned, no instances of MWE/compound doublets however. The same holds for grammatical MWEs such as conjunctions, e.g. wenn auch (‘although’). Although there are a few non-phrasal counterparts, such as wenngleich (‘albeit’), these are not compounds but univerbations.

3.2 Adverbs and adverbials

Fleischer (1997b: 149–153) stresses that adverbial MWEs display great structural variety. Many of them contain prepositions. Some frequent patterns are given in (3). Note that these examples are diverse regarding syntactic category (so some are structurally equivalent to the prepositional MWEs in the previous section, with others equivalent to the binomials discussed in Section 3.5). The various forms are grouped together due to their common adverbial function, in order to compare them with adverbial word-formation.
Prepositional phrases: *auf Anhieb* (‘straightaway’), *in der Tat* (lit. in the deed, ‘indeed’), *unter vier Augen* (lit. under four eyes, ‘in private’), *von Hause aus* (lit. from home out, ‘by nature’)

Various kinds of binomials:

(3b) Conjoined nouns: *Tag und Nacht* (‘day and night’), *bei Nacht und Nebel* (lit. at night and fog, ‘in secrecy’)

(3c) With prepositions: *von Zeit zu Zeit* (‘from time to time’), *von Kopf bis Fuß* (‘from top to toe’), *von Haus zu Haus* (‘from house to house’)

(3d) Identical constituents (adverbs): *durch und durch* (‘out and out’), *nach und nach* (‘little by little’)

It is obvious (and has also been discussed by Fleischer 1997b) that many of these MWEs are instantiations of partially fixed abstract patterns (cf. Section 4).

Adverbial compounding, on the other hand, is highly restricted and often not recognized as a word formation type on its own. Adverbial compounds are only found with a handful of adverbs and prepositions, in particular directional adverbs such as *hin* ‘to, there’ and *her* ‘to, there’ (cf. Fleischer/Barz 2012), e.g. *herauf* (lit. there up, ‘up’), *hinüber* (lit. there over, ‘over’), *dorthin* (lit. thereto, ‘there’), *daneben* (lit. there next, ‘alongside’). However, in some (though not all) cases these forms seem to be univerbations rather than compounds proper. Also, contrary to genuine compounds, the head cannot be clearly identified in most cases and they are not right-headed, as is usual in German. These restrictions on adverbial compounding can explain the enormous amount and structural diversity of adverbial MWEs, in particular given the fact that adverbial derivation is also restricted to a handful of affixes. For the domain of adverbs and adverbials, this supports the idea of MWE formation as a complementary device to compounding.

### 3.3 Complex verbs

The verbal domain is usually regarded as the most diverse and extensive domain of German MWE formation. Verbal MWEs (the classical “idioms”), either with a fully or a partially non-compositional meaning, such as *bei jdn. einen Stein im Brett haben* (lit. have a stone in so.’s plank, ‘be in so.’s good books’) or *den Wald vor lauter Bäu- men nicht mehr sehen* (‘not see the wood for the trees’) have long been at the core of phraseological research. In addition, there are various abstract verbal MWE patterns and verbal collocations (mostly N+V). However, there are no corresponding verbal MWE and compound patterns, due to the absence of verbal compounding in German. We will therefore only briefly discuss some patterns, in particular in con-
nection with the question of the demarcation between syntactic and morphological verbal units.

The first one are light verb constructions. They are either [NP V]_vp or [PP V]_vp sequences. All of them have corresponding morphological forms, either simplex or derived, but no compounds. The correspondence is also obvious as most of them (though not all) contain a corresponding lexical item, e.g. einen Beschluss fassen/beschließen (lit. grab a decision, ‘decide’), zur Anzeige bringen / anzeigen (lit. bring to record, ‘report’), but in Kenntnis setzen / informieren (lit. set in knowledge, ‘inform’). The phrasal and the morphological forms are equal in meaning, but often differ in argument structure. There are also differences in register as the phrasal constructions are more formal.

Another group are particle verbs. Particle (or: phrasal) verbs such as anlächeln ‘smile at’, abschicken ‘send off’, austrinken ‘drink up’ have been widely discussed for German as well as for other Germanic languages in connection with their unclear status as either morphological or phrasal entities (cf. Los et al. 2012; Dehé 2015; McIntyre 2015; Booij, this volume; a.o.). The central problem is that they are syntactically and morphologically separable in some contexts, e.g. Er schickt den Brief ab. (‘He sends the letter off’); past participle: abgeschickt (‘sent off’), i.e. with the ge-prefix in the middle of the word rather than at the beginning, as usual. Inseparability, however, is usually considered a basic property of morphological units. Interestingly, it seems that German particle verbs are mainly discussed in morphological research (often in connection with the question of whether they form a word formation pattern on their own or not) but are rarely considered in phraseological research. For English, on the other hand, they are quite naturally also included in phraseological work, cf. Gries (2008) and Ramisch (2015), for instance.\(^\text{15}\)

Particles in German particle verbs often have prefixal counterparts, but there are also particles that are homonymous to prepositions, adverbs, adjectives, and nouns (cf. Fleischer/Barz 2012). Thus, even forms like herumbrüllen (lit. yell around, ‘yell’), schönreden (lit. talk st. beautiful, ‘sugarcoat’) or totarbeiten (lit. dead work, ‘work to death’) that on the surface look like compounds since they involve lexical stems rather than prefixes, are in fact particle verbs since they are separable.

For this reason, particle verbs have often been regarded as problematic regarding the demarcation between MWEs and compounds/morphological units. Whereas the cases discussed so far in this chapter raise the question of the way in which (clearly) morphological and (clearly) syntactic lexical patterns relate to

\(^{15}\) However, Moon (1998) argues against the classification of particle verbs as verbal MWEs in English.
each other, they rather demand a solution for the fact that there are also interme-
diate constructions. We will come back to the issue of intermediate construc-
tions in Section 3.5 and 4.

Finally, another unclear, intermediate group are N+V patterns of the type *Rad-
fahren / radfahren* (‘ride a bike’), *brustschwimmen* (‘breaststroke’) or *Eis laufen /
eislaufen* (‘ice-skate’). They have been widely discussed in the literature, regard-
ing both their orthography and their morphosyntactic properties. However, con-
trary to particle verbs, they do not seem to form a homogeneous group. Thus,
several co-existing subtypes of these N+V patterns have been identified, with dif-
ferent analyses as either verbal compounds, backformations or incorporation (cf.
Fuhrhop 2007, among many others).

### 3.4 Adjectival compounds and MWEs

Häcky Buhofer et al. (2014) list numerous adjectival collocations, mostly an adject-
ive preceded by a modifier (adverb, adjective or other), cf. (4):

(4)  *streng geheim* (lit. strictly secret, ‘top secret’), *bitter nötig* (‘urgently
necessary’), *geradezu klassisch* (‘almost classical’), *verschwindend klein*
(‘vanishing small’), *spielend leicht* (lit. playing easy, ‘easily’), *furchtbar
traurig* (‘terribly sad’), *immens wichtig* (‘immensely important’)

The modifiers in these phrases express gradation, i.e. they either intensify or
diminish the property denoted by the adjective. A gradational meaning can also
be found in adjectival compounds, as those in (5).

(5)  *dunkelrot* (‘dark red’), *tiefrot* (lit. deep red, ‘bright red’), *heilfroh* (lit.
salvation glad, ‘really glad’), *stinkfaul* (lit. stinking lazy, ‘bone-idle’),
*grundverkehrt* (‘fundamentally wrong’), *hochbegabt* (‘highly talented’)

However, real doublets are rare, e.g., *schwerkrank – schwer krank* (lit. heavily ill,
‘critically ill’). In addition to such compounds having a gradational meaning,
adjectival compounds very often have a determinative meaning, that is, the mod-
ifier specifies the property denoted by the adjectival head, often, though not
always, in a comparative way, cf. (6).

(6)  *graublau* (‘grey-blue, powderblue’), *hautnah* (lit. skin close, ‘very close’),
*schneeblind* (‘snow-blind’), *butterweich* (lit. butter soft, ‘beautifully soft’)

Thus, the morphological and the syntactic units discussed above only partially overlap in the semantically restricted domain of gradation and cannot generally be regarded as competing patterns.\textsuperscript{16}

In addition to the adjectival collocations as in (4), there are also partially fixed MWE patterns in the adjectival domain. One of them are adjectival phrasal similes as in (7) (cf. Burger 2015: 56f.; Hüning/Schlücker 2015).\textsuperscript{17} It is a typical example of a partially filled MWE. The property denoted by the adjective is – by means of the comparative conjunction \textit{wie} ‘as’ – compared to a reference value provided by the noun.

(7) \([(\text{so}) \text{A wie (ein) N}] [(\text{as}) \text{A as (an) N}]): \text{so weich wie Seide} (‘as soft as silk’)

Interestingly, the same comparison can also be expressed by an N+A compound, as mentioned above, e.g. \text{seidenweich} ‘silky smooth, as soft as silk’, cf. (6). Thus, it seems that these are examples of equivalent morphological and syntactic lexical patterns which in turn raises the question of the relation between the patterns and the distribution of the specific forms.\textsuperscript{18} First, it seems that the formation of comparative compounds is more restricted than that of phrasal similes. There are plenty of phrasal comparisons, both with a compositional and a non-compositional meaning, that do not allow the formation of a corresponding compound, cf. (8).

(8) \([(\text{so}) \text{stumm wie ein Fisch} / *\text{fischstumm} (\text{lit. as mute as a fish, ‘as mute as a maggot’})]

\([(\text{so}) \text{sanft wie Regen} / *\text{regensanft} (‘as soft as rain’)]

\textsuperscript{16} For some examples in (5) and (6) it may be a matter of debate whether they only have a gradational or a determinative meaning or both, e.g. \text{dunkelrot} (‘dark red’). The crucial point here is, however, that the determinative meaning is not available for the syntactic pattern and that for this reason there is only partial overlap between the morphological and the syntactic pattern.

\textsuperscript{17} Adjectival binomials form another pattern, cf. (i). However, nominal, verbal and adverbial binomials seem to be much more frequent than adjectival ones. Yet another pattern is given in (ii), cf. Fleischer (1997b: 149). However, the patterns do not have a direct morphological counterpart, neither regarding form nor semantics.

(i) \([\text{A und A}] ([\text{A and A}]): \text{fix und fertig} (\text{lit. fix and ready, ‘beat, strung out’}), \text{still und leise} (‘silent and quiet’)

(ii) \([\text{zum + infinitive + A]} ([\text{to the + infinitive + A}]): \text{zum Weinen schön} (\text{lit. to the crying beautiful, ‘movingly beautiful’}), \text{zum Bersten voll} (\text{lit. to the bursting full, ‘full to bursting’})

\textsuperscript{18} Interestingly, adjectival phrasal similes and corresponding N+A compounds do also exist in other languages (cf. Finkbeiner/Schlücker, this volume), such as Dutch (cf. Booij, this volume), Italian (cf. Masini, this volume), and Finnish (cf. Hyvarinen, this volume).
(so) dumm wie Brot / *brotdumm (lit. as dumb as bread, ‘as thick as brick’)
(so) frech wie Dreck / *dreckfrech (lit. as cheeky as dirt, ‘as bold as brass’)

An obvious explanation would be that the formation of the compound is blocked due to the existence of the MWE, in line with usual assumptions of non-existence of synonymy in the lexicon. This explanation is not convincing, however, given the existence of numerous doublets as those in (9):

(9)  (so) weich wie Seide / seidenweich (‘as soft as silk’)
     (so) weiß wie Schnee / schneeweiß (‘snow-white’)
     (so) hart wie Stein / steinhart (‘rock-hard’)
     (so) stark wie ein Bär / bärenstark (lit. as strong as a bear, ‘strong as an ox’)

On the other hand, there are also compounds that lack corresponding phrasal comparisons. In these cases, the phrasal expressions are not ungrammatical but are not conventionalized lexical units and therefore much rarer, as can be seen from corpus data, cf. (10).19

(10)  kirschrot [586] / rot wie eine Kirsche [6] (‘cherry-red’)
     zitronengelb [832] / gelb wie eine Zitrone [7] (‘lemon yellow’)
     blitzschnell [8.585] / schnell wie {ein/der} Blitz [63] (‘as quick as a/the flash’)

The distribution of forms is also dependent on the context, as discussed for A+N sequences in Section 2.3. Whereas both patterns can be used predicatively or adverbially, only compounds can occur in attributive position. Thus, although the phrasal pattern might be more expressive, especially since it also allows nonsensical, apparently unmotivated comparisons which compounds generally do not (e.g. frech wie Dreck, dumm wie Brot, cf. (8)),20 compounds are more versatile concerning their syntactic distribution.

Furthermore, it has been assumed that both the phrasal and the morphological pattern have developed a semantic subpattern with an intensifying rather than a comparative meaning (cf. Hüning/Booij 2014; Hüning/Schlücker 2015). Thus, in cases like hart wie Stein / steinhart (‘rock-hard’), stark wie ein Bär / bärenstark (lit. as strong as a bear, ‘strong as an ox’), the intensifying rather than a comparative meaning (cf. Hüning/Booij 2014; Hüning/Schlücker 2015). Thus, in cases like hart wie Stein / steinhart (‘rock-hard’), stark wie ein Bär / bärenstark (lit. as strong as a bear, ‘strong as an ox’), the intensifying rather than a comparative meaning.

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19 Counts are from all corpora available through www.dwds.de.
20 A counterexample of a nonsensical comparison in a compound is rotzfrech (lit. cheeky as snot, ‘impudent’).
stark (lit. as strong as a bear, ‘strong as an ox’) the noun does not provide an actual measure for comparison but rather functions as an intensifier (‘very hard’, ‘very strong’). This intensifying meaning is available for both phrasal similes and compounds, although it is not entirely clear under which condition comparative patterns develop an intensifying meaning. Importantly, neither the phrasal nor the morphological pattern do always have this intensifying meaning. For instance, the adjective weich ‘soft’ occurs in numerous comparative patterns, both phrasal and morphological, and all of them have a comparative rather than an intensifying meaning. More specifically, two subgroups can be observed, one relating to the softness of the surface and the other to the softness of the substance, cf. (11)–(12).

surface

(11a) seidenweich, samtweich (‘silky smooth’, ‘velvety’)
(11b) (so) weich wie {Seide / Samt} (‘as soft as {silk / velvet}’)

substance

(12a) butterweich, gummiweich, wachsweich, watteweich
(‘buttersoft’, ‘as soft as rubber’, ‘as soft as wax’, ‘cotton-soft’)
(12b) (so) weich wie {Butter / Gummi / Wachs / Watte}
(‘as soft as {butter / rubber / wax / cotton}’)

In these cases, the various measures of comparison are literally present, thus samtweich is different from seidenweich in the way velvet is different from silk. In particular, the groups in (11) and (12) have clearly different meanings and cannot be used interchangeably. It might then be concluded that an intensifying meaning can only develop if only one comparative measure is conventionalized, as in the case of hart (hart wie Stein / steinhart) and stark (stark wie ein Bär / bärenstark), and not several.21

21 There are also intensifying modifiers in compounds that have developed into a productive intensifying pattern such that the modifier has completely lost its literal meaning, often discussed in connection with the term affixoid. A case in point is the intensifier stock ‘stick’ which first occurred in morphological and phrasal comparisons such as stocksteif / steif wie ein Stock ‘as stiff as a stick’ but later, after having developed an intensifying meaning, was used as an intensifier of other, totally unrelated adjectives, e. g. stockdunkel (‘very dark’), stockbesoffen (‘very drunk’) (cf. Hüning/Booij 2014; Hüning/Schlücker 2015). The abovementioned example of grund- (‘ground’) (cf. (5)) seems to be a similar case.
These observations lead to the conclusion that phrasal similes and adjectival compounds are an example of the co-existence of corresponding phrasal and morphological lexical structures. They show that blocking as a principle controlling the lexicon does not seem to be as strong as sometimes assumed. Also, as both patterns share lexical material and semantic subgroups (comparative/intensifying) they cannot be regarded as complementary. Rather, it can be assumed that both patterns as well as their instantiations are related to each other via their constituents and their meanings. The choice between either form in the case of doublets as in (9), (11), and (12) is likely to be determined by expressivity (in favor of the phrasal structure) as well as syntactic flexibility and conciseness (favoring the compound), but also other factors determined by the actual context, e.g. sentence length (cf. Section 2.3).

3.5 Nominal compounds and MWEs

Nominal compounding, in particular N+N compounding, is without doubt the most frequent and productive type of compounding in German. However, nominal MWEs also come in a variety of forms, cf. (13) and (14) (cf. Burger 2001, for instance). Thus, contrary to what has been assumed in the literature nominal compounding and MWE formation do not seem to complement each other; in particular, it is not the case that MWE formation is poorly developed due to the obvious productivity of nominal compounding.

(13a) Postnominal genitives: \textit{Schlaf der Gerechten} (‘sleep of the just’), \textit{Geschenk des Himmels} (lit. gift from heaven, ‘godsend’), \textit{Macht der Gewohnheit} (‘force of habit’)

(13b) Prenominal genitives: \textit{des Rätsels Lösung} (lit. the puzzle’s solution, ‘the answer to this problem’)

(13c) Prepositional constructions: \textit{Dame von Welt} (lit. lady of world, ‘sophisticated woman’), \textit{Nerven aus Stahl} (‘nerves of steel’)

(13d) Close apposition: \textit{Häufchen Elend} (lit. heap misery, ‘picture of misery’), \textit{Vater Staat} (lit. father state, ‘Uncle Sam’)

(13e) Binomials: \textit{Grund und Boden} (lit. ground and soil, ‘property’), \textit{Sack und Pack} (‘bag and baggage’)

(14) \textit{A+N phrases:}

(14a) \textit{lahme Ente} (‘lame duck’), \textit{heißes Eisen} (lit. hot iron, ‘hot potato’), \textit{krumme Sachen} (lit. bent things, ‘criminal activities’)


Composund and multi-word expressions in German

(14b) *gelbes Trikot* (‘yellow jersey’), *echte Grippe* (lit. real flu, ‘influenza’), *schwarzes Brett* (lit. black board, ‘notice board’)

Some of them have a (fully or partially) non-compositional meaning, e.g. *lahme Ente* (‘lame duck’) or *Nerven aus Stahl* (‘nerves of steel’). Others differ from corresponding free phrases regarding their morphosyntactic properties. For instance, nouns in binomials do not occur with determiners (never inside the construction and only rarely before), which would be ungrammatical in a normal coordinative construction. Also, their order is not interchangeable, again contrary to free coordinative structures.\(^{22}\)

Prenominal genitives are no longer productive in present-day language (except with proper names and kinship terms) and thus are only found with fossilized forms.

Compared to the patterns in (13) and (14), those in (15) are more specialized regarding semantics and conditions of use:

(15a) N+A constructions: *Forelle blau* (lit. trout blue, ‘blue trout’), *Sonne pur* (lit. sun pure), *Rahmspinat tiefgefroren* (lit. cream spinach deep-frozen)

(15b) \[ein N₁ von einem/einer N₂\] (‘[an N₁ of an N₂]’): *ein Berg von einem Mann* (lit. a mountain of a man, ‘a man like a mountain’), *eine Null von einem Stürmer* (lit. a null of a striker, ‘a useless striker’), *ein Arsch von einem Professor* (lit. a butt of a professor, ‘an idiot of a professor’)\(^{23}\)

(15c) \[N₁ von N₂\] (‘[N₁ of N₂]’): *Salat von Flusskrebsen* (lit. salad of crayfish), *Gratin von Tomaten* (lit. gratin of tomatoes), *Suppe von Spinat und Bärlauch* (lit. soup of spinach and wild garlic)

The pattern in (15a) is characterized by a postponed uninflected adjective. Its use is highly restricted and productive only in advertising catalogues, as slogans, brand names, or product descriptions (cf. Dürscheid 2002). The pattern in (15b) is productive; it has an evaluative meaning and expresses a comparison of \(N₂\) to the reference value provided by \(N₁\). Thus, there is a mismatch between the semantic head of the construction (\(N₂\)) and the syntactic one (\(N₁\)). Finally, the pattern in (15c) can be described as a register-specific construction for haute cuisine language. Here, \(N₁\) must denote a dish and \(N₂\) an ingredient. This prepositional

\(^{22}\) This view is somewhat simplified as there does not seem to be a strict border between conventionalized binomials and free coordinative constructions. It can be observed that nouns in occasional binomials do not occur with determiners, but their internal order is interchangeable (cf. D’Avis/Finkbeiner 2013, for instance), so they might be regarded as in-between forms.

\(^{23}\) I owe the last two examples to Rita Finkbeiner.
construction is used instead of the compounds *Flusskrebssalat* ‘crayfish salad’, *Tomatengratin* ‘tomato gratin’, *Spinat-Bärlauch-Suppe* ‘spinach & wild garlic soup’ that are the usual (and only) way of expressing these concepts in everyday language.

The examples discussed above show that some of the nominal MWE patterns differ morphosyntactically from the corresponding free phrases. This also holds for the A+N phrases in (14). More specifically, some of them form an example for the existence of intermediate constructions, that is, constructions that are neither clearly phrasal nor morphological, similar to particle verbs (cf. Section 3.3). Two groups of A+N phrases can be distinguished. The first one (cf. (14a)) consists of phrases with a metaphorical meaning (either of the modifier alone or both modifier and head), e.g. *heißes Eisen* (lit. hot iron, ‘hot potato’). The special meaning of these forms requires the adjective and the noun to be unseparated. Thus, if there is an intervening adjective (e.g., *heißes gefährliches Eisen* ‘hot dangerous iron’) or if the adjective is used predicatively (*das Eisen ist heiß* ‘the iron is hot’) only the literal meaning is available. However, these phrases allow comparative forms and the modification of the adjective, just as free A+N phrases, e.g. *ein sehr heißes Eisen* (‘a very hot potato’). Thus, although the meaning of the adjective is metaphorical (e.g. ‘hot’ standing for ‘tricky’, ‘delicate’), it specifies the meaning of the nominal head and can as such be modified itself, just as in any regular A+N phrase. In the second group (cf. (14b)), in contrast, the adjective has a classifying function. It does not specify a property of the nominal head but rather identifies a subclass of the concept denoted by the head. For instance, a yellow jersey is not just a shirt that is yellow but the kind of shirt worn by the leader of the Tour de France race. Importantly, it is exactly this classifying meaning that is also a general characteristic of A+N compounds, e.g. *Gelbgold* (‘yellow gold’): a kind of gold that is an alloy of gold with silver, *Stummfilm* (‘silent film’): a kind of film without spoken words. Due to this classifying function, the adjective in classifying A+N phrases cannot be modified. The adjective serves to the identification of the subclass. This is a categorial property that is not gradable: either something belongs to the category of yellow jersey or not. Thus, neither intensification or comparative forms are allowed. Similarly, the adjectival modifier in A+N compounds can never be modified. Thus, if we compare metaphorical A+N phrases (as in (14a)) and classifying A+N phrases (as in (14b)), it becomes obvious that the former are clearly phrasal in nature while the latter have both phrasal and morphological features. The classifying A+N phrases allow syntactic rules of agreement and case assignment of the adjective (just like in any phrase and unlike adjectives in A+N compounds), and are meanwhile inseparable, with the adjectival precluding comparative forms and modification (as morphologically complex words, cf. A+N compounds). For this reason, it seems that classifying A+N
Compos unds and multi-word expressions in German

phrases constitute an intermediate construction. Following a proposal for the analysis of A+N phrases in Dutch in Booij (2010: Chapter 7), they can be analyzed as syntactic compounds, and thus as lexical items (N₀) with a complex internal syntactic structure (cf. Schlücker 2014: 173–187). With this analysis comes the idea that classifying A+N phrases are instantiations of a productive abstract pattern (or schema), and thus a phrasal pattern for the formation of new lexical entities, just like the morphological pattern of (A+N) compounding. Metaphorical A+N phrases, on the other hand, are idiosyncratic forms that result from the lexicalization (including semantic specialization) of individual regular A+N phrases.

4 Theoretical implications

In the past decennia of phraseological research it has become obvious that the existence of abstract, partially fixed phrasal patterns in the lexicon is not restricted to a handful of MWE patterns, such as binomials, but rather seems to be a fundamental characteristic of MWEs more generally. Such patterns are assumed to underlie MWEs both with and without a compositional meaning and both with and without deviant phonological, morphological, or syntactic properties.

The crucial point here is that under this view, MWE patterns are syntactic patterns in the lexicon, and thus are lexical patterns on a par with morphological ones. Booij (2002, 2010) argues that constructional idioms are syntactic expressions that function as alternatives to morphological expressions. In his definition, constructional idioms are

syntactic constructions with a (partially or fully) non-compositional meaning contributed by the construction, in which – unlike idioms in the traditional sense – only a subset (possibly empty) of the terminal elements is fixed. (Booij 2002: 302)

This definition can capture many pattern-like, partially-fixed MWEs as, for instance, in (2), (7), or (15b). In addition, it also covers other, more grammatical kinds of MWEs such as analytic causative constructions or analytic progressives (cf. Booij 2002, 2010). These are productive patterns with the same function as their morphological, synthetic counterparts and, just like these morphological counterparts, their productivity can be shown to be subject to certain restrictions.

24 For further details, including an analysis of the adjective as either A⁰ or AP, cf. Booij (2010: 176ff.) and Schlücker (2014: 177ff.).
Culicover/Jackendoff/Audring (2017) point to another parallel between morphological and MWE patterns. Obviously, not all MWEs are instantiations of a partially fixed pattern, for instance verbal MWEs that share syntactic structure (e.g., [V NP]_{vp} or [V NP PP]_{vp}) but do not have a common lexical element. Culicover/Jackendoff/Audring (2017) argue that many MWEs – both those with and those without fixed elements – display a fully regular syntactic behavior. So, for instance, in the case of classical verbal idioms such as *kick the bucket* or *sell [NP] down the river*, there are no differences concerning the morphosyntactic behavior between the idiomatic and the literal phrases except for their meaning (and, arguably, the morphosyntactic properties that result directly from this meaning, such as the non-passivizability of *kick the bucket* ‘die’). Other MWEs are lexically restricted, such as for instance *go/drive [NP] nuts/crazy/bananas/insane/*wild/*demented/*meshuga. The (non-)admissibility here is unpredictable with regards to the meaning of the MWE, and therefore has to be stored. The authors argue that the same contrast can be found in morphological patterns which may either be morphosyntactically unrestricted and therefore fully productive, as with the s-plural in English, or unsystematically restricted as is the case with several derivational affixes, leading to a restricted productivity or unproductivity of these patterns. Again, these restrictions must be stored. Thus, the resemblance Culicover/Jackendoff/Audring (2017: 14) identify between morphological and MWE patterns is that of the difference between what they call “relational” and “generative” patterns: Relational patterns are stored items that are related to more general patterns in the lexicon, and, via them, to similar stored items. Generative patterns are also relational, but in addition are productive and can be used to generate new expressions. Thus, morphological and MWE patterns are of a very similar nature in that they are both determined by the co-existence of relational and generative patterns.

One consequence that follows from this line of thought is the existence of ad hoc MWEs – that is, MWEs that are occasionally coined and used but not stored – but also the existence of potential MWEs, which are MWEs that fit the morphosyntactic and semantic specifications of a particular MWE pattern but which have not yet been realized, just as is the case with occasional and potential word formations. Empirically based research (cf., for German, Finkbeiner 2008; Steyer 2015, for instance) has provided ample evidence for this idea. However, it obviously fundamentally clashes with the notion of MWEs as stored items not only in traditional phraseological research but also in older “mainstream” generative grammar which views MWEs as a residual collection of idiosyncratic expressions stored in the lexicon.

Finally, against the background of the basic similarity between morphological and MWE patterns, it is quite possible to accept the idea of intermediate con-
structions that have both phrasal and morphological properties like the syntactic compounds discussed at the end of Section 3.5 (in addition to clearly morphological and clearly syntactic patterns). They can be regarded as a link or transitional category between morphological and syntactic lexical patterns. In other words, morphological and syntactic lexical patterns form a continuum and these intermediate constructions are situated in the middle.

In sum, treating MWEs in the way advocated here has a crucial impact on ideas about the structure of the lexicon and the division of labor between morphology and syntax.

5 Conclusion

This chapter has provided an overview of German MWEs from the perspective of relating MWEs and MWE formation to compounds and compounding. It has been shown that in German, MWEs for the most part can be clearly distinguished from compounds on formal grounds. This chapter has focused on MWEs that have – or at least could have in principle – corresponding compounds with a similar meaning and function. In general, it can be seen that the proportion of compounds and MWE differs between lexical categories. These differences – or at least some of them – can be explained by the idea about the avoidance of synonymous expressions in the lexicon. On the other hand, however, it has also become clear that there are numerous parallel and thus competing abstract patterns and even doublets on the level of specific forms.

From a theoretical perspective, it has been argued that MWEs should not generally be regarded as individual and idiosyncratic formations that are derived from “regular” syntactic phrases in a secondary process of idiomatization and lexicalization. Instead – and in accordance with numerous findings in recent literature – it can be assumed that abstract patterns underlie MWE formation and that, therefore, MWE formation can be regarded as being on a par with word formation. Thus, just as there are abstract morphological patterns for the formation of lexical units there are also syntactic ones.

References

Barz, Irmhild (1996): Komposition und Kollokation. In: Knobloch/Schaeder (eds.). 127–146.
Barz, Irmhild (2007): Wortbildung und Phraseologie. In: Burger, Harald et al. (eds.): Phraseology. Vol. 1. Berlin/New York: De Gruyter. 27–36.
Booij, Geert (2002): Constructional Idioms, Morphology, and the Dutch Lexicon. In: Journal of Germanic Linguistics 14, 4. 301–329.
Booij, Geert (2010): Construction morphology. Oxford/New York: Oxford University Press.
Burger, Harald (2001): Von lahmen Enten und schwarzen Schafen. Aspekte nominaler Phraseologie. In: Häcki Buhofer, Annelies/Burger, Harald/Gautier, Laurent (eds.): Phraseologiae Amor. Aspekte europäischer Phraseologie. Festschrift für Gertrud Gréciano zum 60. Geburtstag. Hohengehren: Schneider. 33–42.
Burger, Harald (2015): Phraseologie: eine Einführung am Beispiel des Deutschen. 5th ed. (= Grundlagen der Germanistik 36). Berlin: Schmidt.
Culicover, Peter W./Jackendoff, Ray/Audring, Jenny (2017): Multiword Constructions in the Grammar. In: Topics in Cognitive Science 9, 3. 552–568.
D’Avis, Franz/Finkbeiner, Rita (2013): “Podolski hat Vertrag bis 2007, egal, ob wir in der Ersten oder Zweiten Liga spielen.” Zur Frage der Akzeptabilität einer neuen Konstruktion mit artikellosem Nomen. In: Zeitschrift für germanistische Linguistik 41, 2. 212–239.
Dhé, Nicole (2015): 35. Particle verbs in Germanic. In: Müller et al. (eds.). 611–626.
Donalies, Elke (2008): Sandstrand, sandy beach, plage de sable, arenile, piaskowy plaża, homokos part. Komposita, Derivate und Phraseme des Deutschen im europäischen Vergleich. In: Deutsche Sprache 36, 4. 305–323.
Dürscheid, Christa (2002): “Polemik satt und Wahlkampf pur” – Das postnominale Adjektiv im Deutschen. In: Zeitschrift für Sprachwissenschaft 21, 1. 57–81.
Fillmore, Charles J./Kay, Paul/O’Connor, Mary Catherine (1988): Regularity and idiomaticity in grammatical constructions. The case of “let alone”. In: Language 64, 3. 501–538.
Finkbeiner, Rita (2008): Zur Produktivität idiomatischer Konstruktionsmuster. Interpretierbarkeit und Produzierbarkeit idiomatischer Sätze im Test. In: Linguistische Berichte 216, 4. 391–430.
Fleischer, Wolfgang (1982): Phraseologie der deutschen Gegenwartssprache. Leipzig: VEG Bibliographisches Institut.
Fleischer, Wolfgang (1996a): Phraseologische, terminologische und onymische Wortgruppen als Nominierungseinheiten. In: Knobloch/Schaeder (eds.). 147–170.
Fleischer, Wolfgang (1996b): Zum Verhältnis von Wortbildung und Phraseologie im Deutschen. In: Korhonen, Jarmo (ed.): Studien zur Phraseologie des Deutschen und des Finnischen II. Bochum: Universitätsverlag Brockmeyer. 333–344.
Fleischer, Wolfgang (1997a): Das Zusammenwirken von Wortbildung und Phraseologisierung in der Entwicklung des Wortschatzes. In: Wimmer, Rainer/Berens, Franz-Josef (eds.): Wortbildung und Phraseologie. Tübingen: Narr. 9–24.
Fleischer, Wolfgang (1997b): Phraseologie der deutschen Gegenwartssprache. 2nd ed. Tübingen: Narr.
Fleischer, Wolfgang/Barz, Irmhild (2012): Wortbildung der deutschen Gegenwartssprache. 4th ed. Berlin: Schmidt.
Fuhrhop, Nanna (2007): Verbale Komposition: Sind brustschwimmen und radfahren Komposita? In: Kauffer, Maurice/Métrich, René (eds.): Verbale Wortbildung im Spannungsfeld zwischen Wortsemantik, Syntax und Rechtschreibung. Tübingen: Narr. 49–58.
Gaeta, Livio/Ricca, Davide (2009): Composita solvantur: Compounds as lexical units or morphological objects? In: Gaeta, Livio/Grossmann, Maria (eds.): Compounds between syntax and lexicon. Special Issue of Italian Journal of Linguistics/Rivista di Linguistica 2, 1. 35–70.
Gries, Stefan Th. (2008): Phraseology and linguistic theory: a brief survey. In: Granger, Sylviane/Meunier, Fanny (eds.): Phraseology. An interdisciplinary perspective. Amsterdam/Philadelphia: Benjamins. 3–25.

Häcki Buhofer, Annelies et al. (2014): Feste Wortverbindungen des Deutschen. Kollokationenwörterbuch für den Alltag. Tübingen: Francke.

Haiman, John (1980): The Iconicity of Grammar: Isomorphism and Motivation. In: Language 56, 3. 515–540.

Häusermann, Jürg (1977): Phraseologie: Hauptprobleme der deutschen Phraseologie auf der Basis sowjetischer Forschungsergebnisse. Tübingen: Narr.

Hüning, Matthias/Booij, Geert (2014): From compounding to derivation. The emergence of derivational affixes through “constructionalization”. In: Folia Linguistica 48, 2. 579–604.

Hüning, Matthias/Schlücker, Barbara (2015): 24. Multi-word expressions. In: Müller et al. 450–467.

Jackendoff, Ray (1997a): The architecture of the language faculty. Cambridge, UK: Cambridge University Press.

Jackendoff, Ray (1997b): Twistin’ the night away. In: Language 73, 3. 534–559.

Jackendoff, Ray (2002): Foundations of language. Oxford: Oxford University Press.

Kay, Paul/Fillmore, Charles J. (1999): Grammatical constructions and linguistic generalizations: The What’s X doing Y? construction. In: Language 75. 1–33.

Knobloch, Clemens/Schaeder, Burkhard (eds.): Nomination, fachsprachlich und gemeinsprachlich. Opladen: Westdeutscher Verlag.

Los, Bettelou et al. (2012): Morphosyntactic change: a comparative study of particles and prefixes. (= Cambridge Studies in Linguistics 134). Cambridge, UK: Cambridge University Press.

McIntyre, Andrew (2015): 23. Particle-verb formation. In: Müller et al. 434–449.

Möhn, Dieter (1986): Determinativkomposita und Mehrwortbenennungen im deutschen Fachwortschatz. In: Jahrbuch Deutsch als Fremdsprache 12. 111–133.

Moon, Rosamund (1998): Fixed expressions and idioms in English: a corpus-based approach. Oxford/New York: Oxford University Press.

Motsch, Wolfgang (2004): Deutsche Wortbildung in Grundzügen. 2nd ed. Berlin/New York: De Gruyter.

Müller, Peter O. et al. (eds.) (2015): Word-formation. An international handbook of the languages of Europe. Vol. 1 (= Handbooks of Linguistics and Communication Science (HSK) 40.1). Berlin/Boston: De Gruyter.

Pavlov, Vladimir M. (1983): Zur Ausbildung der Norm der deutschen Literatursprache im Bereich der Wortbildung (1470–1730): Von der Wortgruppe zur substantivischen Zusammensetzung. (Zur Ausbildung der Norm der deutschen Literatursprache (1470–1730) VI). Berlin: Akademie.

Ramisch, Carlos (2015): Multiword expressions acquisition: a generic and open framework. New York: Springer.

Roth, Tobias (2014): Wortverbindungen und Verbindungen von Wörtern. Lexikografische und distributionelle Aspekte kombinatorischer Begriffsbildung zwischen Syntax und Morphologie. Tübingen: Narr.

Roth, Tobias (2015): Kompositum oder Kollokation? Konkurrenz an der Syntax-Morphologie-Schnittstelle. In: Schmidlin, Regula/Behrens, Heike/Bickel, Hans (eds.): Sprachgebrauch und Sprachbewusstsein. Berlin/Boston i.a.: De Gruyter. 155–176.
Scherer, Carmen (2012): Vom Reisezentrum zum Reisezentrum. Variation in der Schreibung von N+N-Komposita. In: Gaeta, Livio/Schlücker, Barbara (eds.): Das Deutsche als kompositionsfreudige Sprache. Strukturelle Eigenschaften und systembezogene Aspekte. Berlin/New York: De Gruyter. 57–81.

Schlücker, Barbara (2014): Grammatik im Lexikon. Adjektiv+Nomen-Verbindungen im Deutschen und Niederländischen. (= Linguistische Arbeiten 553). Berlin/Boston: De Gruyter.

Schlücker, Barbara/Hüning, Matthias (2009): Compounds and phrases. A functional comparison between German A+N-compounds and corresponding phrases. In: Italian Journal of Linguistics/Rivista di Linguistica 21, 1. 209–234.

Schlücker, Barbara/Plag, Ingo (2011): Compound or phrase? Analogy in naming. In: Lingua 121, 7. 1539–1551.

Schuster, Saskia (2016): Variation und Wandel. Zur Konkurrenz morphologischer und syntaktischer A+N-Verbindungen im Deutschen und Niederländischen seit 1700. (= Konvergenz und Divergenz (KuD) 4). Berlin/Boston: De Gruyter.

Steyer, Kathrin (2015): Patterns. Phraseology in a state of flux. In: International Journal of Lexicography 28, 3. 279–298.

Steyer, Kathrin (2016): Corpus-driven Description of Multi-word Patterns. In: Pastor, Gloria Corps et al. (eds.): Workshop Proceedings “Multi-Word Units in Machine Translation and Translation Technologies” (MUMTTT2015). Genf: Editions Tradulex. 13–18.