

## **Eva Sicherl**

University of Ljubljana Faculty of Arts, English Department

# On the Content of Prepositions in Prepositional Collocations

#### Summary

The article aims to shed some light on the problems faced by non-native speakers in the formation of so-called prepositional collocations (i.e. typical, recurrent combinations of verbal, nominal or adjectival bases with prepositional collocators). The reasons for frequent mistakes mainly lie in the meaning of the preposition used as part of collocation, which tends to be even more dispersed, abstract and difficult to define than that of the preposition used in a free combination. However, the preposition when used as a collocator seems to act, at least to some extent, as a carrier of some content; this can be proven by valency patterns: meaning-related content words (collocational bases) tend to regularly combine with identical prepositions. The fact that prepositions used in collocations also have their semantic part to contribute to the whole unit should also be considered in the classification of collocations into grammatical and lexical ones.

## Vsebina predlogov v predložnih kolokacijah

#### Povzetek

V prispevku skušamo osvetliti vzroke za težave, s katerimi se govorci tujega jezika srečujejo pri tvorbi t.i. predložnih kolokacij (povezav nosilne besede – glagola, samostalnika ali pridevnika – s predlogom). Razloge za pogoste napake je treba iskati predvsem v pomenu predloga, ki je v kolokacijskih povezavah šibkejši, še bolj abstrakten in težje določljiv kot takrat, kadar je predlog rabljen v prosti zvezi. Vendar je tudi predlog kot del kolokacije nosilec določene vsebine, kar dokazujejo vezljivostni vzorci: pomensko sorodne polnopomenske besede (kolokacijske osnove) se praviloma vežejo z istim predlogom. Dejstvo, da tudi predlogi v kolokacijah prispevajo svoj semantični delež, bi morali upoštevati tudi pri delitvi kolokacij na slovnične in leksikalne.

## On the Content of Prepositions in Prepositional Collocations

### 1. Introduction

When non-native speakers of English try to write or speak English accurately, they often face problems connected with the combinability of words. This, however, is not a problem limited solely to the English language. Most non-native speakers of any foreign language may experience difficulties when trying to express themselves in a natural way in that foreign tongue. If one wants to speak or write naturally, it is important to know not only about individual words, their forms and meanings, but also about the way words combine with other words. One must get used to mastering the combination of words into phrases, sentences, and, finally, texts.

In every language, certain words regularly combine or collocate with certain other words. The study of regular word combinations or collocations has attracted quite some attention in the past decades, particularly in those sections of British and German linguistics where collocations have been recognized as one of the most difficult areas of linguistic knowledge to master for non-native speakers. However, in one's mother tongue, collocations are seen as something quite unproblematic: word associations of the collocational type are relatively uniform within one language community and as soon as native speakers hear or read a certain word, they often know which word to expect after it (see, for example, Herbst 1996, 389–90) unless, of course, the collocation belongs to some specialized field or technical language (e.g. peripheral vision – periferni vid – peripheres Sehvermögen).

#### 2. On the Nature of Collocations

Collocations are a very natural phenomenon in every language, they allow a certain degree of syntagmatic predictability which the native speakers have gradually learnt to master; however, non-native speakers, even those very advanced ones, often lack this type of knowledge. While they may have command of large vocabularies and observe all grammatical rules, they still often combine their words in an untypical and unusual way. Although grammatically correct, the (written or spoken) texts they produce may lack the idiom of that particular language. Or, as Anthony P. Cowie (1994, 3168) rather succinctly puts it: 'native-like proficiency of a language depends crucially on knowledge of a stock of prefabricated units'. Such institutionalized or lexicalized chains are then stored in speakers' long-term memories and activated when the need arises as units or 'chunks' (see Pawley and Syder 1983, 191–2; Lewis 1993).

Naturally, collocations have been defined from different points of view, often depending on the authors' linguistic 'orientation' and their objectives (theoretical, lexicographical, pedagogical, statistical, etc.). It is therefore not surprising that certain definitions of collocations are quite different from others (cf., for example, Sinclair 1991, 110, 173; Herbst 1996, 381; Bahns 1996, 11; Hausmann 1984, 398; 1985, 178; Benson 1989, 3). However, it seems



that the definition provided by Hausmann<sup>1</sup> and later partly accepted by the author team Benson, Benson, and Ilson for the compilation of their collocational dictionary (The BBI Combinatory Dictionary of English 1986; The BBI Dictionary of English Word Combinations 1997, revised edition) has proven quite useful for pedagogical needs. For the purpose of the above-mentioned dictionary, collocations have been defined as 'arbitrary, recurrent word combinations' (Benson 1989, 3). This brings us to the central theme of the present paper – a type of word combination which we have named 'prepositional collocation'. Prepositional collocations are typical, recurrent combinations of verbal, nominal or adjectival bases with prepositional collocators. In The BBI Dictionary of English Word Combinations such combinations are referred to as a subclass of grammatical collocations (see categories G1, G5 and G8D in Benson, Benson, Ilson 1997, xvi, xviii, xxi). These combinations of a collocational base with a preposition functioning as a collocator (followed by a nominal phrase), however, should be kept apart from prepositional free combinations, which, in accordance with the general rules of English syntax, follow the verb, noun, or adjective in a text and freely allow substitution. However, the distinction between the two groups is not always clear-cut - while some cases may be immediately classified as either prepositional collocations or prepositional free combinations, others may prove to be extremely unclear and vague, and there are many borderline cases which may satisfy some of the syntactic criteria<sup>2</sup> for inclusion among prepositional collocations but not others. Even if we leave the complex syntactic criteria aside, most speakers of English, after having reached a certain level of knowledge of the language, tend to 'feel' a difference between sentences like:

John lectures on semantics. /prepositional collocation/
John lectures on fridays. /free combination of verb + preposition/

In the case of prepositional collocation, the link between the base and the following preposition is felt to be stronger than is the case with free combinations. In the latter sentence, the phrase boundary comes after the verb, and the preposition with the following noun forms a phrase. Semantic criteria for distinguishing between free combinations and prepositional collocations seem to be more elusive<sup>3</sup>, yet they often prove decisive for inclusion in one group or the other, especially when combined with the syntactic ones (see also Quirk et al. 1985, 1163).

On the whole, it seems that learners of English, given a certain level of proficiency, tend to

Hausmann (1985, 178) defined collocations as 'typical, specific and characteristic two-fold relationships between words' (*typische*, *spezifische und charakteristische Zweierbeziehungen von Wörtern*). Characteristically, collocations are not produced creatively by the speaker as are free combinations; rather, they are retrieved from the speaker's memory as combinations forming a unit, as some kind of language 'semiproducts'. Another typical trait is a relationship of affinity between the two words forming a collocation, so that they often appear together (see also Hausmann 1984, 398; Bahns 1996, 24).

<sup>&</sup>lt;sup>2</sup> These criteria were mainly defined by British and German linguists (for further details see, for example, Quirk et al. 1985, 1163 ff; Palmer 1988, 229–31; Schröder 1986, 13–22; Helbig and Schenkel 1975, 40–9; Lerot 1982, 263–5), and include the choice of the question form, possibility of passive transformation, possibility of cutting the preposition off from the lexical verb in relative clauses and wh-questions, substitutability of preposition, etc.

<sup>&</sup>lt;sup>3</sup> Naturally, since the borders between the two groups remain fuzzy, no hundred-percent agreement can be expected between different analysts as to the inclusion of certain cases in either of the two groups. Thus, for example, the

have less difficulty with free combinations than with prepositional collocations. The reason for this may lie in the content of the preposition which is used as collocator.

For many years, to most grammarians, prepositions, when used as part of collocations seemed to be devoid of any content. Linguists often distinguished between the so-called syntactic prepositions and lexical prepositions: the former are only used to perform a syntactic function within a sentence and are not carriers of meaning (i.e. when used as collocators in prepositional collocations), while the latter have their own semantic content which they contribute to the meaning of the sentence (i.e. when used in free combinations). Most German linguists dealing with valency maintained that prepositions in collocations were semantically empty (e.g. Heringer 1968, 437; Helbig and Schenkel 1975, 43–4). Since prepositions in collocations are mainly 'non-substitutable' and thus without paradigmatic opposition, their only function is, consequently, a syntactic one. On the other hand, prepositions used in free combinations can be substituted for other prepositions (the meaning of the sentence may, consequently, change), and therefore have both syntactic and semantic functions to perform.

In recent decades, however, it has been established that the content of the preposition is, at least to some degree, present in prepositional collocations as well. Linguists have begun to realize that even in the case of prepositional collocations we cannot talk of 'semantic emptiness' (see Schröder 1986, 10), and that the choice of the preposition is semantically motivated (see also Dixon 1991, 271). It has become clear that in some collocations there is possibility of variation in the preposition (e.g. talk of/about/on) without a radical change in meaning. That the preposition when used as a collocator acts, at least to some extent, as a carrier of meaning, can also proven by valency patterns which the collocational bases enter. If these prepositions were entirely meaningless, we would probably not tend to combine meaning-related content words (collocational bases) with identical prepositions. However, in most cases, this is precisely what we do.

To illustrate this point, let us compare instances of prepositional collocations consisting of a verb/noun/adjective denoting sensations perceived through the nose by the olfactory nerves, and the following preposition which introduces a substance emitting an odour.<sup>4</sup> We can see that in English practically all these bases regularly combine with the preposition *of*; similar combinability with a preposition seems to be present in other languages as well. Below, comparison has been made with Slovene and German, where most verbal, nominal, and adjectival semantic equivalents of the English bases regularly combine with the prepositions *po* and *nach* respectively.

degree of metaphoricalness or idiomaticity may influence our decision. If 'disagree with' as used in the sentence Orange juice seems to disagree with some babies. Is perceived as a prepositional collocation, does the same hold true for 'disagree with' in the sentence I respect the president but I disagree with his decision... (illustrative sentences taken from Collins Cobuild English Dictionary 1995, 464), or is the latter a free combination? It seems that the verb 'disagree' when used with an inanimate subject becomes semantically specialized and is therefore often treated differently from 'disagree' with an animate subject. In such cases obviously the context, and not the word combination itself, causes semantic modification which may result in a different classification. Other factors which may influence



#### English verbs

Stop your home smelling of your dog. (www.tipking.com/Tips/publish/printer\_135.shtml)

...just a black tangled mass where the day before had been a mass of pale blue flowers scenting of almonds and ... (www.gonegardening.com/xq/ASP/group\_id.3/article\_id.313/referer./qx/ gg\_shop/article.htm)

When I would ever go into the bookies or a bar I would find that when I came out my clothes were stinking of tobacco. (www.dooyoo.co.uk/lifestyle/health\_therapies\_treatments/ smoking\_in\_general/\_review/ 305209/)

I reeked of kerosene, the cabin reeked of kerosene and the food tasted of kerosene. (www. abycinc.org/Resources/ABYC%20News/ galley\_fireballs.htm)

#### English nouns

The maid goes out with her head bowed, leaving behind barely a trace-odor of Sicilian lemons. (www.terrain.org/fiction/11/wilson.htm)

When is the natural scent of a woman most appealing to men? (www.pheromones.com)

Remove the smell of vomit from carpets. (www.tipking.com/Tips/publish/tip\_453.shtml)

European and Portuguese oysters filled with the salt-laden tang of the sea, fish caught in the bay, its famous cuisine, panoramic views from the coastal paths. (http://www.ville-cancale.fr/htm /english.htm)

the aroma of sizzling bacon (www.bartleby.com/61/22/F0292200.html)

the bouquet of a fine wine (www.bartleby.com/61/22/F0292200.html)

the perfume of roses (www.bartleby.com/61/22/F0292200.html)

the redolence of fresh coffee (www.bartleby.com/61/22/F0292200.html)

*I wish I could bottle the fragrance of a magnolia blossom as perfume for you and for me.* (home.att.net/~SpanishMoss/fragrance.html)

the stench of burning rubber (www.bartleby.com/61/65/S0736500.html)

the fetor of polluted waters (www.bartleby.com/61/65/S0736500.html)

the malodor of diesel fumes (www.bartleby.com/61/65/S0736500.html)

...like tequila which I believe might be the nastiest smell ever produced on this earth, especially when it's combined with the ripe fetidness of an unwashed body ... (www.nuvein.com/ fiction14/bordertrash.html)

#### English adjectives

Antica Officina di Santa Maria Novella, like a 16th-century pharmacy, is wood paneled and odorous of herbs, flowers, and a very special potpourri. (travel.discovery.com/destinations/fodors/ rome/shopping\_20383\_1.html)

Scallops are among the most **odoriferous of** all sea food and it takes a lot of experience to be able to identify the "fresh, sweet aroma." (www.blockhead.com/scaldill.htm)

Blooms in all sorts are white and deliciously scented of orange blossom. (englishgarden. lifetips.com/PPF/id/12016/Cat.asp)

Her clothes were redolent of moth balls and cedar closets. (www.bartleby.com/68/36/5036.html)

Rare culinary Rau kinh gio'i is a seed propagated aromatic of the mint family. (www.redwoods. quik.com/frmstore/george/herbal.html)

They are perfumed of Chenin Blanc grapes and excellent with seafood appetizers or all by themselves as an aperitif. (www.northamptonwines.com/aloire.html)

Anyhow, this contractor was huge and smelly and his arm pits smelly of sour knob cheese. (www.computercont ractor.net/forum/ thread.php?t\_id=2430&fid=3)

A skanky dirty room reeky of stale cigarettes and mildewy carpet. (beautifulfreak.org/spunky/ sterile/24.htm) Sometimes the vomit is fetid of odor and taste. (www.iptq.com/ct07.htm)

#### Slovene verbs

To je svet, ki diši po žiru, kumini, ..., po tisočerih vonjavah, kot nekoč na dišavni cesti,... (www.geocities.com/iren\_knehtl/prijateljstvo.htm)

Pod akacijami in orehi kmalu zadiši po kotletih in klobasah,... (www.capris-d.si/glasila/Beseda/ Beseda\_1\_1999/stran11.html)

...seveda je lepše priti v Istro, kot pa jo "vonjati" po spletu, ampak tudi to je nekaj. (www.capris-d.si/bu/guestbook\_3.html)

Izdelava testa je nekoliko naporna, ker je precej trdo, ko pa se peče, vsa kuhinja **smrdi po** amonijaku. (www.kulinarika.net/baze/recept.asp?ID=2206)

Zasmrdelo je po žveplu – pošast je bruhala ogenj. (www.smihel.si/jakob%20in%20zmaj.htm)

...vlažni zidovi so neprijetno hladni, notranjost prostorov pa zaudarja po vlagi. (www.kema.si/ html\_datoteke\_teh\_listi/kemasol.htm)

"Če ne bi od vas tako dehtelo po žganjici, bi vas raztrgala, ker sovraži ljudi. Dah po žganju... (www.detektiv-da.si/slo/jaga.htm)

#### Slovene nouns

Z uporabo kostanja ne bomo imeli v omarah neprijetnega in močnega **vonja po** naftalinu. (mrdusan.tripod.com/nasveti/mrhtml7.html)

*Pri nas doma je bil zjutraj vedno značilen duh po sveže kuhani kavi.* (www.pisateljstvo.com/index.php?skodelica\_kave)

V prostoru je občasno zaznati vonj po plinu. (www.gorenjeservis.com/nasveti.asp?id\_nasvet=14)

Ko zadiši po zemlji, vlagi in travi; ko se pomešajo **vonjave po** skuti in siru z **vonjem po** skrinji iz kašče;... (www.holdingljubljana.si/a\_trznice\_frame.htm)

Kot bi dišave po hrani privabile prebivalce Vrulj, v luko se pripelje Ante v svojem ribiškem čolnu. (www.odisej.org/dogodki/januar98/jan98.html)

*Ponovno je nekaj počilo, smrad po žveplu je postal kar nevzdržen.* (members.tripod.com/ Herostrat/s/ ukv03/ukv03-02.htm)

Najbolj tipičen znak prevelikih zaužitih količin selena pri ljudeh je **zadah po** česnu. (herbika.vitrum.si/arhiv/2001/clanki\_st\_13.htm)

#### Slovene adjectives

Bili so vsaj desetkrat dražji, a zato toliko okusnejši, plesnivo dišeči po potnih, gljivičnih nogah francoskega kmeta z baretko. (www.angelfire.com/pa/pisk/nadja.html)

Zelena dolina, zalita s soncem, **vonjajoča po** mladem žitu in zoreči travi, je podrhtevala v pesmi škerjancev. (www.beepworld3.de/members16/zpevec/ no4-december-2001.htm)

Sploh mi ni jasno, kaj sem videla na njem; zanemarjen, **smrdeč po** vinu in znoju,... (krt.s-gim.kr.edus.si/krt23/clanki/39.asp)

Letos me je ob pisanju voščil spet nagovorila štalica: borna, zaprašena, pajčevinasta, zaudarjajoča po gnoju... (www.rkc.si/prenova/0012/zive\_jaslice.html)



#### German verbs

Gelegentlich wird auch heute noch die Zuckerkrankheit über die Ausatemluft erkannt. Betroffene riechen nach Aceton (Nagellackentferner). (www.quarks.de/peinlich/03.htm)

Er blüht im Spätsommer und Herbst und seine weißen Blüten duften nach Jasmin. (gartenforum.tv/duftbaum-herbst.htm)

Für mich war das der normalste Geruch der Welt und nie würde ich sagen, mein Vater "stank nach Fisch". (www.freitag.de/2000/21/00212001.htm)

Es roch nach Pech, Schwefel, und es müffelte nach Hunden und deren Geschäfte. (www.schlossberg.loe.schul e-bw.de/geschich/mittelal/burgle/02burgl.htm)

#### German nouns

Hinter dem Geruch nach frischem Brot steckt eine erhitzte Mischung von Prolin und Glucose. (www.chemieunterricht.de/dc2/tip/07\_99.htm)

Erfrischender Duft nach Zitronenmelisse. (www.morgenland-express.de/Warenubersicht/ Martina\_Gebhardt/martina\_gebhardt.html)

Die unaufdringliche Eleganz auf der Zunge gibt ein dezentes **Aroma nach** Melone frei, das in einem vornehmen, leicht mineralisch geprägten Nachhall endet. (www.weinkontor-mv.de/Kessler-Sektkellerei/)

Jetzt kommt heraus, dass die Rohner wusste, dass die Produktion des Fungizids Gestank nach faulem Fisch auslöst. (www.onlinereports.ch/RohnerImmissionen.htm)

#### German adjectives

Riechend nach Knoblauch, mit Schnecken und Fisch in den Bäuchen, verlassen wir Les Baux und fahren nach Paradou. (www.pvb.ch/documents/Organisation/Adressen/Sektionen/Reisebericht% 20Thun.htm)

Am Straßenrand verlockende Auslagen mit arabischem Gebäck und kleinen Gerichten, duftend nach orientalischen Gewürzen. (www.dig-frankfurt.de/telaviv/route3.htm)

Er nimmt es gelassen, wenn er, **wohlriechend nach** Zypressensaft, heimkommt und Frau Suzanne sagt: Du mußt unter die Dusche. (www.rennertz-km.de/htmls/texte.htm)

Bouquet etwas parfümiert nach rosarotem Bazooka-Kaugummi. (www.plus-it.com/institut/ 960510.htm)

Er kam zurück mit schmutziger, zerrissener Kleidung und Sandalen, stinkend nach Schweinen, mit langen Harren [sic] und Bart. (home.pages.at/thelady/coptic/anba-gabriel/ predegt/der-verlorene-sohn.htm)

Naturally, one can find exceptions (e.g. the noun 'aroma' in Slovene regularly combines with the non-prepositional genitival case, as in *aroma sveže kave*), yet the pattern which emerges from illustrative examples above seems distinct enough.

### 3. Conclusion

The finding that prepositions in collocations are not devoid of content, but contribute a certain content to the meaning of the collocational base, even if their content is even more abstract and difficult to define than that of prepositions used in free combinations (which, per definition, tend to have more general and dispersed meanings than lexical words with their lexical meanings), has had consequences for the very status of prepositional collocations. Since for many years it had been maintained that prepositions in collocations

were semantically empty, this assumption has also been partially reflected in the compilation of collocational dictionaries, e.g. in the BBI (*The BBI Combinatory Dictionary of English* 1986; *The BBI Dictionary of English Word Combinations* 1997, revised edition).

The basic distinction between lexical and grammatical (including prepositional) collocations as explained in the BBI (Benson et al. 1997, ix) rests on the assumption that grammatical collocations 'consist of a dominant word – noun, adjective/participle, verb – and a preposition or a grammatical construction' while 'lexical collocations do not have a dominant word; they have structures such as the following: verb + noun, adjective + noun, noun + verb, noun + noun, adverb + adjective, adverb + verb'. One of the typical characteristics of collocations is that the syntagmatic affinity between the constituent parts of the collocation does not work both ways or is mutually not equally strong. In the case of a lexical collocation, i.e. a combination of two lexical items, e.g. an adjective and a noun, the primary or stronger syntagmatic affinity goes from the noun to the adjective, and the secondary or weaker syntagmatic affinity from the adjective to the noun:



The adjectives 'partial' and 'preliminary' may collocationally combine with a number of other, semantically extremely diverse nouns (e.g. partial agreement/solution/withdrawal/success/victory/ban/recovery/results/blindness/settlement; preliminary results/hearing/round/report/agreement/findings/study/figures/work/tests<sup>5</sup>), the nouns 'eclipse' and 'talks', however, combine with only a very limited number of adjectives (e.g. total/full/partial/solar/lunar eclipse; candid/frank/exploratory/private/formal/informal talks; see Benson et al. 1997, 114, 334). A similarly uneven, yet two-way syntagmatic affinity is noticeable in other lexical collocations in which, theoretically, neither of the two full lexical items should be semantically more dominant than the other:

a rough estimate	približna ocena	grobe Schätzung
commit suicide	narediti samomor	Selbstmord begehen
quench one's thirst	pogasiti si žejo	Durst stillen

Interestingly, the same phenomenon can be observed in prepositional collocations, which are, according to Benson et al., classified as grammatical collocations. If the preposition, when used in a collocation, is to be assigned a certain amount of content, then we must also admit that prepositional collocations too have a two-way syntagmatic affinity, the stronger leading from the dominant word to the preposition, and the (fairly) weaker leading from the preposition to the lexical word:

<sup>&</sup>lt;sup>5</sup> The cited collocations have been taken from Collins Cobuild English Collocations on CD-ROM (Sinclair 1995a).



invite to argument over

angry at

povabiti na prepir o jezen na

einladen zu Auseinandersetzung über böse auf / verärgert über

In other types of grammatical collocation (e.g. where the dominant word is followed by an infinitive or a dependent clause) the syntagmatic affinity between the elements seems to be only one-way; the direction is from the lexical word to the grammatical construction, which as a structure is 'meaningless' and thus cannot influence syntagmatically the choice of the dominant lexical word:

begin to speak I'm afraid that I might začeti govoriti bojim se, da bi ga prizadel anfangen zu reden ich fürchte, ich könnte

hurt him I felt it move

čutil sem, kako se premika

ihm weh tun ich spürte, wie es sich bewegte

If this difference between prepositional and other grammatical collocations is to be taken into account, then also our view of the rather rigid distinction between lexical and grammatical collocations should be slightly rectified. Due to the (weak, but nevertheless present) content of their prepositions, prepositional collocations are to be found somewhere between lexical and strictly grammatical collocations. Benson et al. have most probably classified them as grammatical collocations for pedagogical and lexicographical reasons, which demanded certain simplifications during the compilation work for the dictionary. Linguistic tradition, which for many years assigned very little or no content to prepositions in such combinations, may have contributed to the authors' decision to grant prepositions a (semantic) status equal to that of an infinitival structure or a dependent clause. In view of the above mentioned findings, we can see that prepositional collocations should either be treated as a third, special class of collocations (as they are fundamentally different from 'classic' grammatical collocations), or as an important subclass of grammatical collocations with their specific characteristics (since grammatical combinability tends to have fix patterns and is more deterministic than lexical combinability, see also Carter 1987, 49).

Occasionally, the preposition and the following context may even help learners decipher or guess at the approximate meaning of the collocational base which they encounter for the first time, as in the following text:

...the mind's eye at the neglected gravestones sticking out at all angles and recalling dead friends of many years ago and the redolency of flowering weeds and... (www.davidkozubei.com/nostalgia.html)

Obviously, this is helpful: in the apparent chaos of word combinations, there seem to appear certain patterns which may facilitate the memorizing of prepositional collocations for nonnative speakers, and thus in general improve the quality and naturalness of the English texts they produce.

## **Bibliography**

- Asher, R. E., ed. 1994. The Encyclopaedia of Language and Linguistics. Oxford/New York: Pergamon Press.
- Bahns, J. 1996. Kollokationen als lexikographisches Problem. Eine Analyse allgemeiner und spezieller Lernerwörterbücher des Englischen. Lexicographica, Series maior 74. Tübingen: Max Niemeyer.
- Benson, M. 1989. The Structure of the Collocational Dictionary. International Journal of Lexicography 2, vol. 1: 1-14.
- Benson, M., E. Benson, and R. Ilson. 1986. *The BBI Combinatory Dictionary of English: A Guide to Word Combinations*. Amsterdam/Philadelphia: John Benjamins.
- ----. 1997. The BBI Dictionary of English Word Combinations. Amsterdam/Philadelphia: John Benjamins.
- Carter, R. A. 1987. Vocabulary. Aspects of English series. London: Allen & Unwin.
- Cowie, A. P. 1994. Phraseology. In Asher, ed., 3168-71.
- Dixon, R. M. W. 1991. A New Approach to English Grammar, on Semantic Principles. Oxford: Clarendon Press.
- Hausmann, F. J. 1984. Wortschatzlernen ist Kollokationslernen. Praxis des neusprachlichen Unterrichts 31: 395-406.
- -----. 1985. Kollokationen im deutschen Wörterbuch: ein Beitrag zur Theorie des lexicographischen Beispiels. In *Lexikographie und Grammatik*, eds. H. Bergenholtz and J. Mugdan, 118–29. Tübingen: Max Niemeyer.
- Helbig, G., and W. Schenkel. 1975. Wörterbuch zur Valenz und Distribution deutscher Verben. Leipzig: VEB Bibliographisches Institut.
- Herbst, T. 1996. What Are Collocations: Sandy Beaches or False Teeth? English Studies 4: 379-93.
- Heringer, H. J. 1968. Präpositionale Ergänzungsbestimmungen im Deutschen. Zeitschrift für deutsche Philologie 87: 426-57.
- Lerot, J. 1982. Die verbregierten Präpositionen in Präpositionalobjekten. In *Satzglieder im Deutschen: Vorschläge zur syntaktischen, semantischen und pragmatischen Fundierung*, ed. W. Abraham, 261–91. Tübingen: Narr.
- Lewis, M. 1993. The Lexical Approach. Hove, East Sussex: Language Teaching Publications.
- Palmer, F. R. 1988. The English Verb. Harlow, Essex: Longman.
- Pawley, A., and F. H. Syder. 1983. Two Puzzles for Linguistic Theory: Nativelike Selection and Nativelike Fluency. In *Language and Communication*. Applied Linguistics and Language Study, eds. J. C. Richards and R. W. Schmidt, 191–226. Harlow, Essex: Longman.
- Quirk, R., S. Greenbaum, G. Leech, and J. Svartvik. 1985. *A Comprehensive Grammar of the English Language*. Harlow, Essex: Longman.
- Schröder, J. 1986. Lexikon deutscher Präpositionen. Leipzig: VEB Verlag Enzyklopädie.
- Sinclair, J. 1991. Corpus, Concordance, Collocation. Oxford: Oxford University Press.
- -----, ed. 1995a. Collins Cobuild English Collocations on CD-ROM. London: HarperCollins.
- -----, ed. 1995b. Collins Cobuild English Dictionary. London: HarperCollins.