

## The Treatment of Binomials in Monolingual and Bilingual Dictionaries

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**Abstract:** *The paper is intended to be a contribution to lexicographical research. In particular it reports on the findings of an exploratory study on how dictionaries treat binomials, e.g. bread and butter, bolts and nuts, etc. A set of 40 binomials from a preliminary larger list of pairs are selected on the basis of their frequency of occurrence in the British National Corpus (BNC). These binomials are looked up in five paper-based dictionaries: three monolingual (English- English) and two bilingual (English-Arabic). The findings reveal that some of the target binomials are absent from the five dictionaries. Moreover, the 'test' dictionaries show some inconsistency in their treatment of binomials, and, more often than not, fall short of meeting the EFL user needs. The findings point to a weak relationship between a binomial's frequency of occurrence and its probability of being listed in a certain dictionary. However, the findings suggest that opaque and conventional binomials have more chances to be listed than transparent ones.*

### 1. Introduction

This paper is intended to promote research on the status of binomials, one type of collocations, in dictionaries. Malkiel (1959) used the term 'binomial' to characterize lexical pairs such as *choice and chance*, *little by little* and *heads or tails*. For him, a binomial is a label for "the sequence of two words pertaining to the same form-class, placed on an identical level of syntactic hierarchy, and ordinarily connected by some kind of lexical link" (p.113). Malkiel maintained that while the constituents of a binomial such as *snow and cold* are reversible and even changeable by some semantically related items (cf. *cold and snow* and *wind and cold*), the sequence of a large number of binomials such as *odds and ends* and *law and order* has become fixed. Although the members of some binomials may be connected by a preposition or a conjunction other than 'and', the study reported here is solely concerned with binomials linked with 'and' (e.g. *bread and butter*).

The last three decades have witnessed a growing interest in vocabulary (Meara 2002); it has been acknowledged as an essential part in language acquisition and language teaching. Lewis (quoted in Moudraia 2001), argued that children acquire a structured lexicon rather than a lexicalized grammar. Commenting on Palmer and

Hornby's *Second Interim Report on English Collocations* (1933), Cowie (2000:5) posited that their work "showed how much of everyday speech and writing is in fact made up of fixed phrases". Such expressions including binomials as multi-unit words have a key role in promoting fluency because words "are stored not only as individual morphemes, but also as parts of phrases, or as longer memorized chunks" (Bolinger, quoted in Nattinger and DeCarrico 1992:31).

The dictionary, which is often viewed as the most successful and significant book about language (Ilson 1985:1), is expected, *inter alia*, to assist users who encounter problems while interacting with binomials. In this vein, a thorough treatment of binomials in both monolingual and bilingual dictionaries may turn out to be highly desirable. This treatment is particularly needed with opaque binomials (e.g. *by and large*). Farghal and Jaber (1995:100-101) argued that unlike the meanings of transparent binomials (e.g. *tall and short*) the meanings of opaque binomials do not directly derive from the members of the pair. Hamdan (2005:138) observed that "a major problem with this dichotomy is its fuzzy and indeterminate boundaries". For instance, Farghal and Jaber (*ibid*) viewed *in and out* and *forgive and forget* as opaque, while Makki (1972) perceived them as transparent. In light of this, one may suggest a tripartite classification of binomials to allow for the inclusion of those binomials which tend to have a conventional (non-predictable) use or a specific discourse function; yet their meanings are not problematic. For instance, both *come and go* and *first and foremost* mean what they say, but the first is often used non-literally to indicate transience (e.g. *pain comes and goes*) and the second is typically used to indicate a discourse-organizing function, particularly in academic writing. In this context, and for practical reasons, we propose a tentative classification of binomials into transparent, conventional and opaque.

Since the prime concern of this paper is to investigate how binomials are treated in dictionaries, it is useful to observe that dictionaries do not usually subscribe to one listing method. One method is to cite the binomial as a headword (H) followed by detailed information (e.g. pronunciation, morphology, meaning, etc.). Another is to list the binomial as a multiword sense (MS) within an entry, usually under the first item, with a definition, and often examples too. A third is to list the binomial just as/within an example (E) at the appropriate meaning of one of its constituents, typically with the binomial highlighted in bold type, and often with a gloss. The first method provides the fullest information; the third, the least. Below is an illustration of these methods as used by *Oxford*.

## 1) Listing a binomial as a headword

**bed and 'breakfast** noun (abbr. B and B) 1 [u] (BrE) a service that provides a room to sleep in and a meal the next morning, in private houses and small hotels: Do you do bed and breakfast? Bed and breakfast costs £30 a night.—compare FULL BOARD, HALF BOARD 2 [c] a place that provides service: There were several good bed and breakfasts in the area.

## 2) Listing a binomial as a multiword sense in an entry

(under **back**) **IDM** ,**back and 'forth** from one place to another and back again repeatedly; *ferries sailing back and forth between the island and the mainland*

3) Listing a binomial within an example (under **name**)  
**name/neim/** noun, verb

• noun 1. a word or words that a particular person, animal, place or thing is known by: What's your name ... ? *Please write your full name and address below.*

Users expect the dictionary to inform them of almost all necessary information about binomials. This is especially invaluable to SL/FL learners. Short of that, such learners will be disappointed when they encounter a problem while interacting with a certain binomial.

Cowie (1981) examined some of the problems which a lexicographer undertaking the task of compiling a dictionary of idioms may face. He also tried to provide a system for categorizing idioms and collocations based on sense and restricted collocability. Further, he showed how the grammatical and lexical aspects of these fixed expressions can be presented lexicographically to help foreign learners use them adequately.

Among the large number of studies that investigated the treatment of different linguistic phenomena in the dictionary are Verstraten (1992), Hamdan and Fareh (1997) and Komuro (n.d). The most relevant of these studies to the paper reported here is probably Hamdan and Fareh's (1997), which suggested that insufficient and vague dictionary information could be a potential source of error for EFL learners.

The paper proceeds as follows. Section 2 below states the significance and objectives of the study. Section 3 provides information about the research methodology. Results are presented and discussed in section 4. Section 5) is spared for conclusions and recommendations.

## 2. Significance and objectives of the study

To the researchers' knowledge, this is the first study that is completely devoted to the treatment of binomials in dictionaries; particularly those involving the use of *and*. Hamdan (2005) reported that advanced EFL learners in Jordan had encountered considerable difficulty while interacting with binomials. Hamdan's proposal for the reasons underlying this difficulty leaves some room, at least for one further suggestion. It could be the case that binomials are not adequately treated in dictionaries. Suppose a learner looks up a certain binomial in a dictionary and discovers that it is not listed, or it is treated in a way that does not meet his/her needs. Such a learner will feel frustrated and has to look for another source, if available, for assistance. This piece of research contributes to investigating the extent to which dictionaries facilitate the FL/SL learner's interaction with binomials.

Unequivocally, the idiomatic part of language is as important as other components (e.g. syntax). Many researchers (Kjellmer 1991; Nattinger and DeCarrico 1992, among others) have highlighted this by referring to language acquisition as including both words and idioms. Bolinger (quoted in Cowie 1981:234), suggested that "in acquiring its mother tongue, the young child learns word meanings by progressive analysis of the collocations in which words are presented". By extension, this may apply to EFL learners. In sum, the study seeks answers to the following questions:

1. How do both monolingual and bilingual (English-Arabic) dictionaries list binomials, and what kinds of information do they offer? Put another way, one needs to know whether the sample binomials, if covered in the dictionary in the first place, are listed as headwords, multiword senses in an entry, or only illustrated in examples at the appropriate meaning of one of the constituents. Moreover, one needs to know the kinds of information offered for each binomial, e.g. meaning, pronunciation and stress, morphology and grammar, etc. Obviously, the question assumes that a user who is interested in a certain binomial will find it listed in such dictionaries.
2. To what extent is the listing method motivated by variables such as a binomial's frequency of occurrence and a binomial's type (i.e. transparent, conventional or opaque)?

## 3. Methodology

First, the researchers used Fletcher's Phrases in English (PIE) database (Fletcher 2003) which incorporates data from the British National Corpus<sup>1</sup> (BNC) to compile a preliminary list of all three-word phrases

where the second item is *and*. The only condition for inclusion in the list, at this stage, was that the frequency of occurrence of the phrase should be above an arbitrarily set threshold of 20 (i.e. 20 hits in BNC). The search yielded 5621 items. Some binomials were repeated more than once due to the variable taggings generated in the database. For example, the item *east and west* appeared three times: once as NN1 CJC NN1 (283 hits), another time as NN1 CJC NP0 (54) and a third time as NP0 CJC NP0 (42)<sup>2</sup>. Other items appeared more than once because of different inflections (e.g. *male and female* and *males and females*). Therefore, all the binomials were ordered alphabetically in order to group the same items that were listed more than once together. Derivationally related words were counted separately (e.g. *economic and social* and *economy and society*), whereas inflectionally related words were counted once. Moreover, to refine the list, the researchers excluded combinations involving pronouns (e.g. *me and him*), numbers (e.g. *hundred and fifty*), proper nouns (e.g. *England and Wales*), parts of phrases (e.g. *Britain and the*) and open-ended transparent repetitions (e.g. *days and days*). However, opaque manifestations (e.g. *on and on*) which are treated independently in dictionaries were included. Of the resulting list, the researchers chose only the binomials that had a frequency of 200 and more. The final list had 200 binomials. With the help of two linguist colleagues, the researchers divided the set into three binomial types: transparent (T), conventional (C) and opaque (O) (see section 1 above). This classification, though somewhat debatable, and by no means invariable, seems to be important as the second research question seeks to examine if there is a relationship between binomial type and the way it is listed in dictionaries. Of these 200 binomials 16 were thought to be opaque, 17 conventional and 167 transparent. For practical reasons, the researchers chose to explore the status of 40 binomials. So the final list included all the opaque and conventional binomials (16 and 17 items respectively), in addition to the seven most frequent transparent ones. Table 1 [Appendix I below] provides the complete list of the selected binomials, in terms of type and frequency of occurrence in the BNC.

The selected binomials were looked up in three monolingual dictionaries viz. Oxford Advanced Learner's Dictionary of Current English (Wehmeir 2000), Longman Dictionary of Contemporary English-Third Edition (Summers 2000), Merriam-Webster's 11<sup>th</sup> Collegiate Dictionary (Mish 2003), and two bilingual ones viz. Atlas Encyclopedic Dictionary: English-Arabic (Atlas Global Centre for Studies and Research 2002) and Al-Mawrid: A Modern English-Arabic Dictionary (Al-Ba'alabki 2006). These dictionaries were chosen because they are widely used by EFL learners in Jordan. For the reader's convenience, these dictionaries will be referred to as Oxford,

Longman, Webster, Atlas and Al-Mawrid, respectively. [See Table 1: Appendix I below].

#### 4. Results and discussion

Results are presented and discussed in connection with the three study questions.

##### 4.1. How do dictionaries list binomials and what kinds of information do they offer?

Before exploring the listing methods which the 'test' dictionaries tend to use, one needs to know the extent to which the target binomials are listed in these dictionaries. Table 2 [Appendix I below] provides summary data on the number of binomials listed in each dictionary in terms of type and listing method.

Table 2 [Appendix I below] shows that *Oxford* includes 37 out of a possible 40 items, *Longman* 35, *Webster* 24, *Atlas* 21, and *Al-Mawrid* 20. Apparently, the monolingual dictionaries tend to list more binomials than the bilingual ones; however, the two EFL-oriented dictionaries (i.e. *Oxford* and *Longman*) include more items than *Webster*, the non-specified user dictionary. In terms of agreement across the six dictionaries in listing the corpus items, 16 of the items (40 %) appear in all the dictionaries, three others (15%) appear in four of the five dictionaries, four (10%) in three of the five dictionaries, eight (20%) in two of the five dictionaries and five others (12.5%) appear in one dictionary only. One binomial (2.5 %) only, viz. *trade and industry*, is completely absent from the five dictionaries. For detailed information as to which binomial appears in which dictionary, the reader may wish to see Table 3 [Appendix I below]

The listing method varies across the dictionaries. While *Oxford*, *Longman*, and *Al-Mawrid* show a preference for the multiword sense method, *Webster* and *Atlas* tend to prefer the headword method. The least used method is to illustrate the binomial in an example only. In fact, the two bilingual dictionaries do not utilize it, while *Webster* utilizes it once, *Longman* twice, and *Oxford* five times. It seems that the listing method pendulum is still swinging between headword and multiword sense. Below is a detailed explanation of how each dictionary treated the sample binomials. This information is summarized in Table 3 [Appendix I below] .

##### 4.1.1. Oxford

Of the target binomials, *Oxford* includes 37; 27 as multiword senses under the first item of the binomial, five as headwords and five as examples. Of the five binomials listed just as an example, only *name*

*and address* is listed under both items, *health and safety*, *men and women*, and *go and get* are listed under the first constituent only, whereas *economic and social* is listed under the second constituent only. Although the general policy of *Oxford* is to cite multiword senses under the first constituent, it cites *there and then* under both constituents with exactly the same information repeated twice, and *up and running* under both with almost the same information repeated using different wording. Also it cites *by and large* under the second item only. As a general practice, *Oxford* does not provide a cross-reference under the second item of a binomial except in a few cases (e.g. *bread and butter*, and *bed and breakfast*). However, it sometimes gives a cross-reference to the relevant headword, in the form 'see X', without mentioning the whole binomial. Obviously, this strategy does not contribute to giving users easy access to the information required. Here is an illustration.

**foremost** ... adv. IDM see FIRST adv.

*Oxford* provides its users with the meaning of all the target binomials (except for *health and safety*, *research and development*, *men and women*, *go and get*, *economic and social* and *name and address*) using synonyms and/or paraphrasing with the exception of *as and when* and *wait and see* which are defined through usage i.e. mentioning when or where the binomial is used. As for stress, it always indicates the stress pattern of the binomial except for three binomials viz. *there and then*, *again and again* and *time and again*, and the five items that are given in examples only. This, undoubtedly, gives *Oxford* an advantage over those dictionaries which do not usually indicate stress. However, *Oxford* does not in general provide users with pronunciation; the only exception was *so and so*.

*Oxford* has a clear and consistent policy with regard to exemplifying binomials: all except one (*research and development*) are illustrated by an example. As for grammatical and morphological information, however, *Oxford's* policy is less satisfactory. With the exception of *bed and breakfast*, *bread and butter*, *life and death*, *research and development*, *to and fro* and *so and so*, the word-class of the binomial is never stated. What might have made up for this shortcoming is the fact that *Oxford* clarifies the meaning of the listed binomials through illustrative examples. It seems that *Oxford* relies on the illustrative examples it provides to help users guess the word class in context. However, this may not turn out to be always helpful, as not all users can deduce word-class from illustrative examples.

Another feature that is peculiar to *Oxford* is its indication, where appropriate, that a binomial is an idiom (e.g. *bread and butter* **IDM**). Particularly, this may draw EFL learners' attention to these items.

#### 4.1.2. Longman

Of the 35 binomials treated by *Longman*, eight appear as separate headwords, but *bread and butter* also appears as a multiword sense under *bread*. Two binomials appear only within examples viz. *name and address* under both items and *go and get* under the first constituent only. The other 25 binomials appear as multiword senses under the first constituent. Of these, only four receive full explanation under both items viz. *night and day*, *there and then*, *off and on*, and *by and large*. Moreover, of the 35 binomials, only 14 have a cross-reference under the second item viz. *back and forth*, *bread and breakfast*, *bread and butter*, *backwards and forwards*, *first and foremost*, *health and safety*, *law and order*, *now and then/again*, *time and again*, *over and above*, *life and death*, *wait and see*, *up and running* and *to and fro*.

With the exception of *to* and *fro*, *Longman* does not indicate pronunciation. Stress is indicated for seven binomials, viz. *bed and breakfast*, *black and white*, *bread and butter*, *health and safety*, *research and development*, *profit and loss*, and *to and fro*. It is worth noting that these items appear as separate headwords.

*Longman* gives the meaning of all the binomials; the only exceptions are *name and address*, *research and development* and *go and get*. Some meanings are indicated using synonyms (e.g. *over and over*), some using paraphrasing (e.g. *bits and pieces*) and some by suggesting a situation in which the binomial could be used (e.g. *by and large*). All binomials are illustrated with examples except for one, namely, *research and development*. *Longman* occasionally gives limited morphological and grammatical information.

#### 4.1.3. Webster

Of the 40 items, *Webster* lists only 24; all of them are accorded separate headword status except for *first and foremost*, which appears within an example only under the first item, and *once and for all* and *time and again*, which appear as multiword senses under the first constituent. There is no cross-reference under the second item except for *to and fro*. The binomial *on and off* appears twice in the alphabetically appropriate place, once as *off and on* and once as *on and off*. Word-class is indicated for all the binomials that appear as headwords. However, *Webster* does not tend to indicate pronunciation and stress. The only exceptions are *up and down*, *black and white*, *so and so* and *to and fro*.

*Webster* presents the meaning of all the binomials using synonymy and paraphrasing. However, it provides illustrative examples for nine items only, viz. *up and down*, *black and white*, *bread and butter*, *head and*



*shoulders, law and order, then and there, now and then, off and on and to and fro.*

For *now and then*, Webster does not indicate that it had another variant, namely, *now and again*.

#### 4.1.4. Atlas (English-Arabic)

*Atlas* lists 21 of the target binomials. Of these 21, 13 are shown as headwords, with the other eight (*now and then/again, off and on, on and on, more and more, time and again, once and for all, up and running* and *head and shoulders*) treated as multiword senses under the first item. It is worth remembering that *Atlas* does not cite the binomials that are treated as multiword senses in bold. Moreover, *Atlas* does not make a cross-reference to the binomial under the second item. The binomial *up and down* appears twice, once as a headword and once as a multiword sense under *up*.

The provision of information in *Atlas* is mainly restricted to meaning (using synonymy and paraphrasing) and to grammatical category. The word-class of all the binomials that are cited as headwords is indicated. No binomial is illustrated through an example except for *bread and butter*. Pronunciation and stress are indicated only for six binomials, which appear as headwords. These are *bed and breakfast, up and down, bread and butter, life and death, to and fro* and *so and so*. Strangely enough, *Atlas* does not distinguish between primary and secondary stress. Both items of the binomial received primary stress, which does not correspond to their actual pronunciation in English. On the whole, the information given in *Atlas* does not seem to be sufficient for EFL learners.

#### 4.1.5. Al-Mawrid (English-Arabic)

*Al-Mawrid* lists 20 binomials, only five of which appear as headwords, namely, *bread and butter, profit and loss, black and white, so and so* and *up and down*. However, *up and down* is also treated as a multiword sense under *up*. The other multiword sense binomials are cited under the first member except for *on and off* and *to and fro*, which are cited under both members.

Stress and pronunciation are rarely indicated. Only *so and so* is cited along with its pronunciation and stress. As in *Atlas*, stress placement is misleading because *Al-Mawrid* assigns primary stress to both items.

*Al-Mawrid* indicates the word-class of four items only, viz. *black and white, bread and butter, more and more* and *up and down*. Therefore, one can claim that *Al-Mawrid's* treatment of binomials in terms of word-class is inadequate and very poor. With regards to meaning, *Al-Mawrid* provides it using paraphrase in Arabic or single-

word equivalents. No illustrative examples are provided except for *bread and butter* and *so and so*. It is worth noting that *Al-Mawrid* mentions *once and for all* as *once for all* without using 'and'—a form that is not cited in the other dictionaries.

As is clear, *Al-Mawrid*'s treatment of binomials is restricted to giving meaning and rarely word-class. Thus, one can safely conclude that *Al-Mawrid*'s treatment of English binomials is not satisfactory, which makes its usefulness to Arab EFL learners interested in this area rather limited.

Having described how each dictionary treats the target items, we can argue that none of them is consistent in its treatment of binomials. Sometimes, a dictionary gives detailed information about some binomials and fragmentary information about others. For example, while *bread and butter* is treated fairly thoroughly in all the dictionaries, many items are not adequately treated, which does not enable some users to encode and decode them satisfactorily. There are also cases where the target binomials are completely absent from one dictionary or more.

#### **4.2. Is there a relationship between frequency of occurrence and treatment in dictionaries?**

The data in Table 1 [Appendix I below] show that the frequency of occurrence of the target items in the PIE vary considerably. While 13 of them occur less than 300 times, 7 occur more than 1000 times, with 20 items falling in a frequency range between 305 and 891. Table 3 [Appendix I below] provides data on the frequency of occurrence of binomials in the BNC and their inclusion in the consulted dictionaries.

A closer examination of the frequency of occurrence of a binomial and its inclusion within and across the 'test' dictionaries suggests a weak relationship between the two variables. Before providing supportive evidence for this observation, one may wish to classify the target binomials into three categories in terms of frequency of occurrence, namely, high (891-2483 hits), medium (320-861) hits and low (202-305 hits).

A look at the high-frequency category, which comprises eight items, shows that *Oxford* includes all of them, *Longman* lists five, *Webster*, *Atlas* and *Al-Mawrid* include four each. The two most frequent binomials *more and more* and *up and down*, and the fifth most frequent item *black and white* appear in the five dictionaries. On the other hand, the third, sixth and tenth most frequent binomials *men and women*, *economic and social* and *trade and industry* respectively are absent from four dictionaries, while *in and out*, which ranks four, appears in one dictionary only. In light of this, one can argue that the high frequency of a binomial is not a guarantee for its inclusion in a

dictionary. Further evidence can be cited from the low-frequency category which comprises fifteen items.

Of the 15 low-frequency items, *Oxford* and *Longman* include 14 items each, *Webster* and *Atlas* contain nine, and *Al-Mawrid* has seven items. Moreover, the binomials *so and so*, *bread and butter*, and *head and shoulders*, which are the three least frequent binomials, appear in all five dictionaries. Similar evidence can be cited from the medium-frequency category. [See Table 3:Appendix I below]

### **4.3. Is there a relationship between binomial type and treatment in dictionaries?**

As stated earlier, the researchers suggested that seven of the target items could be viewed as transparent (T), seventeen as conventional and sixteen as opaque (O). Table 4 [Appendix I below] provides the number and percentage of binomials listed in each dictionary in terms of binomial type.

As the figures show, *Oxford* performs especially well across all binomial types. The other 'test' dictionaries tend to include a much higher percentage of opaque and conventional binomials than transparent ones. Therefore, it can be said with greater certainty that there is a high correlation between a binomial's type and its inclusion in dictionaries. The more opaque the item, the more likely it is to be included in dictionaries. It seems that lexicographers, due to different restrictions, (e.g. space and potential users) tend to exclude the straightforward transparent binomials.

Although one may understand the practical motivation underlying this approach, one cannot overlook the fact that a user's interest in a certain binomial is not always determined on the basis of whether it is opaque or transparent. Sometimes, the interest of the user may reside simply in verifying whether a certain pair of words can be conjoined or not. The absence of the desired item from the dictionary, in this case, leaves the user's hypothesis untested, to say the least. After all, it seems that dictionary compilers, being aware that it is not possible to cover the whole language, choose to be selective (Katamba 1994:151), and thus include what they perceive as most useful for the intended users.

## **5. Conclusions and Recommendations**

Despite the fact that English is probably the best-described language lexicographically, the consulted dictionaries, with the exception of *Oxford* and *Longman*, fail to account for a large number of English binomials. Moreover, the monolingual dictionaries tend to list a larger number than the bilingual ones. Although the five dictionaries do not

generally provide sufficient information on binomials, the monolingual dictionaries are in a better position. Moreover, *Oxford* and *Longman*, the two monolingual learners' dictionaries in the set, seem to provide more sufficient and adequate information than those targeting non-specified users. In addition, there is no consistency in the treatment of binomials within and across the dictionaries. Sometimes, they provide reasonably adequate information for some items, sometimes they do not. Even worse, sometimes they may completely disappoint their users who happen to find that the binomial of interest is not included in the first place. This inadequate or insufficient treatment suggests that lexicographers should be encouraged to include as much information as possible on fixed expressions and multi-word units (Yorio, qtd in Farghal and Obeidat 1995:318).

In terms of dictionary usability, we claim that a dictionary that accords a separate headword to an opaque or conventional binomial is easier to use than a dictionary which buries it as a multiword sense under one of its constituents or just as a bold string. In this regard, *Webster* seems to be in the lead.

The 'test' dictionaries tend to allocate more entries to opaque and conventional binomials than to transparent ones. Moreover, the opaque also receive more adequate treatment. This seems to be in line with Verstraten's (1992:38) argument: "Fixed expressions must be thoroughly explained in the learner's dictionary in order to enable the student quickly to enter them into his/her mental lexicon". However, what appears to be transparent to native-speakers may turn out to be problematic for foreign learners, a point which lexicographers may wish to consider when they decide their inclusion strategy.

The findings point to a weak relationship between the frequency of occurrence of a binomial and its inclusion and treatment in the dictionary. For instance, while *trade and industry*, which has a frequency of 825 and ranks ten, is absent from all dictionaries, *so and so*, which has a frequency of 202 and ranks forty, appears in all of them.

On the whole, the consulted dictionaries do not provide their users with adequate and comprehensive information on binomials in English. This indicates that the phenomenon of binomials has not been given due weight and importance by lexicographers. Or, is it the case that the dictionary is still far from being a fully reliable source about language as Johnson had already put it when he compared dictionaries with watches? He maintained that "the worst is better than none and the best cannot be expected to go quite true" (Samuel Johnson's Quotes n.d). But as watches have become reliable instruments for telling the time, should one expect dictionaries to be next in giving reliable and detailed information about language?

Dictionary compilers should be encouraged to include more binomials in their dictionaries. For the transparent binomials, dictionary compilers may opt for listing them in bold strings under, say, the first component. Lexicographers also need to provide more information that enables the interested user to understand and use these binomials adequately. In this context, lexicographers may wish to consider, for the time being, the idea of providing a list of all binomials in English in an appendix, if it is not possible to include them in the body of the dictionary.

Further research is badly needed in this still relatively unexplored aspect of collocations. For instance, a piece of research is highly recommended on the treatment of these binomials in specialist dictionaries. Another study is needed to investigate the treatment of binomials in electronic dictionaries where the pressure of space is not as tight as it is in the case of paper-based dictionaries<sup>3</sup>.

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#### Appendix (I) : Tables 1-4

**Table 1. Target Binomials: Type and Frequency of Occurrence**

Target binomial and rank order	Freq. in BNC	Target binomial and rank order	Freq. in BNC
1 more and more (C)	2483	21 off and on (O)	467
2 up and down (O)	2221	22 day and night (T)	409
3 men and women (T)	1949	23 profit and loss (C)	362
4 in and out (C)	1146	24 there and then (O)	334
5 black and white (C)	1056	25 bits and pieces (O)	329
6 economic and social (T)	1046	26 over and above (O)	305
7 health and safety (T)	1040	27 to and fro (O)	283
8 now and then/again (O)	891	28 once and for all (O)	270
9 name and address (T)	861	29 wait and see (C)	259

10	trade and industry (T)	825	30	up and running (O)	253
11	research and development (T)	724	31	life and death (C)	242
12	go and get (T)	696	32	come and go (C)	239
13	here and there (C)	663	33	first and foremost (C)	237
14	again and again (C)	649	34	time and again (O)	236
15	law and order (C)	585	35	as and when (O)	224
16	over and over (O)	540	36	backwards and forwards (C)	218
17	back and forth (T)	488	37	each and every (C)	217
18	by and large (O)	485	38	head and shoulders (C)	203
19	bed and breakfast (C)	480	39	bread and butter (C)	203
20	on and on (O)	479	40	so and so (O)	202

**Table 2. Number of Binomials in Each Dictionary in Terms of Type and Listing Method**

Dictionary	Number of listed binomials	Listing method			Notes	
		H	MS	E		
Oxford	T	6	1	0	5	
	C	15	3	12	0	
	O	16	1	15	0	
	Total	<b>37</b>	<b>5</b>	<b>27</b>	<b>5</b>	
Longman	T	4	2	0	2	Besides being listed as H, <i>bread and butter</i> also appeared as MS under <b>bread</b>
	C	16	4	12	0	
	O	15	2	13	0	
	Total	<b>35</b>	<b>8</b>	<b>25</b>	<b>2</b>	
Webster	T	0	0	0	0	
	C	12	11	0	1	
	O	12	10	2	0	
	Total	<b>24</b>	<b>21</b>	<b>2</b>	<b>1</b>	
Atlas	T	0	0	0	0	Besides being listed as H, <i>up and down</i> also appeared as MS under <b>up</b>
	C	7	5	2	0	
	O	14	8	6	0	
	Total	<b>21</b>	<b>13</b>	<b>8</b>	<b>0</b>	
Al-Mawrid	T	0	0	0	0	Besides being listed as H, <i>up and down</i> also appeared as MS under <b>up</b>
	C	7	3	4	0	
	O	13	2	11	0	
	Total	<b>20</b>	<b>5</b>	<b>15</b>	<b>0</b>	

**Table 3. Binomials: Frequency of Occurrence in the BNC and Exact Listing Method in Dictionaries\***

Target binomial	Freq.	Oxf.	Long.	Webs.	Atlas	Al-Mawrid	No. of listing dictionaries
1 <b>up and down</b>	2221	MS	MS	H	MS	MS +H	5
2 <b>over and over</b>	540	MS	MS	H	H	MS	5
3 <b>on and on</b>	479	MS	MS	NA	MS	MS	4
4 <b>back and forth</b>	491	MS	MS	H	H	MS	5
5 <b>by and large</b>	485	MS	MS	H	H	MS	5
6 <b>off and on</b>	467	MS	MS	H	MS	MS	5
7 <b>now and then/again</b>	891	MS	MS	H	MS	MS	5
8 <b>there and then</b>	334	MS	MS	H	H	MS	5
9 <b>bits and pieces</b>	329	MS	MS	NA	NA	NA	2
10 <b>over and above</b>	305	MS	MS	H	H	MS	5
11 <b>to and fro</b>	283	MS	H	H	H	MS	5
12 <b>once and for all</b>	270	MS	MS	MS	MS	MS	5
13 <b>up and running</b>	253	MS	MS	NA	MS	NA	3
14 <b>time and again</b>	236	MS	MS	MS	MS	MS	5
15 <b>as and when</b>	224	MS	NA	NA	NA	NA	1
16 <b>so and so</b>	202	H	H	H	H	H	5
17 <i>more and more</i>	2483	MS	MS	H	MS	MS	5
18 <i>in and out</i>	1146	MS	NA	NA	NA	NA	1
19 <i>black and white</i>	1056	MS	H	H	H	H	5
20 <i>here and there</i>	663	MS	MS	H	NA	NA	3
21 <i>again and again</i>	649	MS	MS	H	NA	MS	4
22 <i>law and order</i>	585	MS	MS	H	NA	NA	3
23 <i>bed and breakfast</i>	480	H	H	H	H	NA	4
24 <i>profit and loss</i>	362	NA	H	H	H	H	4



25	<i>day and night</i>	409	MS	MS	H	NA	MS	4
26	<i>wait and see</i>	259	MS	MS	NA	NA	NA	2
27	<i>first and foremost</i>	237	MS	MS	E	NA	NA	3
28	<i>life and death</i>	242	H	MS	H	H	NA	4
29	<i>come and go</i>	239	MS	MS	NA	NA	NA	2
30	<i>backwards and forwards</i>	218	MS	MS	NA	NA	NA	2
31	<i>each and every</i>	217	NA	MS	NA	NA	NA	1
32	<i>head and shoulders</i>	203	MS	MS	H	MS	MS	5
33	<i>bread and butter</i>	203	H	MS+H	H	H	H	5
34	<b>men and women</b>	1949	E	NA	NA	NA	NA	1
35	<b>economic and social</b>	1046	E	NA	NA	NA	NA	1
36	<b>health and safety</b>	1040	E	H	NA	NA	NA	2
37	<b>name and address</b>	861	E	E	NA	NA	NA	2
38	<b>trade and industry</b>	825	NA	NA	NA	NA	NA	0
39	<b>research and development</b>	724	H	H	NA	NA	NA	2
40	<b>go and get</b>	696	E	E	NA	NA	NA	2
Total No. of Binomials			37	35	24	21	20	

\*MS= multiword sense, H= headword, E= within example, NA= not available. Opaque binomials appear in boldface, conventional in italics and transparent in normal font.

**Table 4. Number and Percentage of Binomials in Terms of Type in Each Dictionary\***

Dictionary	Oxford n=37	Longman n=35	Webster N=24	Atlas n=21	Al- Mawrid n=20
Binomial Type	No. and %	No. and %	No. and %	No. and %	No. and %
Transparent (T) (n = 7)	6 86%	4 57%	0 00%	0 00%	0 00%
Conventional (C) (n = 17)	15 83%	16 89%	12 70%	7 39%	7 39%
Opaque (O) (n = 16)	16 100%	15 94%	12 75%	14 88%	13 81%

\* % = the no. of binomials (T, C or O) in each dictionary divided by the overall no. of the target binomials within the same type (T, C or O)

## Notes

<sup>1</sup> PIE makes use of the BNC, which is a carefully-selected collection of 4124 contemporary written and spoken English texts, primarily from the United Kingdom. The corpus totals over 100 million words and covers a representative range of domains, genres and registers ([www.natcorp.ox.ac.uk/what/index.html](http://www.natcorp.ox.ac.uk/what/index.html)).

<sup>2</sup> NN1 stands for singular common noun; CJC for coordinating conjunction and NPO for proper noun.

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