

ON THE FREQUENCY OF OCCURRENCE OF COGNATE OBJECT CONSTRUCTIONS IN PRESENT- DAY BRITISH ENGLISH. A PRELIMINARY CORPUS- BASED ANALYSIS¹

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1. Introduction

The present paper focuses on English cognate object constructions (COC, henceforward) of the type illustrated in the following examples:

- (1) He *fought a last furious fight* and finally gave in. (BNC: H9Y 2985)
- (2) Do not disturb this sleep unless there are other indications that the child *is not sleeping a peaceful, healing sleep*. (BNC: B1R 6651)
- (3) They have begun *to dance a strange dance*. (BNC: H8R 773)

Present in almost any descriptive grammar of English since the publication in 1891 of Sweet's seminal work on English Grammar (e.g. Quirk et al. 1985; Halliday 1987; Downing and Locke 1992; Huddleston and Pullum 2002, among others), English COCs seem to be of special linguistic interest due to their particular and controversial syntactico-semantic and pragmatic status.

Nevertheless, the research carried out around English cognate objects has not paid the same attention to their syntactico-semantic and pragmatic behaviour. Whereas the former has been widely discussed in the literature (e.g. Baron 1971; Jones 1988; Rice 1988; Massam 1990; Dixon 1991; Downing and Locke 1992; Macfarland 1995; Huddleston and Pullum 2002; Nakajima 2006; Iwasaki 2007; Mirto 2007; Höche 2009; Ogata 2011), the latter has gone almost unnoticed

(e.g. Jones 1988; Rice 1988; Massam 1990; Macfarland 1995; Mittwoch 1998; Pereltsvaig 1999; Felser and Wanner 2001; Kuno and Takami 2004; Höche 2009). As a consequence, there are many issues of a pragmatic nature concerning COCs which are still unanswered nowadays: among others, their exact extra-linguistic meaning, their distribution and their real frequency of occurrence in the speech of native speakers of English. This pragmatic gap in the research on English COCs is also noticed by Höche (2009: 1), who comments that in modern functional theoretical approaches to the study of language very little attention has been paid to this specific clausal pattern:

While the description and analysis of the construction played some role in Generative Grammar research, where it was discussed as a challenge to certain established principles and theoretical constructs (e.g. subcategorization frames or case-assignment), not much attention has been paid to this phenomenon in more recent approaches to and models of language, such as Functional Grammar or Cognitive Linguistics.

In contrast, their syntactico-semantic description has been the subject-matter of numerous studies, which have mainly revolved around the following problematic issues: (i) the very definition of the term ‘cognate object’ itself (e.g. Baron 1971; Massam 1990; Macfarland 1995; Ogata 2011); (ii) their syntactic function either as verbal arguments or adjuncts (e.g. Baron 1971; Massam 1990; Macfarland 1995); (iii) the verbal classes that are compatible with them (e.g. Macfarland 1995; Nakajima 2006; Iwasaki 2007; Ogata 2011); (iv) the obligatory/optional patterns of modification they take (e.g. Rice 1988; Iwasaki 2007; Höche 2009; Ogata 2011); (v) the restrictions, if any, on the determiners that introduce them in discourse (e.g. Rice 1988; Höche 2009; Ogata 2011); (vi) and the comparison, due to their semantic closeness, between COCs and intransitive patterns with adverbial modification, like (4), on the one hand, and light verb constructions of the type illustrated in (5), on the other (e.g. Jones 1988; Dixon 1991; Downing and Locke 1992; Macfarland 1995; Huddleston and Pullum 2002; Mirto 2007; Höche 2009; Ogata 2011):

(4) Emily Carr *died peacefully* in her sleep in March of 1945. (BNC: B11 2)

(5) Yeah, you *have a recurrent dream*, okay. (BNC: HUL30)

For this reason, and with the intention of shedding some light on the pragmatics underlying English COCs, I will present in the present paper the results of the preliminary, but thorough and exhaustive, analysis I have carried out in the *British National Corpus* of the four verbal classes that, according to Levin (1993), seem to be potentially compatible with cognate objects in order to prove, first, and in agreement with Mittwoch (1998), that cognate objects are “heavily restricted” in present-day British English, as well as to account for the main reasons underlying their low frequency of occurrence.

2. Delimiting the Phenomenon

But what are COCs? In order to avoid confusion, this question must be answered at the very beginning of this paper because in the literature there is not a single homogeneous definition of this linguistic phenomenon. There is, on the one hand, a broad definition (e.g. Sweet 1891; Baron 1971; Quirk et al. 1985; Halliday 1987; Levin 1993; Mittwoch 1998; Kuno and Takami 2004) that considers that cognate objects are those noun phrases that have as their head a noun either morphologically or semantically related to the verb of the sentence:

Sometimes an intransitive verb is followed by a noun in the common form which repeats the meaning of the verb, as in *sleep the sleep of the just, fight a good fight*, where the noun is simply the verb converted into a noun, and in *fight a battle, run a race*, where the noun repeats the meaning, but not the form, of the verb. Such object-nouns are called cognate objects. (Sweet 1891: 91)

According to this definition, a *painful death* in (6) and *an enigmatic smile* in (7) are representative of the first class of cognates, generally referred to as “morphological cognates”, due to the morphological relationship they have with the verbs *die* and *smile*, respectively; *the polka* in (8) and *her Cheshire cat grin* in (9) are, in turn, two clear examples of the so-called “semantic cognates” since the only relationship they have with the verbs *dance* and *smile* is semantic in nature, but not morphological:

- (6) Given a meatless diet it will rapidly become ill and *will die a painful death*. (BNC: BMG 658)
- (7) She *smiled an enigmatic smile*. (BNC: H97 4104)
- (8) ‘Now, if this young scoundrel has the moral fibre to wear *this* apparatus for one month, I can guarantee *he’ll be dancing the polka* with the best of them. (BNC: AEB 3177)
- (9) And *smiles her Cheshire cat grin*. (BNC: CH5 27)

On the other hand, one can find a narrower definition in scope (e.g. Jones 1988; Massam 1990; Downing and Locke 1992; Macfarland 1995; Felser and Wanner 2001; Real Puigdollers 2008; Höche 2009; Ogata 2011), which only includes as cognate objects those noun phrases of the first type; that is, those noun phrases whose head, like *death* in (6) and *smile* in (7), maintains a morphological relationship with the verb:

This section considers the working definition and the constraints of COCs and examines a COC classification. COCs take cognate objects that are morphologically related to the verbs and usually the verbs are intransitive. (Ogata 2011: 1)

Those nouns that share, in turn, with the verb only a semantic relationship, like *polka* and *grin* in (8) and (9), seem to exhibit a syntactico-semantic behaviour of their own in relation to passivization, topicalization, pronominalization, definiteness and questionability, which is similar to the behaviour displayed by regular objects and which morphological cognates, however, do not show. Thus, they are excluded from the realm of COCs in this alternative definition, where they receive different names. Massam (1990: 163), for instance, calls them *transitivizing objects*, Felser and Wanner (2001: 106) *hyponyms of cognate objects*, Real Puigdollers (2008: 158) *hyponymic objects* and Ogata (2011: 3) *non-cognate objects*².

Taking into account the Latin origin of the term cognate (*cognatus* originally meant ‘related by blood’), it is not surprising to find morphological cognates included within the cognate object category in the two alternative approaches previously outlined, which, nevertheless, offer a different treatment for those verbs traditionally called semantic cognates. The morphological connection that seems to be crucial for cognateness to be possible, however, is not devoid of problems either. Here again we find two different views. In one of them, only those nouns which are either zero-related to the verb or created from a verb by means of the morphological process known as ablaut (*song* from *sing*, *death* from *die*, *thought* from *think*, etc.) are included. As Macfarland (1995: 6) clearly explains:

Furthermore, because of the lack of consensus in the literature on the issues of derivation and affixation, I will follow Baron’s guidelines and accept only verb-noun pairs which are either zero-related or which share a root morpheme and are not derived by means of affixation. I thus restrict the scope of my investigation of the cognate object construction to the two established types, *fight a fight* and *die a death*.

In the other proposal, defended by Höche (2009), among others, cognate objects also embrace those noun phrases that are related to the verb by means of any other morphological process, such as, for instance, affixation or derivation:

I do not make restrictions to the form of NR—contrary to e.g. Macfarland, who only considered zero-derived nouns or nouns derived by stem alternation as possible CO candidates. Therefore, in the present study *record a record* \emptyset , *pray a prayer*, *paint a painting*, *arrange an arrangement* or *decide a decision* will be discussed as instances of COCs. (Höche 2009: 85-86)

Since it comprises the only class of nominals that are unanimously recognised in the literature as cognates, I will adopt as my starting point, due to the preliminary status of this work, the most restrictive definition of all the ones previously described; thus, cognate objects are to be understood in this study as being in line

with Macfarland's (1995); that is, as those nominal participants in a clause that either have exactly the same morphological form as the verbs they are related to, like *grin* in (10), or share with them the same root, though with some internal vocalic change, like *song* in relation to *sing* in (11). That is, those nouns that are either zero-related to the verb or created from a verb by means of the morphological process known as ablaut:

(10) He was squatting at our feet *grinning his wide sheepish grin*. (BNC: FEM 83)

(11) She was knitting and *singing a song*. (BNC: FEU 422)

3. Corpus Analysis

3.1. Methodological Issues

Once COCs have been delimited, I proceed to present the methodology and results of the corpus analysis I have carried out. I have taken as my starting point the four English verbal classes that Levin (1993) describes as potentially compatible with cognate objects since her definition of this particular clausal constituent, though more restricted than mine, adjusts quite well to the one proposed in this study. Notice that Levin (1993: 95-96) excludes from the realm of COCs not only semantic cognates, but also all kind of morphological cognates, except for those having exactly the same form as the verb they derive from: "Some basically intransitive verbs take as their object a noun that is zero-related to the verb—a so-called "cognate object".

These four verbal classes are: (i) verbs of nonverbal expression; (ii) verbs of manner of speaking; (iii) *waltz* verbs; (iv) and a fourth class which comprises the verbs *dream*, *fight*, *live*, *sing*, *sleep* and *think*. Due, however, to the different morphological scope of both definitions, I have also included in this last group the verbs *die* and *breathe* because they also describe, as well as the others, recurrent processes in the behaviour of human beings and allow cognate objects in their subcategorization frames:

(12) The lines were coming out as written, but the play *was dying a slow death*. (BNC: H92 934)

(13) As she walked the woman *breathed a great breath of warm night air*. (BNC: HGB 2914)

The corpus I have chosen for my research is the second edition of the *British National Corpus*, known as the *BNC World*, for being, on the one hand, one of the largest electronic corpora of contemporary British English available nowadays (100 million words) and, on the other, for being representative of different written (90%) and spoken (10%) registers and varieties of the language.

Since the number of verb-noun types of combination to be analysed amounts to 130, in this preliminary study I have just searched in the corpus for the nominals in the singular number morphologically related to the verbs included in the four aforementioned verbal classes. In order to get only those valid examples for my study—those in which the nominal at issue functions as a morphological cognate of the verb and indicated in the tables that follow as “raw frequency of COCs”—, the examples obtained in each case (total number of examples) have been analysed manually so as to eliminate those instances in which the nominal at issue, like *smile* in (14-15), for example, displays a different syntactic function:

(14) *Your smile* destroyed her. (BNC: A08)

(15) It was *a pleasant smile*. (BNC: CN3)

My analysis is, thus, quite different from the two, as far as I know, most recently published corpus-based studies on English COCs: Macfarland’s (1995) and Höche’s (2009). It differs from Macfarland’s work (1995) in that her corpus comprises 2,000 naturally occurring tokens and 170 verb-noun sequences the author herself compiled from different sources:

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... this is an opportunistic corpus, listing any and all the tokens I have found in the literature (not examples constructed by linguists, but only naturally occurring tokens cited in grammars or in linguistic papers), in other readings, and through computer searches of various electronic searchable materials (e.g., files from the Gutenberg project, The Wall Street Journal files distributed by the ACL-DCI, Nexis). (Macfarland 1995: 9)

My analysis also differs from Höche’s study (2009), despite being similarly rooted in the *BNC*, in several issues. The most striking contrast, in my view, is the broad definition of cognate objects that Höche (2009) defends which, as mentioned before, also comprises those nouns that are morphologically derived from verbs by means of affixation. As a logical consequence, then, her results differ from mine in several important aspects, concerning, above all, the number of verb-noun combinations studied, as well as the number of COCs found; specifically, 400 verb-noun pairs, resulting in 3,139 different COCs.

3.2. Real Data

As illustrated in Table 1, the overall results obtained from my analysis show that COCs are not as frequently used as might be expected *a priori* in the real speech of native speakers of British English; notice in this regard that only 1,169 COCs have been attested out of a total of 136,032 examples analysed; that is, a 0.85% of the corpus:

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<i>Verbal class</i>	<i>Total number of examples analysed</i>	<i>Raw frequency of COCs</i>	<i>Normalised frequency of COCs³</i>
Nonverbal expression	13,679	302 (2.20%)	220.77
Human processes and behaviour	103,184	845 (0.81%)	81.89
Waltz verbs	7,637	12 (0.15%)	15.71
Manner of speaking	8,717	8 (0.09%)	9.17
Nonverbal + Manner of speaking	2,815	2 (0.07%)	7.10
Total	136,032	1,169 (0.85%)	85.93

Table 1. Frequency of occurrence of COCs per verbal classes in the BNC.

Thus, in complete agreement with Mittwoch (1998: 313), the first conclusion that can be drawn at this stage of the research is that in present-day British English the occurrence of cognate objects is “heavily restricted”.

3.2.1. Cognates Derived from Verbs of Nonverbal Expression

Taking into account the normalised frequencies shown in Table 1, the verb-noun combinations that stand out above the rest for having the highest level of frequency of occurrence in the COC in present-day British English are those denoting nonverbal expression; specifically, a normalised frequency of occurrence of 220.77, distributed as follows:

<i>Morphological cognate</i>	<i>Total number of examples analysed</i>	<i>Raw frequency of COCs</i>	<i>Normalised frequency of COCs</i>
Smile	5,867	238 (4.04%)	405.65
Grin	1,016	22 (2.16%)	216.53
Laugh	1,759	26 (1.47%)	147.81
Sigh	1,002	10 (0.99%)	99.80
Scowl	106	1 (0.94%)	94.33
Yawn	110	1 (0.90%)	90.90
Chuckle	168	1 (0.59%)	59.52
Frown	435	2 (0.45%)	45.97
Cough	523	1 (0.19%)	19.12
Total	13,679 ⁴	302 (2.20%)	220.77

Table 2. Frequency of occurrence of nonverbal morphological cognates in the BNC.

After a careful look at the individual results presented in Table 2, it can be concluded, however, that the frequency of occurrence of this kind of morphological cognates is not as outstanding as might be thought *a priori* since the 302 COCs found here (out of a total of 13,679 examples) are distributed among only 9 of the 29 cognates derived from the verbs in this group; namely, *smile*, *laugh*, *grin*, *sigh*, *frown*, *cough*, *chuckle*, *scowl* and *yawn*⁵.

- (16) I *smiled a lopsided smile*. (BNC: B38 152)
- (17) He *laughs a low laugh of relief*. (BNC: HH0 2816)
- (18) Tom *grinned an enormous grin* across the table. (BNC: A6J 115)
- (19) He *sighed a deep, despairing sigh*. (BNC: CDY 333)
- (20) He *frowned his black frown*. (BNC: FET 158)
- (21) He ... then *coughed a harsh, chest-tearing cough* before asking further. (BNC: HWE 555)
- (22) He *chuckled, a wickedly delicious little chuckle*. (BNC: JYB 173)
- (23) “She takes after our Lance,” declared Rowbotham aunts and cousins, and I *would scowl his scowl* and confirm their verdict. (BNC: FU7 7)
- (24) ... he stretched at leisure, *yawned an artificial, exaggerated yawn*. (BNC: FRC 46)

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Furthermore, with the exception of *smile*, *grin* and *laugh*, which appear at the top of the frequency list of COCs in this group –specifically, 238 out of 5,867, 22 out of 1,016 and 26 out of 1,759–, representing, thus, the largest normalised frequencies of all the morphological cognates analysed (405.65, 216.53 and 147.81, respectively), the remaining cognates of nonverbal expression attested in the corpus show a considerably restricted use in the COC. Notice in this regard, on the one hand, that *sigh* (10 instances out of 1,002), *scowl* (1 example out of 106) and *yawn* (1 attestation out of 110) exhibit a normalised frequency of occurrence which ranges from 90.90 (*yawn*) to 99.80 (*sigh*), and 94.33 for *scowl*. On the other hand, the normalised frequencies for the single instance of *chuckle* (out of 168) and for *cough* (out of 523) and the 2 attestations of *frown* (out of 435) are no higher than 60.00: specifically, 59.52, 19.12 and 45.97, respectively.

3.2.2. Cognates Describing Recurrent Processes in the Behaviour of Human Beings

The second most productive verb-noun combinations that seem to enter the COC in present-day British English, with an average normalised frequency of 81.89, are the ones comprising the cognates listed below:

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<i>Morphological cognate</i>	<i>Total number of examples analysed</i>	<i>Raw frequency of COCs</i>	<i>Normalised frequency of COCs</i>
Song	3,744	249 (6.65%)	665.06
Dream	3,647	30 (0.82%)	82.25
Life	54,416	437 (0.80%)	80.37
Fight	2,839	19 (0.66%)	66.92
Sleep	3,735	18 (0.48%)	48.19
Death	19,592	72 (0.36%)	36.74
Thought	10,542	17 (0.16%)	16.12
Breath	4,669	3 (0.06%)	6.42
Total	103,184	845 (0.81%)	81.89

Table 3. Frequency of occurrence in the BNC of morphological cognates derived from verbs denoting recurrent processes in the behaviour of human beings in the BNC.

Although they all describe recurrent and common stative or dynamic processes in the behaviour of human beings, Levin (1993) considers the verbs they derive from semantically diverse and classifies them within different groups in her study of English verbs and alternations: *fight* (e.g. 25), as a verb of social interaction; *live* (e.g. 26), as a verb of existence; *sing* (e.g. 27), as a verb of sound emission; *sleep* (e.g. 28), as a verb involving the body; *think* (e.g. 29), as a verb either of assessment or judgment; *die* (e.g. 30), as a verb of disappearance; *breathe* (e.g. 31), as a verb of bodily process; and, finally, *dream* (e.g. 32), as a verb denoting a mental process (e.g. Hoche 2009)⁶:

- (25) No, *they're still fighting the good fight.* (BNC: C87 5913)
- (26) Jesus came, he *lived a sinless life.* (BNC: KLF 54841)
- (27) Malcolm Macleod *sang a heroic song in Gaelic ...* (BNC: GIY 797)
- (28) Luice *was sleeping an unnaturally deep sleep.* (BNC: HTN 5928)
- (29) ... *these thoughts would only have been thought* by a Christian audience of that time. (BNC: HUP 980)
- (30) *We are dying a slow death.* (BNC: CAD 2023)
- (31) Its bark was gone quite long ago but it's still there, out of its row, out of its life, out of its death, but there no less__ and *breathing breath.* (BNC: EUY 190)
- (32) But peacefully now he *dreamed a dream of green fields far away.* (BNC: B24 1085)

As Table 3 reveals, the subcorpus of examples analysed with these morphological cognates (103,184 tokens) surpasses by far that of the rest of the groups. It

represents, in fact, three quarters of the whole corpus examined: namely, 75.85% of the total. This figure indicates that, in comparison with the other cognates, whose meaning is undoubtedly much more specific, these ones have an extensive and wide use in any type of register and discourse due to their semantics. Notice in this regard that ‘living’, ‘dying’, ‘breathing’ and ‘sleeping’ are, on the one hand, states or activities all human beings without exception experience because they are essential for life, and that ‘thinking’, ‘singing’, ‘fighting’ and ‘dreaming’, on the other, describe states and activities also performed often by animate beings. Therefore, it is not surprising to have found here the largest number of COCs attested in the whole corpus (845, specifically).

However, after a careful look at the overall results obtained for this particular class of cognates, it can be noticed that they only exhibit 81.89 average normalised frequency of occurrence in the COC, thus supporting Mittwoch’s (1998) hypothesis about its scarce use in present-day British English. The distribution of the 845 COCs associated with this group is also enlightening in this respect because, as illustrated in Table 3, all the morphological cognates searched for, except for *song*, are not really recurrent in the COC. Notice in this regard that not even *dream*, with 30 attested instances out of 3,647 and, thus, the most frequent cognate in this group, exhibits a normalised frequency of occurrence superior to 100: specifically, 82.25; *life*, found in 437 COCs out of 54,419 examples, comes in second place with a similar normalised frequency of occurrence (80.37); the third morphological cognate in terms of productivity is *fight*, which having produced 19 attestations out of a corpus of 2,839 examples, presents a normalised frequency of 66.92; less recurrent are *sleep* and *death*, which attested in 18 instances out of a corpus of 3,735 tokens and in 72 examples out of a total number of 19,601, respectively, show a lower normalised frequency of occurrence: namely, 48.19 and 36.74; and finally, at a considerable distance, *thought* and *breath* appear with the lowest normalised frequencies in the group: 16.12 and 6.42, respectively, which stand for the 17 COCs attested with *thought* out of a corpus of 10,542 tokens and the 3 tokens found with *breath* out of the 3,361 patterns analysed.

Song has been attested, in turn, in 249 COCs out of the 3,744 examples analysed, showing, thus, a noticeably much higher normalised frequency of occurrence in this particular syntactic pattern than the other cognates associated with this verbal class; specifically, 665.06. This finding should not strike the reader, however, as surprising once account has been taken of the syntactic nature of the verb this specific nominal complements. In contrast to most of the verbs in this class, except for *think*, which are undoubtedly intransitive unergative, *sing* is a prototypical transitive verb which allows, as such, the presence of the morphological cognate *song* as direct object in its subcategorization frame much more freely than the rest:

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- (33) But the real stormer from these sessions is a tune called ‘Hittin’ The Bottle Again’, in which he just strokes his National Steel and *sings this sad, lovely song about dereliction and bar-hopping*. (BNC: CK4 45)
- (34) Let me *sing this song* right. (BNC: KBN 26)

The relatively high productivity of this verb-noun combination in the COC in present-day British English is, thus, to be accounted for by the fact that the morphological cognate *song* does not have the same “exceptional” transitivity effect on the verb *sing* as any other morphological cognate has on the intransitive unergative verb it complements.

3.2.3. Cognates Derived from ‘Waltz’ Verbs

Waltz verbs conform one of the seven verbal groups in which Levin (1993: 263-270) divides English verbs of motion. As Levin (1993: 269) remarks, these verbs are zero-related to names of dances and mean roughly “perform the dance” that is referred to. Since most of them are hyponyms of the general term “dance”, the nominals related to them are much more productive as transitivity objects of the verb *dance* (that is, as semantic cognates), as shown in examples (35-39), than as morphological cognate objects:

- (35) . . . since he did not dance he was content to watch her *dance the tango* with a number of admirers. (BNC: ANF 63)
- (36) I can guarantee he’ll be *dancing the polka* with the best of them. (BNC: AEB 3)
- (37) Now, at Madeleine’s insistence, they were going to while the night away at the Cave of Harmony nightclub, where they would all get even hotter *dancing the shimmy, the foxtrot or the black bottom*. (BNC: FS1 11)
- (38) *Dance one more pirouette* and it could blind you. (BNC: CH2 10)
- (39) . . . then a troupe of girls *danced a vigorous whirling jig* which left the faces of the spectators, as well as theirs, red with excitement. (BNC: HUO 31)

Thus, the COCs built around their members do not seem to be very productive, common or frequent. Notice here, on the one hand, that only twelve tokens have been found out of a corpus of 7,637 examples: a figure that represents an average normalised frequency of occurrence of 15.71; and on the other, that they are all distributed just between two out of the twenty one morphological cognates associated with the components of this verbal group: *waltz* appears in one single instance out of a corpus of 152 examples, thus having a normalised frequency of occurrence of 65.78; and *dance* has provided, in turn, as expected, the eleven remaining tokens out of a total number of 2,919 examples, displaying, hence, a normalised frequency of occurrence of 37.68:

<i>Morphological cognate</i>	<i>Total number of examples analysed</i>	<i>Raw frequency of COCs</i>	<i>Normalised frequency of COCs</i>
Dance	2,919	11 (0.37%)	37.68
Waltz	152	1 (0.65%)	65.78
Total	7,637 ⁷	12 (0.15%)	15.71

Table 4. Frequency of occurrence of ‘waltz’ morphological cognates in the BNC.

The behaviour of the two *waltz* cognates attested in the corpus show, furthermore, that in this particular English pattern the verbs they complement are best interpreted as “performance verbs” rather than as “motion verbs” because, though describing movement, as Levin (1993: 269) herself acknowledges, no specific direction is implied in the cognate object patterns found. In fact, none of the COCs attested in the corpus, like examples (40-41), have an explicit directional phrase present in them:

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- (40) They *had waltzed the last waltz* together, now the evening was over. (BNC: FP7 308)
- (41) Jonathan *danced a manic little dance*. (BNC: HTU 3361)

3.2.4. Cognates Associated with Manner of Speaking Verbs

Although in Levin’s (1993) work the manner of speaking verbal class includes the verb *sing*, I have not analysed its morphological cognate here, but have done so within the second group of nominals previously identified, because the usual meaning of the verb-noun combination *sing-song* does not denote any specific manner of speaking, but some kind of sound emission:

- (43) ‘When I opened in Vegas and I sang ‘Goldfinger’, they all said, ‘Why is this black girl *singing a white girl’s song*?’ (BNC: A3X 34)
- (44) A wren *sings a song* with twenty or more distinct notes per second. (BNC: MBY 1032)

As Table 5 reveals, this particular class of cognates is not really productive in the COC either; it is, in fact, the group with the lowest level of frequency of occurrence of the five classes examined; specifically, a normalised frequency of occurrence of 9.17, which corresponds to the only 8 attestations found out of a corpus of 8,717 tokens:

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<i>Morphological cognate</i>	<i>Total number of examples analysed</i>	<i>Raw frequency of COCs</i>	<i>Normalised frequency of COCs</i>
Scream	516	3 (0.58%)	58.13
Bark	447	1 (0.22%)	22.37
Purr	41	1 (2.43%)	243.90
Shout	480	1 (0.20%)	20.83
Whisper	579	1 (0.17%)	17.27
Yell	98	1 (1.02%)	102.04
Total	8,717 ⁸	8 (0.09%)	(9.17%)

Table 5. Frequency of occurrence of manner of speaking morphological cognates in the BNC.

Its extremely reduced level of productivity is further enhanced by the fact that only 6 cognates out of 66 have been found in the corpus in the COC—*bark*, *purr*, *scream*, *shout*, *whisper* and *yell*— and all of them, except for *scream*, with 3 attestations, appear in one single instance:

- (45) The dog *was* still *barking*: a hysterical, high-pitched bark that went on and on. (BNC: ACB 216)
- (46) ST came to me and rubbed against my side, *purring his rattling, wheezing purr*. (BNC: G02 12)
- (47) Backing against a wall she *screams a scream that will soon have most of Britain in suspense* (BNC: F94 89)
- (48) “I hope you get bloody herpes”, she *shouted rather an old-fashioned shout, in Oxford in 1988 [...]* (BNC: HAO 473)
- (49) What remains *whispers the whisper of the startled stare before death*. (BNC: B1C 88)
- (50) She *yelled an incoherent yell*. (BNC: CJA 60)

3.2.5. Cognates Derived from Both “Manner of Speaking” and “Nonverbal Expression” Verbs

The class of manner of speaking verbs is said to comprise, apart from the 66 verbs from which the previous morphological cognates derive, seven more units (i.e., *cackle*, *cry*, *groan*, *growl*, *howl*, *moan* and *whistle*) whose morphological cognates I have analysed separately, because they can also be classified as denoting some kind of nonverbal expression:

<i>Morphological cognate</i>	<i>Total number of examples analysed</i>	<i>Raw frequency of COCs</i>	<i>Normalised frequency of COCs</i>
Cry	1,585	2 (0.12%)	12.61
Total	2,815 ⁹	2 (0.07%)	7.10

Table 6. Frequency of occurrence in the BNC of morphological cognates derived from verbs classified as manner of speaking and nonverbal expression verbs.

As the results in Table 6 reveal, of these seven cognates only *cry* has been attested in the COC, though with almost no frequency of occurrence at all (12.61), producing only the following two examples out of a corpus of 1,585 tokens:

- (51) He heard someone *cry out*, a terrible *cry*, and then realised it was himself. (BNC: C8S 1557)
- (52) For he *cried out* with power and anger, a *cry so loud and full of authority that the men themselves stopped and looked back in surprise*. (BNC: FP3 1814)

4. Explaining the Frequency of Occurrence of COCs in Present-Day British English

As has been shown in the previous sections, the results obtained in my corpus-based analysis lead me to conclude, in complete agreement with Mittwoch (1998: 213), that in present-day British English the occurrence of cognate objects is “heavily restricted”. In my view, however, their scarce use has to be explained not only, as Mittwoch (1998: 313) does, from a purely syntactic perspective, but also in semantico-pragmatic terms.

According to Mittwoch (1998: 313), COCs are extremely reduced in English because “they occur only with intransitive verbs, and only with unergatives. [...] Even with unergatives, CO formation in English is marginal and far from being productive”. Although this syntactic restriction, quite extended in the literature (e.g. Sweet, 1990, Jones 1988; Kevin 1993; Mittwoch 1998; Felser and Wanner 2001; Nakajima 2006), is responsible, indeed, to a great extent for the low frequency of occurrence of this particular pattern in the real speech of British speakers, it cannot be considered the only reason that accounts for its extremely restricted use. Notice in this regard, first, that not only intransitive verbs of the unergative type, like *sigh* and *scream* (e.g. 53-54), but also transitive verbs, like *sing* and *think* (e.g. 55-56), for instance, and the inaccusative verb *die* (e.g. 56), allow cognate objects in their subcategorization frames (e.g. Jespersen 1909-1949; Baron 1971; Massam 1990; Dixon 1991; Macfarland 1995; Höche 2008):

On the frequency of occurrence of cognate object constructions...

- (53) He *sighed a deep, despairing sigh*. (BNC: CDY 333)
- (54) Backing against a wall she *screams a scream that will soon have most of Britain in suspense* and the output cuts to a camera facing the roller caption machine on which the end credits are being displayed. (BNCF9Y: 89)
- (55) MY MOTHER, many years ago, *used to sing a song about a miner*, warned by his daughter not to go to work because she dreamed of a disaster. (BNC: CHI 30)
- (56) He hoped George *wasn't thinking the same thought*. (BNC: HR4 3076)
- (57) I wouldn't say it *will die a natural death*. (BNC: CAP 814)

It should be noticed here, notwithstanding, and in agreement with Mittwoch (1998), that the intransitive verbs of the unergative type are, by far, the most recurrent ones in the COC since of the 130 verb-noun combinations analysed, 118 contain, in fact, unergative verbs; that is, 90.73% of the total. The 12 remaining verbs are distributed as follows: 11 verbs (8.46%) can have a transitive use, besides an intransitive one (*dream, think, sing, chant, croon, grunt, holler, mumble, murmur, mutter* and *whisper*), and only one, *die* (0.76%), is to be classified as an unaccusative verb:

<i>Syntactic verbal class</i>	<i>Number of verbs in the COC</i>	<i>Percentage</i>
Unergative	118	90.76%
Unaccusative	1	8.46%
Transitive	11	0.76%
Total	130	99.98%

Table 7. Distribution of the syntactic verbal classes attested in COCs in the BNC

The findings concerning unaccusative verbs cannot be regarded as a matter of chance since *die* is almost unanimously considered in the literature to be the only representative of the unaccusative verbal class that enters the COC in English. As far as I know, there are only two studies —Macfarland's (1995) and Kuno and Takami's (2004)— that are somehow exceptional in this regard, though for very different reasons. Macfarland (1995), for instance, does not consider the behaviour of *die* exceptional because, after comparing it with its synonym *perish*, she concludes that *die* is an intransitive verb of the unergative type and, as a consequence, unaccusative intransitive verbs are to be ruled out completely from the COC. And for Kuno and Takami (2004: 11-116), in turn, there is nothing special in the behaviour of *die* since for them there are many other unaccusative verbs in English that enter the COC, as examples (58-60) illustrate, without causing any type of ungrammaticality¹⁰:

(58) Mary *blushed a deep/sudden blush*. (Kuno and Takami 2004)

(59) The apples *fell just a short fall* to the lower deck...

(60) The tree *grew a century's growth* within only ten years.

Apart from this syntactic constraint operating on the formation of English COCs, the restricted occurrence of COCs in present-day British English also has to be explained in terms of their internal syntactico-semantic organization which should be compared with that of their (in)transitive and light verb counterparts, exemplified, for instance, in (61-62) and (63-64), respectively:

(61) They *weep openly and harrowingly* [...] (BNC: G0T 43)

(62) He rolls away from Marjorie, who, now lying on her back, *begins to snore faintly*. (BNC: ANY 18)

(63) You *can have a real old giggle* at that. (BNC: FXW 11)

(64) Bert *took a long sniff* and looked at Yanto. (BNC: B3J 121)

According to Höche (2009: 79), the intransitive structures in these examples are the basic clause type from which light verb patterns and COCs derive because they are the ones that exhibit a canonical internal organization; namely, one in which the event denoted in the clause is expressed through the verb. Thus, in (61-62) the events of “weeping” and “snoring” are encoded by means of the verbs *weep* and *snore*, respectively.

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In light verb constructions, however, the direct object is the clausal element in charge of denoting the event described in the clause because the verbal unit, being semantically vague and almost devoid of meaning, only displays a grammatical function. Notice, in fact, that the events of “giggling” and “sniffing” encoded in (63-64) above are not directly denoted, due to their semantic emptiness, by the verbs *have* and *take*, but by the deverbal nouns functioning as heads of the direct objects *a real old giggle* and *a long sniff*, respectively¹¹.

And finally, as shown in (65-66), in COCs the event is encoded twice because, as Quirk et al. (1985: 750) remark, the semantic function of the cognate object (*her billy goat laugh* and *an enormous grin*) is just “to repeat, wholly or partially, the meaning of the verb” (*laugh* and *grin*). For this reason, Quirk et al. (1985: 750) do not consider the cognate object a verbal argument and, in a similar line, Mirto (2007: 1) describes it as “a predicate surfacing as an argument”:

(65) Margaret *laughed her billy goat laugh*. (BNC: CR6 2985)

(66) Tom *grinned an enormous grin* across the table. (BNC: A6J 115)

As a consequence, COCs are frequently described in the literature as redundant (e.g. Quirk et al. 1985; Massam 1990; Langacker 1991: 63; Dixon 1991: 118)

and, as such, as Langacker (1991: 364) also remarks, as deviating from the expected grammatical structure: the basic (in)transitive scheme they derive from.

It is not surprising, then, to find in the literature a frequent comparison of COCs with: (i) intransitive sentences, usually with adverbial modification (e.g. Jones 1988; Dixon 1991; Dowling and Locke 1992: 159; Huddleston and Pullum 2002; Höche 2009; Ogata 2011); (ii) light verb patterns (e.g. Mirto 2007; Höche 2009); (iii) and even sentences in which the nominal at issue, being a semantic cognate, functions as a transitivizing object (e.g. Massam 1990; Real Puigdollers 2008).

The general idea underlying the comparison between COCs and the intransitive sentences with adverbial modification they are related to is their synonymy. Huddleston and Pullum (2002: 673), for instance, comment that they mean “essentially the same”; and for Jones (1988: 93), the difference between them is more “a matter of style than of meaning”. However, if this were the case, COCs would be useless because they would not serve a specific function of their own in the language. With this in mind, Jespersen (1925: 235) observes that the examples illustrated in (67a-67b) are, by no means, semantically equivalent, and concludes that English COCs are a clear means of filling a gap in the language since they are used to describe a verbal event that cannot be described otherwise; that is, when the language does not possess an adverb appropriate for displaying such a descriptive function:

(67a) *To fight the good fight.* (Jespersen 1925: 235)

(67b) ≠ *To fight well.*

This specific purpose of English COCs is best explained with the pair of examples in (68a-68b), provided by Horita (1996: 224), where the intransitive sentence is not simply non-equivalent in its meaning to the cognate object pattern but ungrammatical, due precisely to the insertion of the adverb *strangely* in the predicate:

(68a) *Mary dreamed a strange dream.* (Horita 1996: 224)

(68b) **Mary dreamed strangely.*

These examples would seem to confirm Dixon’s remarks (1991: 12, footnote 9) that “English grammar has much more restricted possibilities for adverbial modification of verbs than for adjectival modification of nouns; hence the usefulness of cognate NPs”¹².

In order to see the real productivity of the three above-described syntactic patterns in the real language of native speakers of British English, I have analysed their distribution and frequency of occurrence in the subcategorization frame of the

unergative verb *smile*. I have chosen this particular verb for two main reasons: first, because it belongs to the class of unergative verbs, which, as explained above, is the prototypical one to appear in the English COC; and second, because, as summarised in Table 8, it is the verb of the 130 verb-noun combinations analysed which has provided the largest percentage of COCs in the *BNC*:

<i>Verbal class</i>	<i>Cognate</i>	<i>Total number of examples analysed</i>	<i>Raw frequency of COCs</i>	<i>Normalised frequency of COCs</i>
Human behaviour	Song	3,744	249	665.06
Nonverbal expression	Smile	5,867	238	405.65
Manner of speaking	Scream	516	3	58.13
Waltz verbs	Dance	2,919	11	37.68
Nonverbal + Manner of speaking	Cry	1,585	2	12.61

Table 8. Verb-noun combinations per semantic verbal groups with the greatest percentage of COCs in the *BNC*.

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The results derived from my analysis, illustrated in Table 9, reveal two noticeable and important findings in this regard: on the one hand, that the contrast between adjectival and adverbial modification in English put forward by Dixon (1191: 12) proves to be true; and on the other, that COCs have, as expected, a much more restricted use in the real speech of British English speakers than light verb constructions:

<i>Registers</i>	<i>Examples analysed</i>	<i>Intransitive with adverbial modificat.</i>	<i>COCs</i>	<i>Light verbs¹³</i>	<i>Other patterns¹⁴</i>
Spoken	112	1	0	10	101
Fiction	5511	62	219	569	4661
Magazines	218	4	6	15	193
Newspaper	314	5	2	15	292
Non-academic	125	5	1	3	116
Academic	58	3	1	0	54
Miscellan.	457	10	5	30	412
Total	6795 ¹⁵	90/132.45 ¹⁶	234/344.37	642/944.81	5829/8578.36

Table 9. Distribution of COCs, light verb constructions and intransitive patterns with adverbial modification in the subcategorization frame of 'smile'

Notice at this point that COCs have a higher frequency of occurrence in the *BNC* than intransitive patterns with adverbial modification: namely, a normalised frequency of occurrence of 344.37 *vs.* 132.45. This situation is reversed, nevertheless, when comparing the productivity of COCs with that of light verb constructions, since the latter exhibits a much higher frequency of occurrence (944.81) than the former (344.37).

These findings are also supported by the fact that there has been no search in my corpus-based analysis, except for those cognates that, like *song*, *thought*, *breath* and *death*, are formally different from the verbs they derive from, in which the nominal at issue does not surface either as the intransitive/transitive verb it is related to or in the subcategorization frame of a light verb. Both syntactic environments are exemplified, respectively, in (69-70) with the morphological cognate *croon*, for which the *BNC* only provides 13 COCs:

(69) At this point, Joey's voice was heard *to croon* quietly. (*BNC*: ATE 1)

(70) Drake *has low croon*, duck a harsh wigeon-like quack; (*BNC*: GUA 13)

It can be concluded, therefore, at this stage that the first reason for the restricted use and appearance of COCs in present-day British English, in favour of light verb patterns and intransitive patterns with adverbial modification, is the redundancy inherent in the construction itself¹⁷.

Apart from the redundancy they entail, there are two other reasons concerning the style of COCs commonly mentioned in the literature which, in my view, also account for their low frequency of occurrence in contemporary British English. One is their formal and, as Quirk et al. (1985: 13) call it, "orotund style"; the other, the archaic flavour that, according to Downing and Locke (1992: 144-145), these constructions seem to maintain in present-day English due mainly to their classical Latin and Greek origin.

With these stylistic connotations in mind, I have analysed the frequency of occurrence of COCs in the different varieties and registers of English present in the *British National Corpus*: speech, fiction (including poetry and prose), magazines, newspapers, non-academic, academic and miscellaneous. The results obtained, shown in Table 10, do indeed prove Quirk et al.'s (1985: 14) hypothesis, which states that COCs are "to be found in more elaborate pieces of writing or public speeches rather than in informal conversation":

<i>Cognates</i>	<i>Spoken</i>	<i>Fiction</i>	<i>Magazine</i>	<i>Newspaper</i>	<i>Non-Academic</i>	<i>Academic</i>	<i>Miscellan.</i>
Dream	2/228	15/1,281	3/352	0/617	2/508	2/142	6/519
Fight	0/171	4/542	4/207	3/1,025	1/340	0/163	7/391
Life	16/3,010	206/10,825	47/3,902	14/6,175	26/9,511	27/7,687	101/13,306
Song	57/386	75/589	12/641	15/445	22/435	14/340	54/908
Sleep	0/344	14/1,619	0/118	0/172	2/942	0/140	2/400
Thought	1/1,330	11/3,877	0/470	0/505	3/1,089	1/1,703	1/1,568
Death	3/587	21/4,026	4/1,183	7/2,955	15/3,466	9/3,201	13/4,174
Breathe	0/148	2/3,293	0/142	0/227	0/202	0/260	1/397
Chuckle	0/1	1/123	0/9	0/13	0/5	0/1	0/16
Cough	0/95	1/157	0/17	0/25	0/137	0/31	0/61
Frown	0/2	2/392	0/6	0/8	0/12	0/2	0/13
Grin	0/10	19/800	0/50	1/51	0/20	0/2	2/83
Laugh	0/267	23/1,092	0/86	0/104	1/40	0/30	2/140
Scowl	0/0	0/87	0/5	0/4	1/6	0/0	0/4
Sigh	0/12	10/808	0/28	0/41	0/44	0/10	0/59
Smile	0/69	223/4,874	5/173	2/269	2/90	1/43	5/349
Yawn	0/2	1/77	0/10	0/4	0/0	0/1	0/16
Bark	0/31	1/171	0/49	0/30	0/39	0/37	0/90
Purr	0/0	1/30	0/2	0/1	0/4	0/0	0/4
Scream	0/24	2/340	0/40	0/26	0/26	0/7	1/53
Shout	0/67	1/270	0/17	0/26	0/18	0/7	0/75
Whisper	0/2	1/464	0/15	0/27	0/26	0/11	0/34
Yell	0/3	1/71	0/6	0/2	0/1	0/1	0/14
Cry	0/46	2/706	0/114	0/167	0/184	0/121	0/247
Dance	0/185	7/509	0/409	0/507	1/487	0/205	3/617
Waltz	0/8	1/47	0/20	0/11	0/5	0/22	0/39
Total	79/7,028 (112.40) ¹⁸	645/37,070 (173.55)	75/8,071 (92.92)	42/13,437 (31.25)	76/17,637 (43.09)	54/14,167 (38.11)	198/23,577 (83.98)

Table 10. Distribution of COCs in the different registers of the BNC.

Notice in this regard that fiction, the most elaborate of the seven varieties included in the corpus, is the register where the COCs found have the highest level of productivity; specifically, a normalised frequency of occurrence of 173.55. The findings obtained for spoken British English are, however, surprising *a priori* since its normalised frequency of occurrence (112.40) surpasses that of the remaining five written registers dealt with in the *BNC*, thus apparently contradicting the previously stated hypothesis. A careful look at the distribution of the COCs in this particular register reveals, nevertheless, that this figure is not so noteworthy and striking since most of the attestations found in spoken British English occur with the verb *sing*, a transitive verb on which the morphological cognate noun *song* does not have, as explained above, the same “exceptional” transitivity effect as any other morphological noun has on the intransitive unergative verb it complements. The presence of COCs in the five remaining registers analysed is less significant since in none of them is their normalised frequency of occurrence superior to 100.000: in magazines, for instance, the 75 tokens attested, mainly with the morphological cognates *life* and *song*, out of a corpus of 8,071 exhibit a normalised frequency of occurrence of 92.92; the “miscellaneous” register displays, in turn, a normalised frequency of 83.98, which stands for the 198 attestations found in a sample of 23,577 examples; it should be noted here, furthermore, that the majority of the COCs located in this specific variety have been attested in two different types of written texts, both fairly formal in their style: religious texts, on the one hand, and biographies, on the other. And finally, the lowest results, ranging from 31.25 to 43.09, are those obtained for newspapers, academic and non-academic English.

4. Conclusions

From the preliminary corpus-based analysis of English COCs reported in this paper two main conclusions can be drawn. On the one hand, this clausal pattern shows a very low frequency of occurrence in present-day British English due, mainly, to the redundancy inherent in the construction itself: only 1,169 COCs have been found in a corpus of 136,032 examples, a figure that represents just 0.85% of the total.

And on the other, as regards its distribution in the different kinds of registers and varieties of English, the COC shows a clear tendency to appear in the more elaborate types of written discourse analysed (fiction, biography and religious texts), which in my view explains its archaic and formal tone. In the more informal registers (particularly magazines, spoken and non-academic English) its presence is much less notable.

However, to have a complete picture of the real use and distribution of COCs in English, the preliminary research described here should be continued in two different directions. First, the morphological cognates entering the verb-noun combinations studied should be analysed in the same corpus but in the plural number to see if there are changes in the frequency of occurrence of this specific clausal pattern associated with the number (singular/plural) of the cognate noun. And secondly, the same research should be carried out on a Corpus of American English, such as the *COCA* corpus, for instance, in order to compare the productivity and distribution of COCs in American and British English.

Notes

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² Although less extended in the literature, there is a third proposal that includes the two classes of nouns previously mentioned within the cognate object category, depending on the syntactic nature of the verb. Visser's (1963) and Baron's (1971) studies are two cases in point here, since in them transitive verbs are considered to accept both types of cognates—morphological and semantic—as complements, whereas intransitive verbs, in turn, only seem to be compatible with morphological cognates.

³ The figure I have chosen to normalise the raw frequencies of the COCs attested in the *BNC* is that of 10,000 tokens.

⁴ This figure corresponds to the total numbers of examples analysed with the nominals presented in the first column in Table 2, as well as with the following cognates: *beam* (1,010), *chortle* (10), *gasp* (281), *giggle* (150), *glare* (455), *grimace* (135), *guffaw* (27), *jeer* (8), *pout* (69), *simper* (3), *smirk* (75), *sneeze* (41), *snicker* (3), *snigger* (25), *sniff*

(115), *snore* (40), *snort* (105), *sob* (153), *titter* (16) and *weep* (78). They do not appear in the aforementioned table because there is no trace of them in any COC in the *BNC*. The figures between brackets stand for the number of examples analysed with each of them.

⁵ I would like to highlight here that I have studied all the morphological cognates derived from the verbs included in this class, and not only those included in Levin's (1993) work. Thus, just as Macfarland's (1995) work shows that the verb *snicker*, absent from Levin's (1993) analysis, can enter the COC, so my corpus-based research reveals that *scowl*, (23), also missing from Levin's (1993) work for no apparent reason, can function as a cognate object.

⁶ *Dream* is not included within any particular verbal class in Levin's (1993) study.

⁷ This figure corresponds to the total number of examples analysed with the nominals illustrated in Table 4, as well as with the following cognates: *boogie* (110), *bob* (4,019), *cancan* (3), *clog* (43), *conga* (11), *fox-trot* (23), *jig* (115), *jitterbug* (2), *jive* (15), *pirouette* (33), *polka* (28), *quickstep* (3), *rumba* (7), *samba* (16), *shuffle* (70), *squaredance* (1), *tango* (66) and *tapdance* (1). They are not represented in Table 4 because they do not appear in any COC in the *BNC*. The figures between brackets stand for the number of examples analysed with each of them.

⁸ This figure stands for the total number of examples analysed with the nominals illustrated in Table 5, as well as with the following cognates: *babble* (87), *bawl* (2), *bellow* (68), *bleat* (12), *bray* (31), *burble* (14), *carol* (138), *chant* (291), *chatter* (242), *chirp* (16), *cluck* (11), *coo* (49), *croak* (61), *croon* (0), *crow* (321), *drawl* (110), *drone* (130), *gabble* (10), *gibber* (0), *grumble* (31), *grunt* (142), *hiss* (180), *holler* (5), *hoot* (60), *jabber* (13), *lilt* (47), *lisp* (33), *mumble* (26), *murmur* (299), *mutter* (32), *rage* (1,120), *rasp* (64), *roar* (511), *rumble* (154), *screech* (107), *shriek* (128), *snap* (62), *snarl* (89), *snuffle* (3), *splutter* (26), *squall* (59), *squeal* (83), *squeak* (139), *squawk* (26), *stammer* (48), *stutter* (32), *thunder* (689), *trill* (37), *trumpet* (291), *twitter* (7), *wail* (112), *warble* (15), *wheeze* (62), *whimper* (59), *whine* (115), *whop* (4), *yammer* (1), *yap* (11), *yelp* (36) and *yodel* (4). Once again, they are absent from the table referred to because there have been no attestations of the COC in the corpus. The figures between brackets stand for the number of examples analysed with each of them.

⁹ This figure is the sum of the 1,585 cry examples and the attestations analysed with the other six nominals included within this group: *cackle* (35), *groan* (228), *growl* (109), *howl* (118), *moan* (169) and *whistle* (571). As with the other cognates, the figures between brackets indicate the total number of examples examined with each of them.

¹⁰ The examples provided by Kuno and Takami (2004) are, nevertheless, controversial. For Höche (2009: 162), for instance, they are not valid because “these sentences are contrived by the authors and not extracted from a corpus of naturally occurring language”. For other scholars (e.g. Nakajima 2006; Iwasaki 2007; Ogata 2011), however, these examples are a good starting point for the study of English COCs built around unaccusative verbs. Nakajima (2006) in particular calls them “adverbial cognate objects” after noticing that they exhibit a syntactic behaviour of their own in relation to modification, *it*-pronominalization and passivization, which is completely different from that of the cognate objects that complement unergative verbs. And Ogata (2011: 12), in turn, concludes that only those unaccusative verbs that describe a

spontaneous event and that enter, as such, the causative-inchoative alternation are acceptable in the English COC.

¹¹ The class of light verbs could be widened with the insertion of other verbs that, like *let out* — *The older of the young ones let out a sniggering laugh which developed into a hiccoughy laugh* (BNC: 1308: A0U)—, *practise* — *He practised a deep evil laugh, sounded real spooky and sinister* (BNC: HUA 2986)—, *try* — *She tried a watery laugh* (BNC: AD9 1431)—, *manage* — *Lucy managed a laugh shattered like a dropped mirror* (BNC: AOL 1216)— and *utter* — *For no apparent reason she uttered a little laugh* (BNC: GOX 2252)—, cannot be regarded as true or prototypical light verbs due to their semantic content but which, nevertheless, as illustrated in the previous examples, serve a similar grammatical function. Mirto (2007: 4) captures the differences and similarities between both groups of light verbs, calling the first ones [-lexical] support verbs and the second, in turn, [+lexical] support verbs since, besides their grammatical function, they provide the sentence with an additional meaning that, according to Mirto (2007: 4), can be aspectual, stylistic, or simply intensifying.

¹² These two contradictory positions (synonymy vs. non-synonymy) are gathered in Ogata’s (2011: 4) work, where two different classes of COCs are identified depending precisely on their (non)synonymy with the intransitive sentences with adverbial modification related to them: on the one hand, verbal COCs built around intransitive verbs like, for instance, *The old man died a happy death* and *Bill laughed a hearty laugh* which can be paraphrased into intransitive expressions with adverbial modification: *The old man died happily* and *Bill laughed heartily*; and on the other, nominal COCs built, in turn, around transitive verbs of the type of *Fred sang a comical song* and *Sam danced a merry dance* which, on the contrary, do not admit such a paraphrasis; notice here that the intransitive sentences *Fred sang comically* and *Sam danced merrily* do not mean the same as the COCs they are related to.

¹³ The light verbs attested with the nominal *smile* are *get*, *have*, *make* and *give*. *Give* is by far the most recurrent one.

¹⁴ The other syntactic patterns attested in the corpus include, mainly, semantic cognate constructions and intransitive schemes without any kind of adverbial modification.

¹⁵ This figure includes the attestations of *smile*, both as a noun and as a verb, in the *BNC*.

¹⁶ The figures to the left and the right of the slash stand, respectively, for the raw and normalised frequencies of the syntactic pattern in question.

¹⁷ The redundancy underlying English COCs has opened an interesting debate in the literature on the internal structure of morphological cognates. Since they basically repeat the same content as the verb, some scholars (e.g. Massam 1990; Dixon 1991; Levin 1993; Felser y Wanner 2001; Huddleston y Pullum 2020; Nakajima 2006) consider that they must be somehow modified to be informatively relevant. In Felser and Wanner's (2001: 106) words, for instance, their modification is "virtually mandatory": "There is, however, a less radical line of thought (e.g. Jespersen 1949; Quirk et al. 1985; Macfarland 1995; Mittwoch 1998; Pereltsvaig 1999; Höche 2009), which does not rule out as ungrammatical those cognate objects that are unmodified, despite acknowledging their oddity and their extremely reduced use: "The nominal heads of COs do not have to have modifiers. . . . But since the modifier is usually the motivation for the use of the CO, it is not surprising that unmodified COs are rare" (Mittwoch 1998: 315). The results derived from my study confirm, in fact, that cognate objects can appear without any type of modification, though, as previously stated, their frequency is much more reduced than that of those

cognate objects that are somehow modified. Notice in this regard that 306 COCs out of a total of 1169 attestations (that is, the 26,17% of the total) have an unmodified cognate object introduced into discourse by a great variety of determiners: the definite and indefinite articles—*At Faringdon's, the singers stood on chairs but I do not usually do this if I **sing the song** with children* (BNC: C8P 687) and *I am hoping **this will die a death*** (BNC: CH8 1888)—, demonstratives—*"Until I grow busts" I told people, and they all **laughed that laugh** again* (BNC: FU7 580)—, possessives—*Yet never was the need greater to think in terms of real alternatives in adult education, helping people **to dream their dreams**, to construct their version of a better society out of their own experiences* (BNC: GVX 140)—, quantifiers—*Just to think, he said he **would dance every dance** with me if only I would stay* (BNC: BN6 668)—, indefinites—*Perhaps I might see in the rising of that sun icon quintessentially Pacific, or **think some thought** which in a flash would sum up the essential message of the great Ocean* (BNC: CJD 2909) and *Old ladies with thick stockings holding veins like knots of worms, and men whose eyes are duller than clay alleys **dream other dreams** and watched the numbered screen, killing time, hoping for a win* (BNC: A6C 243)—, and finally, relative determiners—*They learn **to sing whatever song** their parent, or foster parent sings* (BNC: GU8 2893)—.

¹⁸ The figure to the left of the slash stands for the number of COCs attested in each of the registers, whereas the one to the right corresponds to the total number of examples analysed. The figure given between brackets indicates, in turn, the normalised frequency of occurrence the COC exhibits in each of the registers analysed.

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