

# ON THE ADJECTIVE/ADVERB INTERFACE: SUBJECT-RELATED *-LY*

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## Abstract

Subject-relatedness is a term used to define subject-oriented *-ly* adverbs that are not liable to convey adverbial meaning and only retain the predicative function (Díaz-Negrillo 2014, Valera 2014). Previous corpus evidence of subject-relatedness has been found in colour adjectives (Valera 2014), which seems to restrict subject-relatedness to this narrow semantic class but, as colour adjectives are central members of this word-class (cf. Dixon 1977), the relevance of these subject-related adverbs may be higher than presumed. The present paper presents results of a systematic corpus search of 17,460 BNC bigrams containing verbs followed by subject-related *-ly* adverbs. The results show subject-relatedness beyond colour adjectives alone and in a wide range of combinations. The interpretations of the mismatch between the suffix *-ly* and the categorial meaning associated with this suffix or with the structures where they appear are manifold and could make an impact on the classification of adjectives and adverbs.

## Key words

*Interface; subject-orientation; subject-relatedness; -ly adverbs; adjectives*

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## 1. Introduction

The separation in the classification of adjectives and adverbs is not clearly delimited as some of the items in these word-classes are very close semantically and morphologically. Traditional grammars consider these word-classes as separated categories, where the word-class adjective is related to the expression of states or qualities of a noun/subject in an attributive/predicative position respectively (cf., among others, Quirk, Greenbaum, Leech & Svartvik 1985: 416–418) and the word-class adverb is more general and includes a large group of words ending in *-ly* related to the expression of circumstances or intensification (again, cf. Quirk, Greenbaum, Leech & Svartvik 1985: 445–454). Other studies argue for the classification of these words into one word-class (Giegerich 2012). In this framework, the suffix *-ly* is considered as an inflectional suffix and, consequently, adverbs morphologically marked with the affix *-ly* are considered inflected adjectives, whilst those that are unmarked with the affix *-ly* are uninflected adjectives (for a review, see Giegerich 2012). This hypothesis argues for the absence of a lexical category adverb and instead favours the specific modifier function performed by inflected adjectives.

This paper explores the so-called categorial space (Givón 1993: 51–53) or interface (Hummel 2014: 35–37) between adjectives and adverbs. This categorial space or interface is the area shared by these word-classes where the specific properties of both categories become ambiguous and the identification of the different items into one category or the other poses problems. One of the aspects that may shed light on the classification of adjectives and adverbs is subject-relatedness: *-ly*-marked adverbs may not perform an adverbial function and can be semantically classified as being closer to the category adjective.

This paper is structured as follows. §2 focuses on the description of subject-relatedness and related issues. §3 describes the method used for data collection and analysis. §4 presents the classification and distribution of the results presented in this paper. The discussion of the results is developed in §5. Final conclusions are drawn in §6.

## 2. Subject-relatedness

The concept of subject-relatedness has been defined successively to the concept of subject-orientation. Subject-orientation was originally described for French adverbs ending in *-ment*, but it is a feature that can also be observed in English *-ly* adverbs. Thus, it can be defined as a feature of *-ly* adverbs that perform the syntactic function adverbial (Quirk, Greenbaum, Leech & Svartvik 1985) and a predicative function (Quirk, Greenbaum, Leech & Svartvik 1985). The combination of the two as one class constituent emerges as described in Guimier (1991: 100). There is a double orientation of the adverb that can characterize the subject, but can also refer to the way the action expressed by the predicator is developed, as for example in circumstance adverbials or adverbial adjuncts. It can be seen in the following example:

- (1) Pierre drives carefully.
  - a. Pierre drives in a careful way.
  - b. Pierre is careful as he drives.

Example (1) shows the double orientation of the adverb *carefully*. In (1a) the paraphrase involves the verb and expresses manner. In (1b) the paraphrase expresses predicative meaning and refers to the subject.

Based on the original definition of subject-orientation given by Guimier (1991), it is not a feature of all *-ly* adverbs. Thus, two conditions can be established for subject-orientation to appear:

- i) The position of the adverb phrase close to the subject: the subject-orientation of the *-ly* adverb is particularly favoured if it takes pre-verbal or post-verbal position in the sentence (Guimier 1991: 97), presumably as close as possible, even if this has not been quantified.
- ii) Semantic compatibility between the adjectival base of the *-ly* adverb and the nominal head of the subject: it explains the relationship between the adverb

and the noun. The paraphrase “Sujet est Adj.,” which in English would be a sentence where the subject is linked to the adjective by the copulative verb “to be”, can be used to test this compatibility (Guimier 1991: 97). Subject-orientation occurs as the base adjective has the ability to take predicative position in the paraphrase which allows the relationship between the subject and the *-ly* adverb.

This argument has been questioned because some adverbs can never be subject-oriented regardless of their position in the sentence and some adverbs can be subject-oriented without taking those particular positions in the sentence (Valera 1998: 273). In addition, for these adverbs to be subject-oriented, the adverbial should be derived from an adjective that maintains an intensive relationship with the subject of the sentence (Valera 1998: 274). Consequently, position is not a decisive variable in subject-orientation in English, but the semantic compatibility between the adjectival base of the *-ly* adverb and the nominal head of the subject is.

With respect to subject-oriented adverbs that do not perform the syntactic function adverbial, there is another type of *-ly* adverb that falls in the literature under the term “subject-relatedness”. Subject-related *-ly* adverbs are subject-oriented adverbs that only retain the prototypical predicative function associated with adjectives (Díaz-Negrillo 2014: 459; Valera 2014: 88). It is caused by:

- i) The semantic compatibility between the adjectival base of the *-ly* adverb and a nominal head
- ii) The lack of semantic compatibility between the verb and the *-ly* adverb.

Subject-related adverbs have the same type of reference as predicative complements, such as subject or object complements. The only difference that can be found between these complements and subject-related adverbs is the realization of the latter by the addition of the suffix *-ly* to the base adjective (Valera 2014: 88). The type of reference in predicative complements and subject-related adverbs can be observed in the following examples:

- (2) a. The soft fall of her hair over her shoulders gleamed **red** in places.  
b. His eyes gleamed **redly** again.
- (3) a. [T]he clouds stood **black** against the unexpected sunlight and the landscape took on another, indefinable dimension.  
b. He grinned as she pushed up on the window sill, her head down, hair hanging **blackly**.

The *-ly* adverbs in examples (2b) and (3b) do not perform the syntactic function adverbial in that they cannot be paraphrased as *in a red way* and *in a black way*. These *-ly* words do not express manner, but a quality of the eyes and the hair. Except for their morphology, no differences can be found in the type of references in these subject-related adverbs and predicative complements.

Subject-relatedness can occur at clause and at phrase level. Subject-related adverbs at clause level have the same behaviour as predicative complements, but these subject-related adverbs keep the mobility and optionality that characterise adverbials instead of the position and compulsion of subject complements (Valera 2014: 92). At both levels, subject-related adverbs do not have adverbial meaning and consequently, they are difficult to classify into the category adverb. Subject-related words can be found in two types of structures depending on whether they are at clause or phrase level:

i) At phrase level, subject-related *-ly* adverbs appear in adverb phrases that precede an adjective phrase. In these cases, the *-ly* adverb preceding the adjective phrase does not premodify the adjective, but the noun; its function is not that of an adverb. It is illustrated in the following examples:

(4) The attractive latticework top looks **nicely** brown and sugary  
Adverbial > \*[The top looks brown in a nice way/to a nice degree]  
Predicative > [The top looks brown and nice]

(5) This **mournfully** bright menial Val wore high heels and a black beret.  
Adverbial > \*[The menial was bright in a mournful way/to a mournful degree]  
Predicative > [The menial was bright and mournful]

In these examples the adverbs do not express circumstance, but a quality of the same noun that is modified by the adjectives in the adjective phrase. As it is evidenced in the paraphrases, the adverbial interpretation is not possible in any of the examples. The only possible interpretation is the predicative one.

ii) At clause level, subject-related *-ly* adverbs are located immediately after the verb. It can be observed in the following examples:

(6) Marcus stared **palely** at his plate.  
Adverbial > \*[Marcus stared in a pale manner/in a pale way/to a pale degree]  
Predicative > [Marcus was pale as he stared at his plate]

(7) The door was tightly laced, and a pressure lamp burned **whitely**.  
Adverbial > \*[A lamp burned in a white manner/in a white way/to a white degree]  
Predicative > [A lamp was white as it burned]

The *-ly* words in examples (6) and (7) refer to qualities of the nominal head of the subjects. The suffix *-ly* in these cases does not contribute to the meaning of the word; it can only facilitate its position and mobility in the sentence, which is a typical feature in adverbials. These examples are part of corpus evidence of subject-relatedness found in previous research (Valera 2014) in which the common

property shared by all the subject-related adverbs in the data is that their adjectival bases are colour adjectives. As previously mentioned, colour adjectives have been considered central members of their category (cf. Dixon 1977) because this type of adjective appears in a wide variety of languages in which other members of this category do not appear. Therefore, the importance of subject-relatedness can be higher than assumed. A closer look at these features raises some puzzling questions on word-class separation, particularly if subject-relatedness occurs outside this narrow semantic group of adjectives. Thus, subject-related *-ly* words can be included in classifications where adverbs and adjectives are one word-class, or it can be argued that subject-related *-ly* is a case of word-class overlap (Valera 2014: 95). Despite the fact that these words are morphologically marked as adverbs, their function is predicative as with prototypical adjectives. There are two different views of subject-related words:

- i) The first view classifies these words as adverbs: because of their morphology as they are marked with the suffix *-ly* and because of properties, such as mobility and optionality, that are typical of adverbs.
- ii) The second view classifies these words as adjectives: because of their syntactic and semantic properties typically performed by adjectives. In this interpretation, the adverbial features taken into account in the previous one are not considered.

Neither of these views is satisfactory to explain the behaviour of subject-related words. On account of this, it has also been suggested that subject-relatedness could be an inherent property of these words and not just a lexical effect due to the absence of semantic compatibility that can be caused by the combination of a specific verb and a specific adverb (Valera 2014: 92). In both cases, the incompatibility between the meaning expressed by the adverb and the verb does not allow the adverbial interpretation and only the predicative interpretation is possible in these subject-related adverbs. This leads to two types of subject-relatedness (Valera 2014: 92):

- i) Extrinsic: it depends on the verb with which the *-ly* word combines. It is a property that appears as a result of the semantic incompatibility between a certain verb and a certain *-ly* word.
- ii) Intrinsic: it does not depend on the verb with which the *-ly* word combines, but on intrinsic properties of the *-ly* words. It appears because the *-ly* word cannot express adverbial meaning in combination with any verb. It can be due to semantic properties of the adjectival base from which the *-ly* word is derived.

In cases where subject-relatedness is an extrinsic property of the *-ly* words, the functional and semantic properties depend on lexico-semantic compatibility which does not always take place. In cases where subject-relatedness is an intrinsic

property of *-ly* words, the suffix only provides mobility and/or optionality to the words (Valera 2014: 92). Consequently, the limits between adjectives and adverbs are not clearly delimited and the identification of one word-class or the other is very difficult in aspects of their interface such as subject-relatedness.

### 3. Method

#### 3.1 Data collection

This paper is based on evidence obtained from the British National Corpus, hereafter BNC, accessed via the CQPweb site. This database contains 100 million words of texts that come from spoken and written corpora classified in a wide variety of genres, e.g., spoken, fiction, magazines, newspapers, and academic. The BNC allows the identification of sequences containing subject-related adverbs, i.e.: sequences in which the adverbs do not refer to their preceding verb, but to a nominal element, typically the subject, in the sentence or in a phrase. Specifically, the emphasis was on adverbs formed by *-ly* suffixation to adjectival bases other than colour adjectives (see §2).

In order to achieve this objective, the analysis was carried out with *-ly* words with a frequency of occurrence 1 in the BNC. This frequency provides examples with a wider semantic range and guarantees that the patterns found are active and productive (cf. Baayen & Lieber 1991; Pierrehumbert & Granell 2018). The process to find the highest possible number of relevant examples took place as follows:

- i) Collection of *-ly* adverbs immediately preceded by verbs. The syntax query for this list was *[vvd\*] \*ly.[R]*. This tag returned a list of 7000 bigrams whose frequency of occurrence in the corpus is up to 2. As the frequency of occurrence that was required for this analysis was frequency 1, the query was revised to exclude the bigrams containing the verbs *be*, *have*, and modal verbs. These verbs were excluded because they can be part of complex structures such as *is generally coming*, where the type of adverbs found in these structures is not relevant for this analysis.
- ii) Since combinations such as *is generally coming* were out of the scope of this research, and, in order to avoid them, the boolean operators (|) and (!) were used to exclude the verbs *be* and *have* from the data obtained. These boolean operators were included in the tags and the queries used were *[vvd\*] \*ly.[R] (!) be\**, *[vvd\*] \*ly.[R] (!) have\** and *[vvd\*] \*ly.[R] | be\**. These queries were unsuccessful and no concordances were obtained either from them or from their variants.
- iii) In order to retrieve all the possible bigrams in frequency 1, a search for the query *[vvd\*] \*ly.[R]* through the alphabet was conducted. Consequently, the query used for these searches was the same as the one used in previous searches, except it was preceded by the starting letters of the verbs. The tags used were *a\*.[vvd\*] \*ly.[R]*, *b\*.[vvd\*] \*ly.[R]*, *c\*.[vvd\*] \*ly.[R]*, etc.

until completion of the alphabet. Each query yielded a list containing all the concordances in frequency 1. The length of the lists obtained varied depending on the letter and is not of special relevance here. The total number of bigrams retrieved and analysed in all the lists is 17,460.

### 3.2 Data analysis

The bigrams obtained in the lists were analysed individually applying several tests to confirm or discard the compatibility between the *-ly* word and the various elements in the sentences, namely the predicate and the subject.

- i) The compatibility between the *-ly* word and the predicate was tested by replacing the *-ly* word in the sentence with the paraphrase *in a \_\_\_ way* for the adverbial interpretation. The gap of the paraphrase was filled with the adjectival base of the adverb. If the paraphrase was not fully acceptable as in examples (8) and (9), the bigram was relevant for this analysis. Conversely, if the paraphrase was acceptable, as in examples (10) and (11), the bigram was not relevant for this analysis, because subject-orientation, not subject-relatedness, obtains. An additional paraphrase *with \_\_\_* was used to further check the possibility of an adverbial interpretation. The gap in this paraphrase was filled with the noun or the verb related to the adjectival base of the *-ly* word in each case. Examples such as (12) did not allow the adverbial interpretation, while examples such as (13) did. The former was relevant for this research, whilst the latter was discarded out of ungrammatical or, at least, questionable paraphrases.

- (8) She cried thankfully  
Adverbial > \*[*She cried in a thankful way*]
- (9) The day dawned snowily  
Adverbial > \*[*The day dawned in a snowy way*]
- (10) She dressed trimly  
Adverbial > [*She dressed in a trim way*]
- (11) Stella excused kindly  
Adverbial > [*She excused in a kind way*]
- (12) She hoped guiltily  
Adverbial > ?\*[*She hoped with guilt*]
- (13) Belinda picked unseeingly  
Adverbial > [*Belinda picked without seeing*].

- ii) The compatibility between the *-ly* word and the subject was tested by using various paraphrases for the sentences. The paraphrases used were *Subject + to be + [base adjective]* and *Subject + [verb] + [base adjective]*. The first

paraphrase revealed the relation between the subject and the adjectival base of the adverb as in example (14). The second paraphrase indicated the possibility of replacing the adverb with its base adjective in the same sentence without variation in the sentence meaning as in example (15). If these paraphrases were possible, the examples were considered relevant as they were subject-related i.e.: these words retain just the predicative function and do not allow the syntactic function adverbial.

(14) She decided angrily.  
Predicative > [*She decided being angry*]

(15) She remained thoughtfully  
Predicative > [*She remained thoughtful*]

These paraphrases were based on previous research on this and related topics (Valera & Rizo 1998, Valera 2014). Besides the paraphrases, it was also necessary to verify if the adverb in the examples was part of a phrase located after the verb phrase as, for instance, an adjective phrase as in *getting really bad*. This allowed exclusion of adverb phrases that performed the function of premodifier in adjective phrases.

After selection of all the relevant bigrams, the relation between the verb and the *-ly* word was analysed again in order to check that there was no relation between them. Examples such as *admitted criminally damaging the telephone*, *he brushed blindly at the front of his jacket*, and *they felt kindly towards him* were excluded because the reference is to the verb after the *-ly* word, the meaning of the *-ly* word is metaphoric, or they can be considered subject-oriented, respectively.

The rest of the examples were examined for patterns that could explain the relationship between the *-ly* word and the nominal element of the sentence to which it refers. The first feature to consider was the function of the *-ly* word, namely, whether the *-ly* word performed predicative or adverbial function in the given example, according to the tests listed above. If the *-ly* word displayed just the predicative function, it was a case of subject-relatedness and the semantic features of the subject, predicate and adjectival bases of the adverbs in the example were analysed. The identification of these semantic features allowed the classification and description of the examples found in §4 and §5 below. Some of the features considered in the semantic analysis of the examples were the subject's semantic role and the distinction stative/dynamic in the verbs and adjectival bases of the adverbs.

The analysis of the semantic features was defined according to previous research (Valera 2014) and to the examples found only in frequency 1 and in all the genres provided by the corpus. The total number of bigrams analysed in this frequency is 17,460. The number of relevant cases of subject-relatedness obtained from their analysis is 179.

## 4. Results

### 4.1 Classification of the results

A total of 179 cases extracted from the BNC as described in §3.2 were analysed following the process described in the previous section of this paper. These cases have been classified according to some semantic features shared by the elements in each pattern. The cases will be presented from the least clear cases to the clearest cases of subject-relatedness:

- i) Cases that contain dynamic verbs and *-ly* words. Some of the examples found within this pattern are:  
accelerated thankfully  
asked colourlessly  
burrowed gratefully  
blew freshly  
charge drunkenly
- ii) Cases that contain stance verbs and *-ly* words. Some of the examples in this pattern are combinations such as:  
sat wetly  
stood worriedly  
stood emptily  
walked thankfully
- iii) Cases that contain a stative verb which influences the relation of the verb and the *-ly* word. Some of the examples found within this pattern are:  
decided angrily  
faded impotently  
hoped guiltily  
listened interestedly  
noticed thankfully  
stared drunkenly  
thought worriedly  
wondered agitatedly
- iv) Cases that contain a copulative verb followed by an *-ly* word that does not relate to the verb, but to the subject. Some of the examples found in this pattern are:  
remained thoughtfully  
seemed obscurely

### 4.2 Distribution of the results

One aspect shared by all the above cases is their frequency of occurrence, that is to say, frequency 1. The distribution of these cases will be indicated in Table 1.

**Table 1.** Distribution of the results according to sample, where the second column indicates the number of occurrences and the third column indicates the percentage of the sample type with respect to the total number of examples under study

Register	Concordances	Percentages
W_biography	3	1.67%
W_fict_prose	153	85.47%
W_misc	10	5.58%
W_newsp_brdsht_nat_misc	2	1.11%
W_newsp_brdsht_nat_repor	1	0.55%
W_non_ac_soc_science	2	1.11%
W_religion	1	0.55%
W_essay_school	2	1.11%
W_newsp_other_report	1	0.55%
W_non_ac_humanities_arts	2	1.11%
W_pop_lore	1	0.55%
W_fict_poetry	1	0.55%

As Table 1 shows, the majority of examples occur mainly in one type of sample, namely W\_fict\_prose (85.47% of the cases recorded), the other samples being considerably less relevant: W\_misc (5.58%), and W\_biography (1.67%). The rest of registers indicated in the table amount to 7.19% of the total number of cases. This distribution evidences two important aspects:

- i) The possibility of occurrence of these words seems to be determined by specific registers (cf. Valera 2014), which can be related to other considerations such as that in which productivity can be conditioned by variables as register and domain (Bauer 2014).
- ii) Subject-relatedness is not a feature of a narrow semantic group of adjectives, namely colour adjectives (Valera 2014), but a characteristic present in a wide variety of adjectives such as adjectives that denote physical properties and mental states.

The examples in each pattern previously presented will be analysed individually or in groups as there are special features in each of the cases that cannot be applied to the other cases. The analysis of the features of each case will be developed in the next section of this paper.

## 5. Discussion

The results in §4 show various cases of subject-relatedness. This section includes a description of 19 cases found in the analysis of the corpus data. This figure is in line with the evidence retrieved for similar cases in Valera (2014) or, for a different structure that also has implications on word-class overlap, in Payne, Huddleston & Pullum (2010). The cases will be described following the order presented in the previous section.

- i) Cases of dynamic verbs and *-ly* words. Dynamic verbs are related to the expression of actions and one of their main features is that they imply agentivity of the action (Quirk, Greenbaum, Leech & Svartvik 1985: 178). This type of verbs is compatible with adverbs as both word-classes have been described as dynamic. The dynamic verbs found in the examples included in this analysis are not followed by adverbs. This is due to the lack of adverbial meaning of the *-ly* words following the verbs. These *-ly* words behave as a subordinate subject complement, as in the following examples:

- (16) She saw a place at the end of the row and **accelerated thankfully**.  
 Adverbial > \*[She saw a place at the end of the row and accelerated in a thankful way]  
 Predicative > [She saw a place at the end of the row and she accelerated [being] thankful]
- (17) She **asked colourlessly**, “When did Monsieur Fabien die?...”.  
 Adverbial > \*[She asked in a colourless way, “When did Monsieur Fabien die?...”]  
 Predicative > [She asked [being] colourless, “When did Monsieur Fabien die?...”]
- (18) Mr Berkley slipped into the Palladium by a side-e-it, and **burrowed gratefully**.  
 Adverbial > \*[Mr Berkley slipped into the Palladium by a side-e-it, and burrowed in a grateful way]  
 Predicative > [Mr Berkley slipped into the Palladium by a side-e-it, and burrowed [being] grateful]
- (19) The breeze **blew freshly**.  
 Adverbial > \*[The breeze blew in a fresh way]  
 Predicative > [The breeze blew [being] fresh]
- (20) He raised the broken glass in his hand and **charged drunkenly** towards Cardiff.  
 Adverbial > \*[He raised the broken glass in his hand and charged in a drunken way towards Cardiff]

Predicative > [He raised the broken glass in his hand and charged [being] drunken towards Cardiff.]

The meaning of these *-ly* words is not adverbial as they do not express a manner (or a circumstance) of carrying out the action expressed by the verb, but a quality of the subject. In the case of *thankfully*, *colourlessly*, *gratefully*, and *freshly*, they can be syntactically analysed as subject complements. Regarding *drunkenly*, it can be analysed as a subject adjunct, which ultimately brings it back to a subject complement. The base adjectives in these cases refer to inherent properties of the subject such as experiences and emotions. These properties express the state of the subject, which do not allow the adverbial meaning of the *-ly* word.

ii) Cases composed by stance verbs and *-ly* words. Stance verbs are intransitive verbs that cannot stand alone (Quirk, Greenbaum, Leech & Svartvik 1985: 205). These verbs are intermediate between dynamic and stative verbs. One of their main features is that they need a clause constituent to support them syntactically. The syntactic support of these verbs is typically realized by an adverbial or, less commonly, a subject adjunct, but the *-ly* words in these examples behave as complements. The stance verbs found in the analysis are *stand*, *sit* and *walk*, under the query forms *stood*, *sat* and *walk*. The examples found in this case are the following:

- (21) She snatched up the receiver and **sat wetly** on the bed.  
Adverbial > \*[She snatched up the receiver and sat in a wet way]  
Predicative > [She snatched up the receiver and sat [being] wet on the bed]
- (22) She **stood worriedly** in front of him.  
Adverbial > \*[She stood in a worried way in front of him]  
Predicative > [She stood [being] worried in front of him]
- (23) Other trains, some also newly arrived, **stood emptyly** by platforms.  
Adverbial > \*[Other trains, some also newly arrived, stood in an empty way by platforms]  
Predicative > [Other trains, some also newly arrived, stood [being] empty by platforms]
- (24) Two men **walked thankfully** and possibly a little **luckily** from court.  
Adverbial > \*[Two men walked in a thankful way and possibly a little luckily from court]  
Predicative > [Two men walked [being] thankful and possibly [being] a little luckily from court]

In these examples the *-ly* words refer to the subject. They express qualities of the subjects and not the manner of carrying out an action. If these words are deleted, the meaning and/or the acceptability of the sentence will change (unless, as in

these examples, the stance verb can rely on a second adverbial as syntactic support, e.g., *on the bed, in front of me, by platforms, from court*), because these verbs are stance verbs. If the *-ly* word is deleted in some of the sentences as for instance *She stood in front of him* or, *Other trains, some also newly arrived, stood by platforms*, the information about the state of both subjects, which is worried and empty, is missing. This quality makes them more obligatory than the rest of the elements following the verb. If they were adverbs, they could be deleted and the meaning of the sentences would not be altered. The suffix *-ly* therefore does not provide adverbial meaning to the word, it can provide a different property such as positional freedom or enabling, as this type of verbs usually take adverbs as their syntactic support.

Concerning example (22), it is important to consider the affix used to create the base adjectives, the suffix *-ed*. The use of this suffix implies that the adjective refers to a person. This *-ly* word cannot express a manner of doing something because of the suffix used. Thus, a contrast can be made between the use of this suffix and the use of the suffix *-ing* to form the word *worryingly*. This word can express the manner and/or degree of standing which cause concern. Example (22) expresses the state of the subject while standing in front of the other person. The *-ly* word does not mean that the subjects carried out the action in a worried manner.

iii) Cases that contain stative verbs followed by *-ly* words. Stative verbs are related to the expression of states (Quirk, Greenbaum, Leech & Svartvik 1985: 178). These verbs are less liable to combine with adverbs which are normally described as dynamic words. A stative verb is more liable to combine with a stative word such as an adjective (Kjellmer 1984: 8–14). The examples of this case are the following:

(25) He could cope with the truth, she **decided angrily**.

Adverbial > \*[He could cope with the truth, she decided in an angry way]

Predicative > [He could cope with the truth, she decided [being] angry]

(26) His drive went low up the right side of the fairway and **faded impotently** into the heather.

Adverbial > \*[His drive went low up the right side of the fairway and faded in an impotent way into the heather]

Predicative > [His drive went low up the right side of the fairway and faded [being] impotent into the heather]

(27) Perhaps, she **hoped guiltily**, Joe would return to pick up her mother and take her home.

Adverbial > \*[Perhaps, she hoped in a guilty way, Joe would return to pick up her mother and take her home]

- Predicative > [Perhaps, she hoped [being] guilty, Joe would return to pick up her mother and take her home]
- (28) He only **listened interestedly** because whatever I was saying I was talking about him.  
Adverbial > \*[He only listened in an interested way because whatever I was saying I was talking about him]  
Predicative > [He only listened [being] interested because whatever I was saying I was talking about him]
- (29) FitzAlan slept on, she **noticed thankfully**.  
Adverbial > \*[FitzAlan slept on, she noticed in a thankful way]  
Predicative > [FitzAlan slept on, she noticed [being] thankful]
- (30) He **stared drunkenly** at Corbett.  
Adverbial > \*[He stared in a drunken way at Corbett]  
Predicative > [He stared [being] drunken at Corbett]
- (31) If she ever saw her, she **thought worriedly**.  
Adverbial > \*[If she ever saw her, she thought in a worried way]  
Predicative > [If she ever saw her, she thought [being] worried]
- (32) “How many questions did he have?” Isabel **wondered agitatedly**.  
Adverbial > \*[“How many questions did he have?” Isabel wondered in an agitated way]  
Predicative > [“How many questions did he have?” Isabel wondered [being] agitated]

The stative verbs in the examples refer to mental processes in which the subject is given the semantic role EXPERIENCER. For an action to be voluntarily carried out, the subject needs to be AGENT. This semantic role is not compatible with the stative verbs above and, consequently, the *-ly* word following the verb does not express a way of doing something, but the state of the subject. It is the subject of the sentence that feels as the base adjective denotes, at the time of experiencing the mental process to which the verb refers. Otherwise, the adjectival bases of the adverbs are stative insofar as they express a state of the subject. These adjectives are, in principle, not used in the imperative mood and/or progressive aspect such as *be impotent* or *be interested* or *is being worried* or *is being agitated* (Quirk, Greenbaum, Leech & Svartvik 1985: 136). Stative verbs are usually followed by stative words such as adjectives and not by dynamic words such as adverbs. In these examples, as the base adjective and the verb are stative, the *-ly* words do not allow adverbial interpretation.

- iv) Cases that contain a copulative verb followed by an *-ly* word that does not relate to the verb, but to the subject. A copulative verb links a subject to a subject complement (Quirk, Greenbaum, Leech & Svartvik 1985: 129–130).

Subject complements are typically realized by adjective phrases and noun phrases. In the examples found in this analysis, all the copulative verbs are followed by *-ly* words that cannot be classified as adverbs as argued below. The examples within this case are the following:

- (33) She smiled at me and sat down and **remained thoughtfully** for a while with her chin resting on the hand.
- Adverbial > \*[She smiled at me and sat down and remained in a thoughtful way for a while with her chin resting on the hand]
- Predicative > [She smiled at me and sat down and remained thoughtful for a while with her chin resting on the hand]

In example (33), the *-ly* word does not refer to the verb, but to the state of the subject. This element is obligatory. The sentence *She smiled at me and sat down and remained for a while with her chin resting on the hand* does not include an obvious subject complement to indicate the state of the person. There is an important part of the sentence missing as *thoughtful* contributes to the sentence's meaning. Adverbs are not obligatory and their deletion does not change the meaning of the sentence, but the *-ly* word in this example does not behave as an adverb: it does as an adjective.

- (34) "The Japanese are a very clean people," Mrs Hobbs said, it **seemed obscurely**.
- Adverbial > \*["The Japanese are a very clean people," Mrs Hobbs said, it seemed in an obscure way]
- Predicative > ["The Japanese are a very clean people," Mrs Hobbs said, it seemed obscure]

In example (34), the *-ly* word is combined with a copulative verb which is not compatible with an adverbial meaning. This verb only expresses the relation between the subject and its subject complement. The *-ly* word refers to a quality of the subject instead of to the way of doing something. The suffix *-ly* in this example does not contribute to the meaning of the word.

Some of the examples in the cases presented above can also be classified within the two major types of subject-relatedness (see §2). Cases of extrinsic subject-relatedness are *accelerated thankfully*, *blew freshly*, *decided angrily* and *stood emptily*. The *-ly* word or the verb in these cases can be combined with other verbs or *-ly* words to express adverbial meaning as in the following examples:

- (35) Each time the driver braked or **accelerated violently** she was thrown off balance
- (36) At the same time a wind **blew briefly** across the harbour
- (37) He **gestured angrily** up at the litter bin

(38) Stephen **stood impatiently** shifting his weight from one foot to the other.

The *-ly* words in these examples express adverbial meaning as they refer to the way the subject was developing the action or moving -examples (35), (37) and (38)- and to the duration of the action -example (36)-. Subject-relatedness here is a property that *emerge* from the incompatibility between the verb and the *-ly* word.

Cases containing copulative verbs are classified within the type intrinsic subject-relatedness as these verbs are less liable to combine with adverbs. Apart from the cases of subject-relatedness, in the rest of the examples found in the BNC, copulative verbs are followed by adjectives and adverbs are part of an adjective phrase as it can be seen in:

(39) She tracked accurately and **remained beautifully balanced**

(40) Who now **seemed considerably less enthusiastic** about the venture than [...]

Other case of intrinsic subject-relatedness is *listened interestedly*. The *-ly* word in this case does not express adverbial meaning even if it is combined with a different verb as it can be seen in:

(41) Young John, seated on his cabside fireman's seat, **looked interestedly** about him

(42) "Going somewhere?" he **queried interestedly**

The *-ly* word in examples (41) and (42) is combined with different verbs, but they do not express adverbial meaning and refer only to the state of the person as it is also illustrated in example (28). Subject-relatedness here appears as a result of an intrinsic property of the verbs in the case of copulative verbs and of the *-ly* word in the case of *listened interestedly*.

The semantic properties of adjectives in these data are in line with the pattern established in previous research for other structures such as supplementary clauses (Valera & Rizo 1998). As supplementary clauses have been presented in the predicative interpretation for the cases included in the previous data analysis, the application of some of the features found in the analysis by Valera & Rizo (1998) could be useful in future research about subject-relatedness. The relevant features in supplementary clauses are:

- i. The distinction stative/dynamic adjectives (81% vs. 19%): stative adjectives such as *afraid*, *blind* or *good* are more liable to appear in supplementary clauses (81% vs. 19%) than dynamic adjectives such as *corresponding* or *mutual*.
- ii. Semantic agreement of verbs and adjectives may govern the co-occurrence of these word-classes. Considering the view of verbs and adjectives as part of one major grammatical category (Ross & Lakoff 1967: 15), it has been hypothesized that there must be a certain kind of semantic agreement that

influence the co-occurrence of verbs and adjectives (Valera & Rizo 1998). This co-occurrence may depend on specific semantic properties of verbs and adjectives.

These relevant features can contribute to some semantic clues in subject-relatedness that could be interpreted as:

- i. Stative adjectives are less liable to form adverbs and consequently, more liable to appear in subject-relatedness and supplementive clauses.
- ii. The extrinsic type of subject-relatedness may be influenced by the semantic agreement that seems to govern the co-occurrence of verbs and adjectives.

## 6. Conclusion

This paper reviews the categorial space between adjectives and adverbs focusing on the property known as “subject-relatedness”. Previous research reported evidence of this property in a semantic class of the category adjective, namely colour adjectives. The analysis conducted in the present paper elaborates on the results obtained in previous research and provides new evidence of this feature in wider semantic ranges.

With regards to the semantic profile of the combinations found, subject-relatedness appears in a wide variety of combinations. The adjectives in these data involve physical and mental properties as well as states of the subject and are combined with different types of verbs such as dynamic, stative, stance or copulative verbs. The most important cases found in this analysis are those of stative verbs and copulative verbs followed by subject-related *-ly* words. These verbs refer to mental processes or qualities of the subject and are not compatible with adverbial meaning as, for instance, in *thought worriedly*, where the *-ly* word does not express circumstance but state.

Thus, subject-relatedness adds new evidence in the classification of *-ly* as an inflectional suffix as the meaning of subject-related adverbs does not differ from the meaning of their adjectival bases. It raises the question of why are subject-related *-ly* words used, if these have the same meaning as their equivalent adjectives. The use of this type of adverbs is preferred in a specific register, namely fiction. However, whether it can be a feature of this specific register used for a stylistic effect, or it is present in different register or varieties of English is a question that remains unanswered and supports the need of further research.

Subject-relatedness also shows a wider range of syntactic functions such as subject complement or subject adjunct associated with the category adjective realised by *-ly*-marked units. The semantic properties of adjectives in these data are in line with the pattern established in previous research (Valera & Rizo 1998) for other structures such as supplementive clauses (Quirk, Greenbaum, Leech & Svartvik 1985).

Regarding subject-related adverbs, the suffix *-ly* does not provide the adjectival base with adverbial meaning, therefore any derivational process that involves the

creation of a manner adverb is carried out by adding the suffix *-ly* to the adjectival bases presented in this research. If *-ly* were a derivational suffix, it would have to add meaning to the word and express manner or circumstance, however, this suffix seems to provide the subject-related adverbs with a position and mobility in the sentence. The mismatch between the form and meaning of these *-ly* words leads to the classification of the suffix *-ly* used in subject-relatedness as an inflectional suffix and supports the view presented in previous research (cf. Giegerich 2012) that classifies *-ly* as an inflectional suffix and proposes the absence of a lexical category adverb and the specific modifier function performed by inflected adjectives.

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