ENGLISH '-LY' ADVERBS: FROM SUBJECT ORIENTATION TO CONVERSION[1]

SALVADOR VALERA

University of Granada

ABSTRACT

Unlike subject-orientation in English '-ly' adverbs, subject-relatedness does not conflate two syntactic functions in one and the same form: subject-related '-ly' adverbs are predicative elements in the clause and do not function as adverbials. Therefore, the morphological make-up of subject-related '-ly' adverbs does not match the syntactic function and the categorial meaning usually associated with the adverbial suffix '-ly'. In subject-relatedness, the association of the predicative function with the '-ly' suffix differs from that of the well-known set of '-ly' adjectives where the suffix is the present-day form of Old English '-līc'. Subject-relatedness raises the question of how these '-ly' adverbs should be classified and the implications of this classification on their place in the system of word-classes. Specifically, it raises the question of the place of this morphological, syntactic and semantic behaviour with respect to word-class membership. In this respect, the paper explores the interpretation of subject-related '-ly' words in frameworks where adjectives and adverbs are considered one and the same word-class and also where they are considered separate ones. The interpretation of subject-related '-ly' words as belonging to the categorial space between adjective and adverb is relevant especially in respect of the morphosyntactic processes described in the literature for similar cases: although the profile of subject-related '-ly' words appears to meet the conditions of conversion, they do not become lexicalized, as in lexical conversion, and cannot be traced back to a syntactic process, as in syntactic conversion.

Keywords: subject orientation, subject-relatedness, conversion, '-ly' adverbs

1. Introduction

The categorial space between adjectives and adverbs has been the subject of much discussion, among others, on account of their formal, syntactic and semantic proximity. In the frameworks where they are one and the same word-class, this syntactic difference has been interpreted to be enabled by '-ly' as an inflectional mark (for a recent review of this position, and also of the opposite position where adjectives and adverbs are separate categories, cf. Payne et al. 2010; Giegerich 2012 and Hummel 2014). In this view, one and the same category (adjective) has access to two functions: predicative and adverbial. The latter position is not unanimously accepted and adjectives and adverbs are viewed as separate categories with specific syntactic functions more often than not. In fact, the separation has been used as an argument for the word-class model of English as a differentiated system (Hengeveld et al. 2004, cited in Hummel 2014). In the frameworks where they are considered two separate word-classes, their different functional potentials are usually adopted as the distinctive criterion (for a review, cf. Payne et al. 2010). As both categories have access to the general function modifier (here meant as modifier within the phrase and within the clause), the contrast lies in the access of adjectives to the function predicative and the access of adverbs to the function adverbial, but not the other way round. Even in this theoretical position, i.e. viewed as separate word-classes, adjectives and adverbs have a large common ground where their categorial limits are blurred, to use the classical expression (cf. Sapir 1921: 118 et passim, cited in Lipka 1971: 212).

This paper explores a part of that common ground, specifically the area where the most distinctive functions of the categories under study, predicative and adverbial, become blurred. This area comprehends two main types of cases (see section 2.): with and without suffix '-ly'. The former have been researched extensively (cf. Valera 1996; for a more recent review, cf. Giegerich 2012: 349-351). This paper focuses on the latter, i.e. on the so-called subject-oriented ((1) and (2)) and subject-related ((3) and (4)) '-ly' adverbs:[2]

(1)   He moved **uncomfortably** and his chair scraped against the dusty edge
              of the grate […]
         Adverbial   >   [He moved in an uncomfortable manner / in an un-
                           comfortable way.]
         Predicative >   [He was uncomfortable as he moved.]

---

[2]   Unless otherwise specified, the examples used in this paper come from the British National
         Corpus (hereafter, BNC), as in the interface by Prof. Mark Davies hosted at Brigham Young
         University (http://corpus.byu.edu/bnc/). Examples (3) and (4) and their paraphrases are from
         Díaz-Negrillo (2014).

(2)   Before the next Wednesday, Elizabeth **carefully** made a notice to say
          that the tea-stall would close.
       Adverbial   >   [Elizabeth made a notice in a careful manner / in a
                          careful way.]
       Predicative >   [Elizabeth was careful as she made a notice.]
(3)   Marcus stared **palely** at his plate.
       Adverbial   >   *[Marcus stared in a pale manner / in a pale way / to a
                          pale degree.]
                    >   *[It was pale that Marcus stared at his plate.]
       Predicative >   [Marcus was pale as he stared at his plate.]
(4)   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.]
                    >   *[It was white that a lamp burned.]
       Predicative >   [A lamp was white as it burned.]

The paper also examines the consequences of subject-relatedness in morpho-
logical description. This is the main objective of the paper, even if the question
of word-class identification or, more precisely, whether the units under study
belong to a categorial prototype, to a shared categorial space between two
classes, or to one or the other class unequivocally underlies the whole paper. In
view of this objective, which of the theoretical approaches is used (e.g. with or
without categorial relativism, adjectives and adverbs as one or as two catego-
ries) is not a central issue and the domain of the paper presented above as cate-
gorial space could be replaced by change of word-class or change of syntactic
category between two (sub-)classes.

    The paper first reviews the categorial space between adjectives and adverbs
briefly (section 2), then focuses on subject-relatedness in '-ly' words (section
3), and finally discusses its consequences in terms of English word-classes and
its implications in English morphology (section 4).

2. The categorial space between adjectives and adverbs

The term 'categorial space' describes the focus of the paper with a term used by
Givón (1993) in his prototype-based description of word-classes in English. In
this framework, word-classes are defined with reference to a prototype or stan-
dard, i.e. to the words that display the morphological, syntactic and semantic
features that set the standard for identification of words as members of any
given category (for an overview of the notion of categorial prototypicality, cf.
Givón 1993: 51-53; for a deeper review, cf. Newmeyer 1998; Aarts 2007: 87 et
passim, and Rauh 2010: 313-321).

As words display fewer of those properties and take on others of other word-classes, they diverge from the standard along a categorial continuum and towards the standard of a different word-class and, as a result, into the categorial space where the members of those other word-classes in turn take on properties that deviate from their standards (cf. Bauer 2005). As summarized by an anonymous reviewer, the term 'categorial space' thus refers to '[…] the fact that lexical categories generally form a spectrum'. Admittedly '[…] there are not two categories of lexical items that belong to the categorial space or fall outside it, all members of lexical categories form a spectrum'. The categorial space is represented below as an intermediate space where words may arrange themselves according to how prototypical properties of categories apply in them, and how close to those categories is each of the behaviours described. The concept of categorial space is also in Lakoff's (1987, cited in Newmeyer 1998: 168) and in Aarts' (2007) descriptions of grammatical categories as graded structures with inherent degrees of membership.

Categorial spaces are fuzzy areas where classification is by definition not without difficulty, whether it involves word-class, syntactic function and/or any other type of category in general, and whether degrees of membership are defined in terms of family resemblance or prototypicality (cf. Heine 1993, cited in Newmeyer 1998: 167; for a detailed description in English word-classes, cf. Aarts 2007: 124 et passim; for a summarized review, cf. Rauh 2010: 396-398). This categorial relativism has been contested, e.g. in Newmeyer (1998) on syntactic categories and word-classes and in Baker (2003) on word-classes, where it is argued that use of one major criterion for word-class identification (syntax), successfully produces at least three distinct classes (noun, verb and adjective), also in such a difficult area as cross-linguistic research.

The categorial space between adjectives and adverbs has also been described as an 'interface between adjectives and adverbs' (cf. Hummel 2014). This is a different name for the contact points between members of the two categories on every level where each of them realizes syntactic functions. The contact points are usually considered to arise from the divergence between the forms usually associated with a given function or set of functions for each word-class (or, conversely, from a function realized by a form that is not its usual realization). Thus, the divergence or the lack of correspondence between the forms of adjectives and adverbs and their respective functional potentials usually manifests itself in the occurrence or not of characteristic word-class morphology in specific functions. As adjectives and adverbs share their inflectional potential, the morphological contrast typically comes down to the occurrence or not of the deadjectival adverbial suffix '-ly'.

The summary of the combinatorial possibilities of this divergence can be arranged by the forms or by the syntactic functions involved. Although present in

most general grammars of English (for a review, cf. Valera 1996), the most systematic review is probably Quirk et al.'s (1985) description of the word-classes adjective and adverb, where the points of contact of the two categories can be summarized in terms of three main morphological types, of which only two are relevant here:

i)   Morphologically simple (unmarked) units that have access to syntactic functions of the two categories at clause and at phrase level, and are formally identical in both. Some of these units have a morphologically marked counterpart that they may use (5),[3] some do not (6).

(5)   We are not disturbed by slowness, for what goes **slow** can run deep.
(6)   It is something I've been working **hard** to improve.

ii)   Morphologically complex (marked) units that have access to syntactic functions of the two categories at clause and at phrase level and are formally identical in both. Some of these units have a morphologically unmarked counterpart that they may use (5), some do not (7).

(7)   It is due to reach our screens **early** next year.

It is important to note that the above summary leaves out 'a-' units, which are also discussed in Quirk et al. (1985). This is omitted above, because 'a-' units do not involve any points of contact between the two categories under discussion. If anything, they are a formal class bound by the initial 'a-'. Formal coincidence does not however form a morphologically relevant class, especially in these words, where considerable morphological, syntactic and semantic variation exists between the 'a-' words, and where 'a-' can be traced back to a limited but varied number of well-known unrelated origins. The initial element 'a-' is morphologically irrelevant in synchronic word-formation and cannot be understood as a prefix. More importantly, the words where the initial 'a-' occurs perform syntactic functions associated with only one word-class. Where one and the same form appears to perform syntactic functions ascribed to the category adjective and also to the category adverb, as in (8) and (9) below, it does so as the result of a set of specific processes that entail lexical change and where a contrast between literal and figurative meaning exists, i.e. cases that must be treated lexically (cf. similarly Jespersen 1909-1949, III: 396, 40; Quirk et al. 1985: 733 or Giegerich 2012: 350).

---

[3]   Cf. *He forced himself to go slowly, with frequent pauses to listen.*

(8)   a.   If the vessel is damaged **afloat** when it should be laid-up **ashore**
            then no cover will operate.
       b.   Much refreshed, and **afloat** in the deep tranquillity of calm after
            storm, Rainbow returns to her aunt's hotel.
(9)   a.   He said he hoped they had laid the foundations for peace – but
            admitted obstacles could lie **ahead**.
       b.   However, there are fears that transport congestion, environmental
            damage and other symptoms of over-development in the south east
            may prove a positive disincentive to growth once the Tunnel is
            opened, and that the main beneficiary will be the Nord Pas de Cal-
            ais region, especially as French companies seem to be **ahead** of
            their British counterparts in planning for the future.

Explanations of any 'a-' words in adjectival functions (predicative position,
attributive position and/or in postpositive position) and in adverbial functions
(adverbial, premodifier in adjective, adverb and prepositional phrases) are
available in the literature and confirm their status as belonging to either one or
the other, but not as members of the categorial space between adjectives and
adverbs according to their common morphology, syntax or semantics (cf. Va-
lera 1996; Payne et al. 2010).

A potential argument for the hybrid status of 'a-' units is thus originally
based on Quirk et al.'s (1985: 408-409) listing these units in the same section,
like types i) and ii) above, as regards homomorphy (cf. Quirk et al. 1985: 404-
405 and 408-409). The concept homomorphy is, however, not fully justified in
'a-' units, if homomorphy is conceived of as the relation that exists between
conversion-related pairs of words, as in most other cases where homomorphy is
described in Quirk et al. (1985). The implicit gradient between 'a-' adjectives
and adverbs is therefore more apparent than real, and does not necessarily mean
the existence of word-class hybrids, or of words in the categorial space between
adjectives and adverbs (cf. other instances where Quirk et al. 1985: 444-445
propose hybrid classes explicitly, e.g. their 'prepositional adverbs'). This is
because hybrid status can only be sustained here in terms of a shared initial
letter, when in fact such a status must rely on attestation not only of formal
identity but also of access to functions of two word-classes.

In the categorial space between adjectives and adverbs, the focus is thus usu-
ally on the occurrence or not of '-ly' with respect to the two syntactic functions
that are considered most distinctive of each of the two word-classes: predicative
and adverbial. The focus is, in the first place, on words without '-ly' that per-
form the functions usually associated with '-ly' words, i.e. adverbial (cf. Valera
1996; Giegerich 2012; Hummel 2014). Again, the reasons for the realization of
adverbial functional potential by unmarked (i.e. without '-ly' affix) forms have

been described in the literature. Leaving aside peculiarities specific to certain registers (e.g. shorter unmarked forms in informal registers, for a review, cf. Giegerich 2012: 343 et passim), the reasons range from diachronic leveling to conversion (for a review, cf. Valera 1996).

The opposite case, i.e. '-ly' words that perform functions usually associated with the absence of '-ly', i.e. predicative function, seems to be limited to '-ly' adjectives in the literature. This behaviour has also been described in the literature, specifically as the result of diachronic leveling of Old English '-līc' adjectives and their corresponding adverbs derived by suffixation of '-e' (for a review, cf. Jespersen 1922: 377; Nist 1966: 190-191 or Guimier 1985; all cited in Valera 1996). To the best of my knowledge, no further reasons have been adduced in the literature. The sources for the realization of syntactic functions associated with the category adjective by '-ly' forms therefore have a much narrower range than their counterparts without '-ly'.

Remarkably, Payne et al. (2010) have recently described another structure in which '-ly' words modify nouns (e.g. '[…] the use temporarily of Australian troops […]'), and which is considered of special interest for its relevance in the association between morphological class and syntactic function or, in general, in the description of the word-classes adjective and adverb. This paper is analogous to that one in that it discusses a similar case, i.e. '-ly' words that perform a function usually ascribed to the category adjective, and its influence on word-classes. Unlike Payne et al. (2010), this paper examines '-ly' words in a predicative, not an attributive structure, and the main objective is the implications of these structures for English morphology. Thus, the focus of the following sections is represented in Figure 1 as the shared ground or the interface between two categories, whether they are syntactic (predicative vs. adverbial) or word-classes (adjective vs. adverb), realized by '-ly' words, its sources (outside the cases that can be referred to '-līc' adjectives) and its morphological consequences.

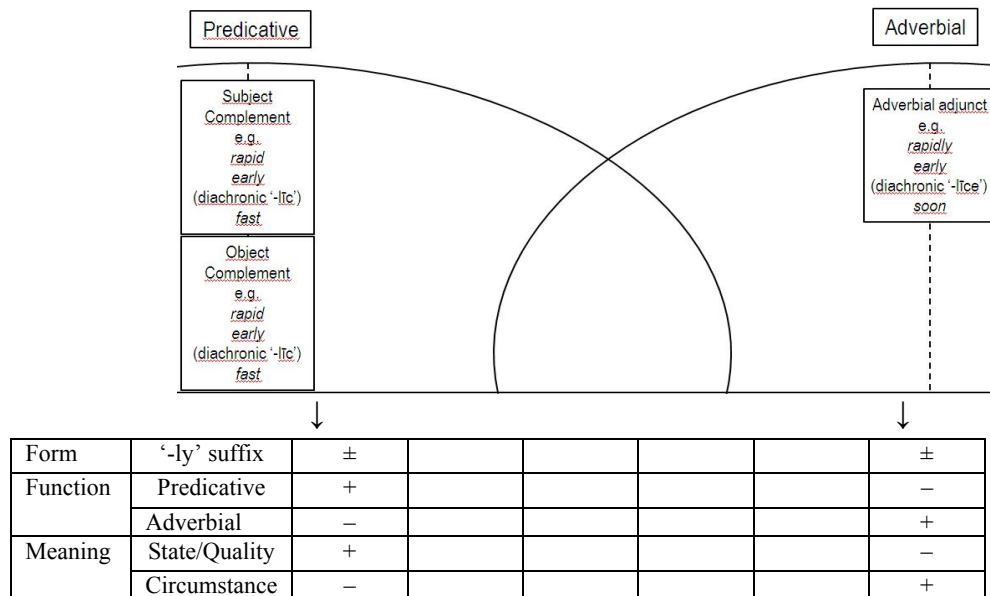| Form	'-ly' suffix	±					±
Function	Predicative	+					−
	Adverbial	−					+
Meaning	State/Quality	+					−
	Circumstance	−					+

Figure 1. A representation of the gradient between predicative and adverbial in English '-ly' words based on Givón's (1993) representation of spaces between categories

3. Subject-orientation and subject-relatedness in English '-ly' adverbs

3.1. Subject-orientation

When the necessary conditions are in place, '-ly' adverbs may take on subject orientation (for a review, cf. Díaz-Negrillo 2014; cf. also Hummel 2000: 111-122). The term 'orientation' alludes to a dual reference, such that an '-ly' adverb contributes a circumstance of the predication (adjunct in Quirk et al. 1985) or a framework of reference for the predication (disjunct, in the same theoretical framework), but it predicates of the subject too as predicative complements do.[4] To use terms associated with the categories adjective and adverb, as in Hengeveld (1992: 37, cited in Rauh 2010: 331), this dual function can also be termed as modification of a nominal head as well as of a non-nominal head, respectively.

---

[4]   Various subtypes of adverbials may take subject-orientation, namely the above mentioned
       adjuncts or disjuncts. Although, as pointed out by an anonymous referee, the relation between
       the distribution and semantic scope of '-ly' words may certainly deserve further comment here
       (cf. Cinque 1999 or Nilsen 2003), this paper does not go into this point, because the position of
       subject-oriented adverbs has been claimed not to bear as much influence on subject orientation
       as assumed initially (see below).

Subject-orientation may manifest itself at clause level, as in (3) and (4) above, and also at phrase level, when the '-ly' adverb premodifies a premodifier of the noun towards which the adverb then becomes oriented, i.e. the adverb modifies both the adjectival modifier and the nominal referent, as in (10) and (11), or both the modifier and the superordinate nominal head of the phrase, as in (12) and (13) (cf. Valera 1998):

(1)   Like the G40, it impresses with its throttle response and low-rev urge, but while the supercharged car is merely **annoyingly noisy** at speed, the GT brings a headache.
        Adverbial   >   [It is noisy in an annoying manner / to an annoying degree.]
        Predicative   >   [It is noisy and annoying.]
(2)   She was very genteel, softly spoken and, although poor, kept standards high – her gloves, although well mended were always **beautifully white**.
        Adverbial   >   [They were white in a beautiful manner / to a beautiful degree.]
        Predicative   >   [They were white and beautiful.]
(3)   Henry was the son of Antoine de Bourbon and, more important as it turned out, of Jeanne d'Albret, a very alarming woman who became, first, Queen of Navarre, and then, having abjured her Catholicism, a **bloodthirstily** militant Calvinist.
        Adverbial   >   [He was militant in a bloodthirsty manner / to a bloodthirsty degree.]
        Predicative   >   [He was militant and bloodthirsty.]
(4)   A mother whose eyes and gestures were **seductively alive**.
        Adverbial   >   [The eyes and gestures were alive in a seductive manner / to a seductive degree.]
        Predicative   >   [The eyes and gestures were alive and seductive.]

The conditions for subject orientation were originally defined for French as lexical compatibility between the adjectival base of the '-ly' adverb and position of the '-ly' adverb near the subject (Guimier 1991). In principle, these conditions apply equally well to English, but in the two languages they are not entirely clear. These conditions have been reduced to just lexical compatibility, at least for English (Valera 1998).

The relevant aspect of subject-oriented adverbs here is that they realize the function adverbial but also predicate of a nominal head as in a predicative pattern, i.e. they fall away from the prototypical syntactic category adverbial, closer to the syntactic category predicative and, as a result, partly into the cate-

gorial space shared with adjectives, because these words predicate of a nominal head. In this respect, they can be viewed as the '-ly' counterparts of '-ly' un-marked units that perform the function described by Allerton (1982) as 'subject adjuncts' or as 'object adjuncts': adjectival realizations of a function whereby predication of a nominal head as in a copulative structure goes along with the expression of an adverbial circumstance as in an adverbial adjunct (e.g. *He arrived sober*, *She found him unconscious*, both in Allerton 1982: 85-86; cf. also Matthews 1980 or Payne et al. 2010: 60; for a similar account in Spanish, cf., among others, Bartra & Suñer 1997; Luján 1980; Hummel 2000 and 2014; or Di Tullio & Suñer 2011). The position of subject and object adjuncts in the gradient between predicative and adverbial is represented in Figure 2.

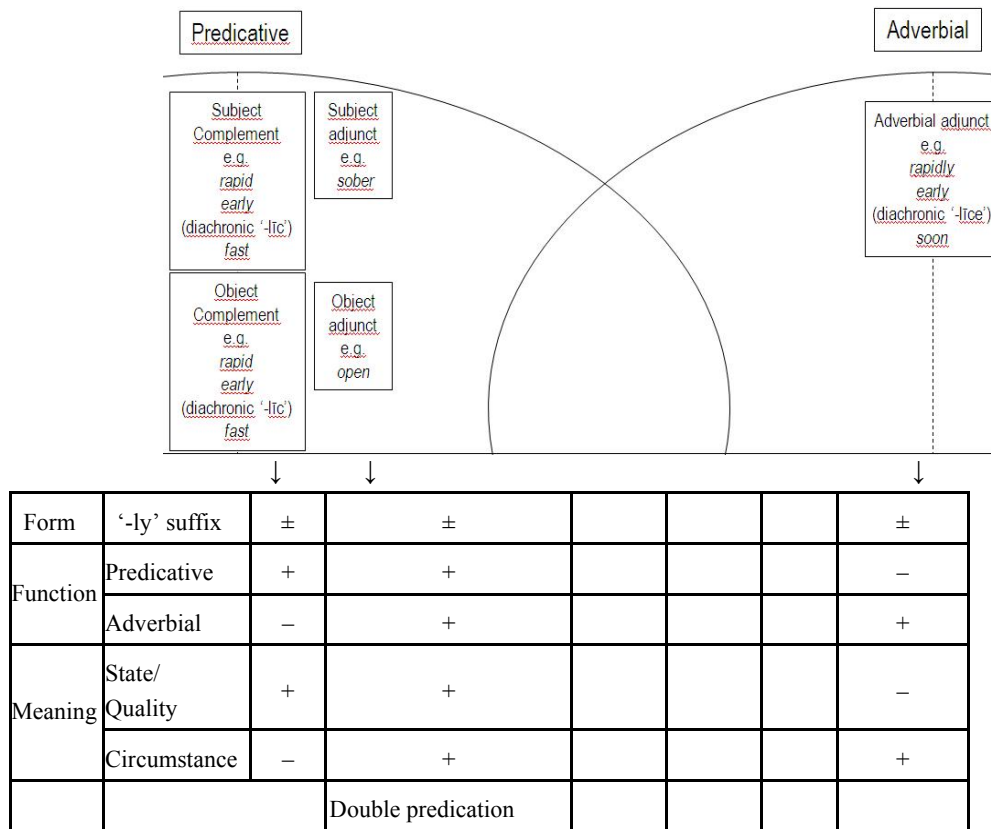|		↓	↓				↓
Form	'-ly' suffix	±	±				±
Function	Predicative	+	+				–
	Adverbial	–	+				+
Meaning	State/ Quality	+	+				–
	Circumstance	–	+				+
			Double predication				

Figure 2. A representation of the gradient between predicative and adverbial in English '-ly' words with indication of the main properties of subject and object adjuncts, based on Givón's (1993) representation of spaces between categories and on Allerton (1982)

Unlike Allerton (1982), Hummel (2000: 112 et passim) views the predication of subject adjuncts as a pragmatic implication at a secondary level with respect to the primary adverbial function. In the view presented here, the predication ('attribution' in Hummel 2000) and the adverbial, which are both encapsulated in the functions subject adjunct and object adjunct, are on a par and are simultaneous arguments. In other words, the predication of a subject adjunct is at the same level as the predication of a subject complement, except that the copulative verb is not explicit (even if it is recoverable and the result is not unacceptable).[5] Hummel (2000: 113) views subject-orientation of '-ly' adverbs as a secondary effect, and one that is similar to the secondary predication of subject adjuncts and object adjuncts. In fact, Hummel interprets '-ly'-marked words as counterparts for the '-ly'-unmarked words that have been described here as subject-adjuncts. While this paper may not agree entirely with Hummel (2000) on that point or on the essentials of subject adjuncts and object adjuncts, because the standpoint here is closer to Allerton's (1982; see above), it agrees on a key question: the orientation of '-ly'-marked words is a side effect (see 3.2).

The reasons why each of these two cases, subject adjuncts or object adjuncts and subject-oriented adverbs, deviate from the standard are primarily syntactic and syntactico-lexical, respectively. These two cases deviate from the prototypical syntactic function associated with the categories adjective and adverb, but they do not deviate (or not relevantly) from the prototype of their respective word-classes, because the prototypical functions associated with adjectives and adverbs in these types of cases remain, and it can be said that the adjectives and adverbs that present these profiles are still within their prototypical functional potentials (predicative and adverbial, respectively). The arrangement of these units in the 'correspond' space between the prototypical syntactic behaviour of the word-classes adjective and adverb is only marginal, and can be justified only on the grounds of the conflation of two different functions, one of each word-class, in one and the same form. As the syntactic processes responsible for the conflation can be identified (syntactic and lexical, respectively), and the syntactic functions of each class remain, this adds little 'orrespond' indeterminacy to the description, if at all. Therefore, these units do not become lexicalized as members of the other word-class or even as syntactic hybrids. The access to the function of a different word-class is an apparent effect of a syntactic structure or a lexical make-up, i.e. the syntactic structure and the lexical make-

---

[5] If any contents are to be inferred, it is probably the semantic type of adverbial adjunct, i.e. the actual type of circumstance (time, manner, etc.) expressed by the adverbial. Interestingly, even this may be relatively predetermined, e.g. when the subject adjunct is the first element of the sentence, in which case the semantic type appears to be cause, not time or manner; when the same element takes a different position, the causal interpretation appears to be replaced by time or manner (cf. Green 1970).

up does not have an influence as regards word-classes, and word-class member-ship is still clear. If anything, these cases bear witness to the lack of complete correspondence between word-classes and syntactic classes, i.e. to the fact that they are two different types of classifications that do not always show clear-cut cases (for a summarized review, cf. Rauh 2010: 209-210, 395).

In a primarily syntactic description where word-classes are defined by func-tion, as in a position like the one mentioned above as defended by Baker (2003), these units could be presented as members of either category (primarily adjec-tives because they predicate of a nominal head or primarily adverbs because they are adverbials, according to which of the two functions is considered to be the main one, if any one of them is). If a conceptual space is allowed between categories, they could be considered members of a third class and perform a different syntactic function, because the functions in question display properties that are different from the properties of subject complements and different from the properties of adverbials. No such intermediate category is presented in Baker (2003) or in the main descriptions of word-classes in English, and these units are described closer to the prototype or outside the 'categorial space' or 'interface' between categories for the reasons presented in the paragraph above.

3.2. Subject-relatedness

The term 'subject-relatedness' has recently been used for the description where a subject-oriented '-ly' adverb no longer performs the syntactic function adver-bial and retains only the predicative function (Díaz-Negrillo 2014). In principle, this is not allowed by the natural expectations of the functional potential of '-ly' words, except where the suffix is the present-day counterpart of Old English '-līc' (cf. Payne et al. 2010: 31-36 on the terms of the so-called complementar-ity claim). Predicative elements of the type subject complement or object com-plement (to a lesser extent, and according to the reference of the verb, also sub-ject adjunct or object adjunct) and subject-related adverbs have the same type of reference, except for the realization by a word with the affix '-ly' in the latter case. The contrast is thus in the morphology and partly also in the distribution, because the '-ly'-marked forms appear to occur mainly in one type of register[6]. Otherwise the structures appear to be (near) synonymous:

---

[6]   81.5% of the cases recorded for the units listed in Table 1 occur in the register W_fict_prose, 4.6% in W_fict_poetry, in W_misc and in W_pop_lore each, and 1.5% in W_non_ac_humanities_arts, in W_non_ac_nat_science, in W_non_ac_soc_science, and in W_biography. As pointed out by Hummel (pers. com. 2014), this seems to be determined by register, which is in line with the observation that productivity can be largely conditioned by such variables as register or domain (cf. Bauer 2014).

(5)   a.   The soft fall of her hair over her shoulders gleamed **red** in places.
        b.   His eyes gleamed **redly** again.
               Adverbial   >   *[His eyes gleamed in a red manner / to a red
                                  degree.]
(6)   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**.
               Adverbial   >   *[Her hair was hanging in a black manner / to a
                                  black degree.]

A contrast is thus established between 'orientation' and 'relatedness', in that not
any of the possible adverbial interpretations of subject-oriented adverbs, which are
tested in the paraphrases of the examples (adjunct, conjunct, disjunct, or intensifier
in Quirk et al.'s 1985 framework), applies in subject-relatedness (cf. Díaz-Negrillo
2014). Subject-orientation is a lexical effect caused by the semantic compatibility
between the adjectival base of the '-ly' adverb and a nominal head jointly with the
semantic compatibility between the predicator and the '-ly' adverb. The following
sets of examples illustrate this at the clause and at the phrase level:

(7)   Detesting auditions and unsure of what to do, he **nervously** sang 'God
        Save the Queen'.
        Adverbial   >   [He sang in a nervous manner / way.]
        Predicative >   [He was nervous and he sang.]
(8)   His manner was **nervously** belligerent. They were put into a little room,
        no more than a cubicle, where there were two kitchen-chairs and a table
        with a few magazines.
        Adverbial   >   *[His manner was belligerent in a nervous manner / way.]
        Predicative >   [His manner was belligerent and nervous.]

By contrast, subject-relatedness is primarily a lexical effect caused by the se-
mantic compatibility between the adjectival base of the '-ly' word and a nomi-
nal head on the one hand, and the lack of semantic compatibility between the
predicator and the '-ly' word on the other:

(9)   When she saw Daniel, shedding red and white fuzz, she said **palely** that
        she was afraid now she would lose little Stephen, it was hope that killed
        you, wasn't it, best not to hope, but what else could you do, sitting
        there? She felt so useless.
        Adverbial   >   *[She said [something] in a pale manner / to a pale degree.]
        Predicative >   [She was pale and she said [something].]

(10)   He then reappeared in the dining car with an interested crowd of people
         following him and asked to speak to Xanthe, who up until then had kept
         palely quiet. He identified her easily because everyone looked her way.
         Filmer was still beside her: the passengers tended all the time to linger at the
         tables, talking, after the meals had been cleared, rather than return to the
         solitude of their bedrooms. Nearly everyone, I would have guessed, had
         been either in the dining room or the dome car all morning. Mrs Young
         squeezed Xanthe's hand encouragingly from across the table while the half-
         child half-young-woman shivered her way through the dangerous memory.
         Adverbial   >   *[She was quiet in a pale manner / to a pale degree.]
         Predicative >   [She was quiet and pale.]

In this case, subject-relatedness does not justify classification of the '-ly' word
as a different word-class, because subject-relatedness depends on the predica-
tors the '-ly' word may combine with. This behaviour is also different from
cases where the '-ly' word has become partly grammaticalized as an intensifier
(similarly with 'awfully'), as in (20), and also from those cases where the '-ly'
word has developed a figurative sense, as in (21) compared with (22), where the
meaning is 'dimly' in the sense 'faintly, indistinctly', i.e. not denoting colour,
vs. subject-oriented 'pale in colour' or in (23) compared with (24), where the
meaning is 'in an environmentally-friendly way' indistinctly', i.e. again not
denoting colour, vs. subject-related 'green in colour' (see also (8a) vs. (8b), and
(9a) vs. (9b) above; cf. also Payne et al. 2010: 54-55).

(11)   […] there was a card tied to this, on which was **palely** visible in type-
         writing [']For Christabel From the women of Tallahassee Who truly
         honour you Who keep your memory green And continue your work'.
         Adverbial   >   [A card was barely visible.]
         Predicative >   *[A card was visible as it was pale.]
(12)   Only an occasional great congress or conference – such as that of Berlin
         in 1878 – brought momentarily into existence something **palely** antici-
         pating the 'summit' diplomacy of the twentieth century, and even then
         the major decisions tended to be made before the great men met.
(13)   He was lying down now and his face shone **palely** out of the gloom of
         the lower bunk like that of some animal in its hole.
         Adverbial   >   [His face shone in a pale manner.]
         Predicative >   [His face was pale and it shone.]
(14)   The problem is that whatever I consume **greenly** or ungreenly consti-
         tutes a bite out of the earth's resources.
(15)   The hot sun fell between the buildings throwing great shadows, the
         trees dotted along the road waved **greenly** reminding Emily of home.

However, some '-ly' words display subject-relatedness regardless of which predicators they combine with. The specifications of this group of '-ly' words are still unclear, but they frequently denote colours similarly as the '-ly' adjectives described by Payne et al. (2010: 44 et passim) seem to be a specialised subspecies (cf. also Díaz-Negrillo 2014). Of these, only *whitely* can be traced back to an Old English adjective in '-līc', the rest showing their earliest records between 1398 (*whitely*) and 1894 (*brownly*). While often not recorded as adjectives or cited as obsolete or of restricted use in *The Oxford English Dictionary* (Simpson 2000-), most are attested in the BNC, even if their frequency is low:

Table 1. Number of occurrences of '-ly'-unmarked and '-ly'-marked terms in the BNC, in the latter case with specification between square brackets of the number of names or examples in which the term is used in a figurative sense (as in examples (21) and (23)) under the same lemma.

	'-ly'-unmarked	'-ly'-marked
black	23609	19
blue	9941	0
brown	8279	2
green	14059	7 [14]
grey/gray	5406/1062	5/1
pink	3103	6
red	14374	6
violet	528	0 [1]
white	23111	24 [45]
yellow	4317	1

Although few in number compared with their '-ly'-unmarked counterparts, these examples are not entirely anecdotal, or not more than others, for at least three reasons: firstly, the number of examples attested compared with similar structures (18 cases in Payne et al. 2010 vs. 65 cases recorded here after discard of names and figurative uses of the type of examples (21) and (23)[7]); secondly, the structure that they illustrate and its morphological interpretations (see section 4); finally, because, unlike other similar cases, they involve colour adjectives when precisely colour adjectives have been considered prototypical adjec-

---

[7]   Unlike Payne et al. (2010), this paper does not use evidence obtained from the internet by general or specific search engines for the difficulty in ascertaining the representativeness of any such retrieved examples compared with the representativeness of corpus examples.

tives (Dixon 1977). If, e.g. *blackly*, *greenly*, *redly* or *whitely* in any of the subject-related examples cited above are accepted as syntactic and semantic adjectives, then there is only the argument of the form with the '-ly' suffix to consider them adverbs. However, occurrence of this suffix does not seem a definitive word-class property compared with the function and the meaning, which in turn means that '-ly' may occur in central adjectives, with the implications that this may have as regards these word-classes and the value of '-ly'.

But what really matters at this point is that, in the examples presented in this section, subject-relatedness is an inherent property rather than a lexical effect of the lack (or not) of semantic compatibility in a given combination. In the two cases, the lack of compatibility between the '-ly' adverb and the predicator excludes the adverbial interpretation and only the predicative interpretation is possible. According to the type of subject-relatedness, it can be either an extrinsic (as a result of incompatibility) or an intrinsic property of '-ly' adverbs (by definition) that has passed unnoticed or has been denied.[8] Its implications have not been explored much in either case (for a review, cf. Díaz-Negrillo 2014). Subject-related adverbs have been described to occur at clause level, as in (3) and (4), and at phrase level, the latter also in cases where an interpretation as compounds is not possible:

(16)   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.]
(17)   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.]

The subject-related '-ly' adverbs that occur at clause level differ from those that occur at phrase level in that the former behave exactly as predicative elements of the type subject complement, except that they retain the mobility and optionality that is typical of adverbials instead of the fixed position and obligatoriness of subject complements. In this sense, they are not always in the same relation as the minimal pair *nice/nicely* with verbs that admit an intransitive and a copulative interpretation, like *smell*, noted by Lyons (1966, cited in Payne et al. 2010: 35) and may thus combine with other than stance verbs (cf. (3), (4), (22), (24), where the

---

8   'Nur die subjektgerichtete Implikation, nicht aber die verbgerichtete Funktion, kann wegfallen' (Hummel 2000: 113; 'Only the implication towards the subject may be cancelled; the function towards the verb cannot' [my translation]).

'-ly' word is mobile and/or optional, unlike *nicely* in *She smells nicely*; for this contrast, cf. the description of complex intransitive constructions in Matthews 1980).

In both cases, at phrase and at clause level, their reference is exclusively one of predication. Compared with subject-oriented adverbs, subject-related adverbs therefore arrange themselves at a different point of the categorial space between adjective and adverbs: as there is no adverbial function, subject-relatedness pushes these '-ly' words into the category adjective and away from the category adverb within the categorial space shared by adjectives and adverbs. From that point of view, it can be claimed that their function is exclusively within the functional potential of the adjective, not within that of the adverb. Subject-related words are thus adverbs only form the point of view of the form (Díaz-Negrillo 2014) and, to a lesser degree, of their mobility and optionality. When subject-relatedness is a lexical effect, the '-ly' words are closer to subject-oriented '-ly' adverbs, because they may have access to orientation (i.e. to the function adverbial too) given the appropriate lexical combination and semantic compatibility. When subject-relatedness is an inherent condition, the '-ly' words are farthest from subject-oriented '-ly' adverbs, because orientation is not possible, i.e. access to the function adverbial is not possible. All are hybrids with different degrees of proximity to central adverbs and to central adjectives.

Leaving aside the diachronic component, these subject-related words are morphologically, syntactically and semantically different from '-ly' adjectives of the type described in point i) of section 1: morphologically, because, unlike '-ly' adjectives of the type described in i), subject-related words systematically have an adjectival base without '-ly'; syntactically, because they express a predication at a secondary clause level, and therefore retain adverbial mobility and optionality even if they do not express a circumstance of time, manner or reason of the predication (however, they cannot express predication at a primary clause level, i.e. in direct combination with a copulative verb); and semantically, because their adjectival bases must belong either to a semantically compatible class with the nominal head to which they refer as a result of a lexical effect, or to a class semantically incompatible with any predicator. Their similarities are unimportant as regards their endings, but not as regards their ability to perform a predicative function and their common categorial meaning. The position of subject-oriented and subject-related words in the gradient between predicative and adverbial is represented in Figure 3.

Predicative — Adverbial

Subject Complement e.g. *rapid early* (diachronic '-līc') *fast*	**Subject adjunct** e.g. *sober*						**Adverbial adjunct** e.g. *rapidly early* (diachronic '-līce') *soon*
Object Complement e.g. *rapid early* (diachronic '-līc') *fast*	**Object adjunct** e.g. *open*	**Subject-related (Intrinsic)** e.g. *whitely*	**Subject-related (Extrinsic)** e.g. *palely*	**Subject-oriented** e.g. *furiously*			

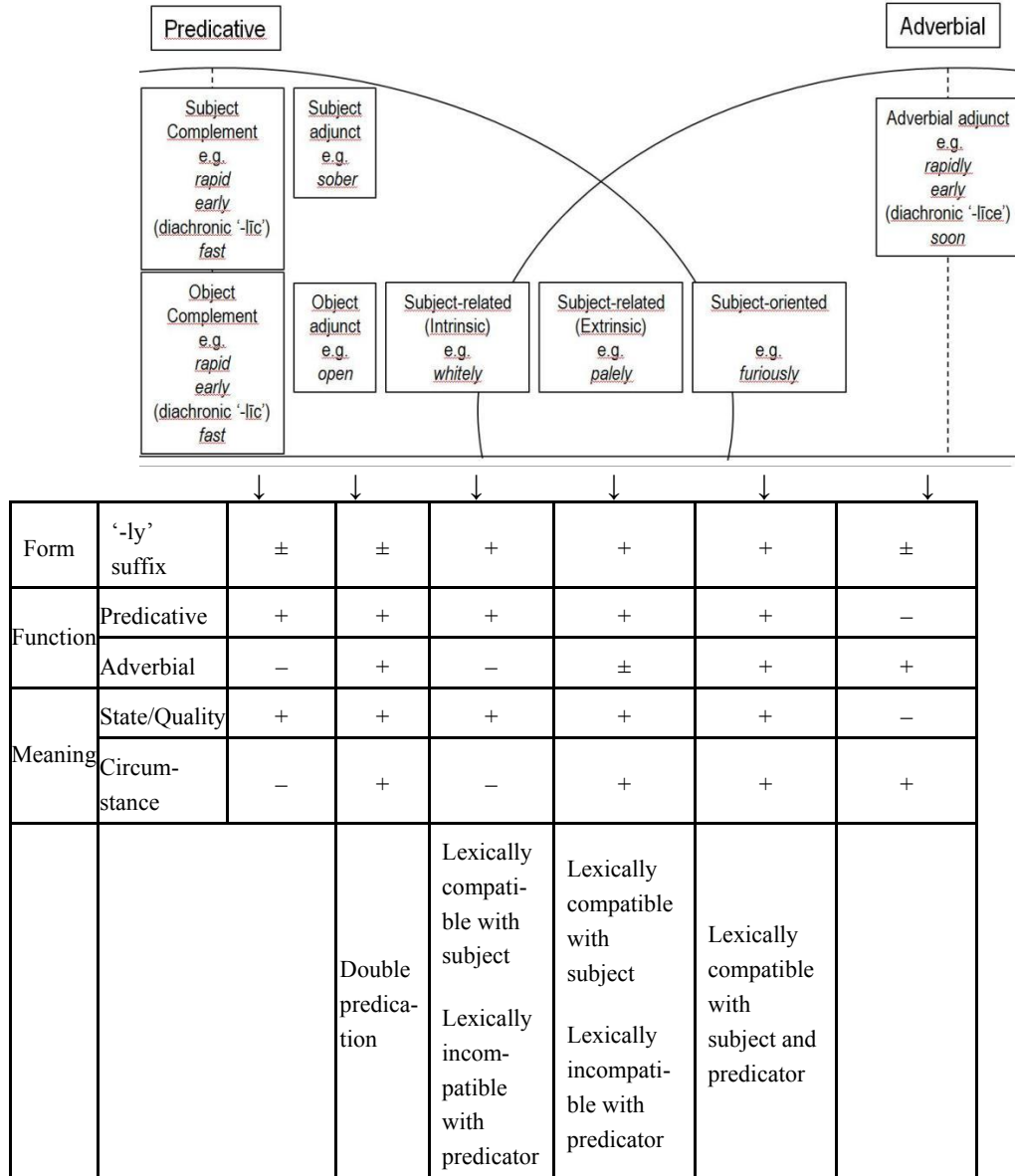|		↓	↓	↓	↓	↓	↓
Form	'-ly' suffix	±	±	+	+	+	±
Function	Predicative	+	+	+	+	+	−
	Adverbial	−	+	−	±	+	+
Meaning	State/Quality	+	+	+	+	+	−
	Circumstance	−	+	−	+	+	+
			Double predication	Lexically compatible with subject Lexically incompatible with predicator	Lexically compatible with subject Lexically incompatible with predicator	Lexically compatible with subject and predicator	

Figure 3. A representation of the gradient between predicative and adverbial in English '-ly' adverbs with indication of the main properties of subject and object adjuncts and subject-oriented and subject-related '-ly' words, based on Givón's (1993) representation of spaces between categories

4. Subject-relatedness and word-classes

Unlike subject-oriented '-ly', subject-related '-ly' is a strong case for word-class overlap or word-class hybridism or indeterminacy. The morphology of these words bears the typically adverbial suffix that has been attached to a systematically available unmarked adjectival base, but their syntactic function is predicative and their categorial meaning is more compatible with the word-class adjective than with the word-class adverb, i.e. as the expression of a state, quality or property rather than as the expression of a circumstance of a predication or a degree of a quality.[9]

   If this is accepted, then subject-related words become particularly attractive as regards syntactic functions, word-classes, and the association between both, because subject-related words lend themselves to at least two different interpretations. The first interpretation is that they are adverbs, for their distinct morphology and, less evidently, for displaying certain properties of adverbials, specifically mobility and optionality (even if these properties are not present in all types of adverbials nor to the same degree; consider, e.g. the position and occurrence of obligatory adverbials). Whether subject-relatedness is an extrinsic lexical effect or an intrinsic property of a lexical subclass, the function is predicative and the categorial meaning fits better in the prototype of adjectives than in the prototype of adverbs. Recategorization as adjectives is not justified when subject-relatedness is an extrinsic property. By contrast, when it is an intrinsic property of a lexical subclass, if this lexical subclass is retained within the category adverb, then predicative function becomes one of the possible functions of adverbs. In either case, these units point at a common area where adjectives and adverbs are formally and/or syntactically closer than in the traditional correspondence between syntactic categories and word-classes or, in other words, adjectives, a lexical subclass of '-ly' adverbs, and a larger group of '-ly' adverbs in certain combinations all have access to the same syntactic functions (predication, premodification of nominal heads). This interpretation brings in additional arguments for the view of adjectives and adverbs as one word-class, but raises the question of why members of the single category use one and the same inflectional '-ly' for different functions: predicative and adverbial.

   The alternative is to consider subject-related '-ly' words not to be adverbs. In this case, they would be categorized as adjectives on the grounds of their syntactic and semantic predicative properties, and despite their apparently adverbial morphology, optionality and mobility. This interpretation is particularly attractive in frameworks where morphology is less important than syntactic function

---

[9]   For the problems defining the semantic prototypical properties of adjectives, cf. Newmeyer (1998: 171 et passim), specifically his review of Croft (1991).

for the definition of word-classes. This interpretation raises the question of the relation or the categorization of '-ly' words when they are subject-related and when they are not. The multiple word-class membership in this case is not attributable to any of the origins invoked for (i) and (ii) in section 2.

The occurrence of the morpheme '-ly' where subject-relatedness is an intrinsic property, i.e. where it is not a lexical effect caused by semantic incompatibility, ultimately questions that these units have ever been adverbs. In these cases, the suffix only marks certain positional mobility and/or optionality. These cases probably develop analogically on the basis of the rest of cases of subject-relatedness and on the cases of subject-orientation too, but this is admittedly a speculative statement. More important, whether as an extrinsic or as an intrinsic property, subject-relatedness entails word-class contrast with formal identity and thus responds to the conditions inherent only in one morphological operation: conversion. The pertinence of this concept for this type of examples is discussed in the next section.

4.1. Subject-relatedness and conversion

It has been argued that, when formal and functional properties follow semantic change, there is a strong argument for new word-formation. By contrast, when either the form does not follow semantic change, or the function can be realized by a range of categories, including the original category of the word in question (so there is no word-class change in principle), the interpretation of a new category is open to discussion.

In subject-relatedness, form does not follow functional and semantic properties. When subject-relatedness is an extrinsic property (a lexical effect in a syntactic structure), the functional and semantic properties depend on a given lexico-syntactic configuration that the word may not always take. This is a similar situation to the one whereby adjectives appear as heads of noun phrases: they retain morphological properties of adjectives but syntactically appear to perform a nominal function. This is a cross-linguistically frequent structure that has been interpreted as a strong argument for word-class underspecification, especially for some units as described in Farrell (2001).[10] So these heads of NPs have been described as partial conversion, because they retain morphological properties of the base and do not take the full morphological properties of the

---

[10]   While word-class underspecification is indeed a coherent and successful description of these cases, it has been questioned where other word-classes are involved and the semantic dependence is clear, as in certain other adjective/noun pairs where one is the base and the other the derivative (e.g. $cold^{Adj} > (the)\ cold^{N}$), nouns that can be converted into verbs but are perceived primarily as nouns (e.g. $pen^{N} > (to)\ pen^{V}$), or in verbs that can be converted into nouns but are perceived primarily as verbs (e.g. $go^{V} > (a)\ go^{N}$).

allegedly end word-class. These two points refer mainly to the inflectional potential of these units, specifically to the lack of plural inflection, when it exists.

The description of the profile of apparently adjectival heads of NPs is important precisely because they have been described as partial conversion. A more precise description than partial conversion and one that is generally preferred today is 'syntactic' instead of 'lexical conversion', although the contrast is in some frameworks only terminological, because the latter has often been felt to exist behind the former (cf., among others, Adams 1973: 19).

The literature has considered traditionally two main cases of the so-called partial conversion: nominal premodification of nominal heads, and adjectival heads of NPs (cf. Marchand 1969: 360-361 for a review). Of these, only the latter are accepted as cases of word-class indeterminacy and described as syntactic conversion today. A similar case could be made of Quirk et al.'s (1985) prepositional adverbs, except that these are not cited in the literature of syntactic conversion as often. The term 'syntactic conversion' successfully encapsulates the presumably syntactic origins of these structures,[11] their lack of lexical change and their display of properties that are compatible with two word-classes at the same time: adjectives as regards their morphology and nouns as regards their syntax.

Syntactic conversion has been described as more productive, semantically less predictable, and with less potential for inflection and lexicalization than lexical conversion, among other things (for a review, cf. Neef 1999; cf. also Anward 2001: 731-732). The term is also important, because it separates a word-formation process as conversion from what many descriptions consider an operation that allows words to take on syntactic properties of a different word-class without implying that their word-class membership has changed, i.e. the unit partially or syntactically converted displays properties of two categories at the same time (cf. Sweet 1891-1998, I: 39 or Tournier 1985: 195). Comparatively few of these cases become lexicalized as members of the new word-class. In this sense, the term 'syntactic conversion' also provides a relation for units that arrange themselves in the categorial space between two word-classes. Finally, the term 'syntactic conversion' underlines the fact that this is different from the usual concept of conversion (lexical conversion): when these adjectives as nominal heads do not show any of the above morphological constraints and lexical change occurs, they are described as complete, full or just conversion:[12]

---

[11] Most of the descriptions of this structure allude to ellipsis of a nominal head (cf. Biese 1941: 334 et passim; Tournier 1985: 175-177; Müller et al. to appear). However, there is no unanimity on this point (cf. Bauer et al. 2013 for a different view).

[12] However, cf. Paul (1982: 298, 305) on 'categori(c)al transference' for classification of what is presented here as partial or syntactic conversion along with full or complete conversion.

(18)   About a third said unequivocally that they would not support the repeal, and even the **doubtfuls** expressed their opinions in such a way as to leave no doubt about the strength of their reservations.

(19)   The government of Mr Beregovoy is still discernibly the government of Mr Mitterrand and many of the old **faithfuls** are still in place.

In complete conversion, meaning change is an important requirement and, unlike inflection, it extends the answer to the question of what it means to belong to a lexical class, as in Bauer (2005; cf. also Rauh 2010: 209 et passim, 323 et passim), from the morphological to the lexical. Thus, when subject-relatedness is an extrinsic property, it is questionable that a new word has been formed, because a set of lexico-syntactic conditions are needed for subject-relatedness to exist and these conditions are not intrinsic to the '-ly' word. This is a similar situation to the one in adjectival heads of NPs, and still the latter have been described as syntactic conversion. It is questionable that a new word has been formed in extrinsic subject-relatedness. If it were, then the next question is: as a result of what. By the same token as with adjectival heads of NPs, the answer would be some type of conversion, and here it is important to note that, if so, then conversion here overruns the constraint of morphological markedness for a given word-class (cf. Neef 1998). It is also important to note that, at the lexical level, both subject-relatedness as an extrinsic condition and adjectival heads of NPs take on a different categorial meaning than when they are not subject-related and when they are not nominal heads, respectively.

By contrast, when subject-relatedness is an intrinsic property, i.e. it does not require any set of lexical or syntactic conditions, the word in question always displays the same syntactic and semantic properties, and those properties are closer to those of the category adjective than to those of the category adverb from the point of view of syntax and meaning. Subject-relatedness arranges itself at different points of the categorial space between adjectives and adverbs when it is extrinsic and when it is intrinsic. In both cases, i.e. as an intrinsic and as an extrinsic condition, subject-related words appear to have converted fully or partially to the category adjective, and in this sense they display an arrangement of conditions that fit in conversion and that fully respond to what Dokulil (1968: 215) anticipated when he placed conversion at the crossroads of morphology, syntax and, in this particular case, most importantly, lexical semantics.

The above interpretations of subject-relatedness as an instance of one or the other word-class are not without reason. Whichever is favoured, it will distort facts at least partly by ignoring either the adverbial (morphologically '-ly'-marked, some degree of mobility and optionality) or the adjectival dimension (syntactic predicative function, categorial meaning as in central adjectives) of subject-related '-ly' words. Categorial spaces or categorial squishes have

been criticized for the lack of an explanation of the reasons why certain (sub-)categories display their specific properties, for the lack of the formalization of the position of these (sub-)categories in the categorial space, for the disregard of contextual information and for the questionable robustness of the evidence on which the (sub-)categories are based (Newmeyer 1998). This description discusses which those points are and as a result of which processes as regards the contrast between the syntactic categories predicative vs. adverbial.

5. Conclusion

It has been claimed that '[i]f the word-classes involved do not differ inflectionally and the only difference is in their syntax and in their meaning, there is no argument to distinguish the two cases' (Valera 2014). This statement on the separation of certain adjectives and nouns or on the separation of adjectives and adverbs in English overlooks the evidence provided by subject-related '-ly' words. Subject-related '-ly' words can be distinguished from plain adverbial '-ly' words by their syntactico-semantic relations, also regardless of any historical processes. This paper therefore reviews the categorial space between '-ly' adjectives and adverbs as predicatives and adverbials, and the (sub-)categories that arrange themselves along the categorial space in between. Subject-oriented '-ly' words and subject-related '-ly' words arrange themselves in the categorial space or in the interface between adjectives and adverbs. They do at different points of proximity to the prototype of adjective or the prototype of adverb according to whether subject-relatedness is an intrinsic property or a lexical effect. Subject-related words by their intrinsic properties are in the categorial space between adjectives and adverbs as a result of the mismatch between form and function, and are therefore closest to the '-ly' adjectives whose suffix is not an adverbial mark (an inflectional mark in other frameworks), even if they may have been formed on the analogy of the '-ly' adverbs that may become subject-related as a result of a lexical effect, or that become subject-oriented. Subject-related '-ly' words by their intrinsic properties can also be considered to take on adjectival function partly as a result of the semantic incompatibility and partly as the result of a syntactic structure, and are therefore closer to syntactic conversion than any of the other groups discussed here. Subject-related words by a lexical effect are similar to examples of syntactic conversion as regards their considerable meaning predictability (dictated by the adjectival base) and low lexicalization. In sum, subject-relatedness is relevant for a number of reasons that have remained unexplored in the syntactic literature but also because they add a substantially different type of structure to the ones that are described in the morphological literature as syntactic conversion.

REFERENCES

Aarts, Bas. 2007. *Syntactic gradience. The nature of grammatical indeterminac*y. Oxford: Oxford University Press.

Adams, Valerie. 1973. *An introduction to modern English word-formation*. London: Longman.

Allerton, D.J. 1982. *Valency and the English verb*. New York: Academic Press.

Anward, Jan. 2001. Parts of speech. In: Martin Haspelmath, Ekkehard König, Wulf Oesterreicher & Wolfgang Raible (eds.), *Language typology and language universals*. Volume I, 726-735. Berlin and New York: de Gruyter.

Baker, Mark C. 2003. *Lexical categories. Verbs, nouns, and adjectives*. (Cambridge Studies in Linguistics 102.) Cambridge: Cambridge University Press.

Bartra, Anna & Avellina Suñer. 1997. Inert agreement projections and the syntax of bare adjectives. *Probus* 9(1). 1-32.

Bauer, Laurie. 2005. Conversion and the notion of lexical category. In: Laurie Bauer & Salvador Valera (eds.), 19-30. *Approaches to conversion/zero-derivation*. Münster: Waxmann.

Bauer, Laurie. 2014. *'What is the plural of mouse?' and other unhelpful questions for morphologists*. Plenary lecture delivered at the 47th Annual Meeting of the Societas Linguistica Europea, Adam Mickiewicz University, Poznań, 11th-14th September 2014.

Bauer, Laurie, Rochelle Lieber & Ingo Plag. 2013. *The Oxford reference guide to English morphology*. Oxford: Oxford University Press.

Biese, Yrjöe M. 1941. *Origin and development of conversions in English*. (Annales Academiae Scientiarum Fennicae B XLV, 2.) Helsinki: Academia Scientiarum Fennica

Cinque, Guglielmo. 1999. *Adverbs and functional heads. A cross-linguistic perspective*. Oxford: Oxford University Press.

Croft, William. 1991. *Syntactic categories and grammatical relations*. Chicago, Il.: Chicago University Press.

Díaz-Negrillo, Ana. 2014. Subject-relatedness in *-ly* premodifying adverbs. *English Studies* 95(4). 459-474.

Di Tullio, Ángela & Avellina Suñer. 2011. Adjetivos desnudos y sintagmas nominales sin determinación. In: María Victoria Escandell Vidal, Manuel Leonetti & Cristina Sánchez López (eds.), *60 problemas de gramática. Homenaje a Ignacio Bosqu*e, 158-162. Madrid: Akal.

Dixon, R.M.W. 1977. Where have all the adjectives gone? *Studies in Language* 1. 1-80.

Dokulil, Miloš. 1968. Zur Frage der Konversion und verwandter Wortbildungsvorgänge und -beziehungen. *Travaux Linguistiques de Prague* 3. 215-239.

Farrell, Patrick. 2001. Functional shift as category underspecification. *English Language and Linguistics* 5(1). 109-130.

Giegerich, Heinz J. 2012. The morphology of *-ly* and the categorical status of 'adverbs' in English. *English Language and Linguistics* 16(3). 341-359.

Givón, Talmy. 1993. *English grammar. A function-based introduction*. Volume I. Amsterdam and Philadelphia, PA: John Benjamins.

Green, Georgia M. 1970. How abstract is surface structure? In: Mary Ann Campbell, James Lindholm, Alice Davison, William Fisher, Louanna Furbee, Julie Lovins, Edward Maxwell, John Reighard & Stephen Straight (eds.), *Papers from the 6th Regional Meetin*g, 270-281. Chicago, Il.: Chicago Linguistic Society.

Guimier, Claude. 1985. On the origin of the suffix '-ly'. In: Jacek Fisiak (ed.), *Historical semantics. Historical word-formation*, 155-170. Berlin: Mouton.

Guimier, Claude. 1991. Sur l'adverbe orienté vers le sujet. In: Claude Guimier & Pierre Larcher *Les états de l'adverbe*. Rennes: Presses Universitaires de Rennes.

Heine, Berndt. 1993. *Auxiliaries: Cognitive forces and grammaticalization*. New York: Oxford University Press.

Hengeveld, Kees. 1992. Parts of speech. In: Michael Fortescue, Peter Harder & Lars Kristoffersen (eds.), *Layered structure in reference in a functional perspective: Papers from the Functional Grammar Conference in Copenhagen 1990*, 29-55. Amsterdam: John Benjamins.

Hengeveld, Kees, Jan Rijkhoff & Anna Siewierska. 2004. Parts-of-speech systems and word order. *Journal of Linguistics* 40(3). 527-570.

Hummel, Martin. 2000. *Adverbale und adverbialisierte Adjektive im Spanischen. Konstruktionen des Typs* Los niños duermen tranquilos *und* María corre rápido. Tübingen: Gunter Narr.

Hummel, Martin. 2014. The adjective-adverb interface in Romance and English. In: Petra Sleeman, Freek Van de Velde & Harry Perridon (eds.), *Adjectives in Germanic and Romance*, 35-72 Amsterdam and Philadelphia, PA: John Benjamins.

Jespersen, Otto. 1909-49. *A modern English grammar on historical principles*. London: Allen & Unwin.

Jespersen, Otto. 1922. *Language, its nature, development and origin*. London: Allen & Unwin.

Lakoff, George. 1987. *Women, fire and dangerous things: What categories reveal about the mind*. Chicago, Il.: University of Chicago Press.

Lipka, Leonhard. 1971. Grammatical categories, lexical items and word-formation. *Foundations of Language* 7. 211-238.

Luján, Marta. 1980. *Sintaxis y semántica del adjetivo*. Madrid: Cátedra.

Lyons, John. 1966. Towards a 'notional' theory of the 'parts of speech'. *Journal of Linguistics* 2. 209-236.

Marchand, Hans. 1969. *The categories and types of Present-Day English word-formation*. München: C. Beck.

Matthews, P.H. 1980. Complex intransitive constructions. In: Sydney Greenbaum, Geoffrey Leech & Jan Svartvik (eds.), *Studies in English linguistics for Randolph Quirk*, 41-49. London: Longman.

Müller, Peter O., Ingeborg Ohnheiser, Susan Olsen & Franz Rainer (eds.). *To appear. An international handbook of the languages of Europe*. Berlin: De Gruyter.

Neef, Martin. 1999. A declarative approach to conversion into verbs in German. In: Geert Booij & Jaap van Marle (eds.), *Yearbook of morphology 1998*, 199-242. Dordrecht: Kluwer.

Newmeyer, Frederick J. 1998. *Language form and language function*. Cambridge, Mass: MIT Press.

Nilsen, Øystein. 2003. *Eliminating positions. Syntax and semantics of sentence modification*. Ph.D. dissertation, Universiteit Utrecht.

Nist, John. 1966. *A structural history of English*. New York: St. Martin's Press.

Paul, Peter. 1982. Homonyms, semantic divergence and valency. *Lingua* 58(3-4). 291-307.

Payne, John, Rodney Huddleston & Geoffrey K. Pullum. 2010. The distribution and category status of adjectives and adverbs. *Word Structure* 3. 31-81.

Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech & Jan Svartvik. 1985. *A comprehensive grammar of the English language*. London: Longman.

Rauh, Gisa. 2010. *Syntactic categories. Their identification and description in linguistic theories*. Oxford: Oxford University Press.

Sapir, Edward. 1921. *Language: An introduction to the study of speech*. New York: Harcourt, Brace & Co.

Simpson, John A. (ed.). 2000-. *Oxford English Dictionary online. Third editio*n. <www.oed.com>.

Sweet, Henry. 1891-98. *A new English grammar. Logical and historical*. Oxford: Clarendon Press.

Tournier, Jean. 1985. *Introduction descriptive à la lexicogènètique de l'Anglais contemporain*. Genève: Editions Slaktine.

Valera, Salvador. 1996. *Adjetivos y adverbios en inglés: La relación de homomorfia*. Granada: Servicio de Publicaciones de la Universidad de Granada.

Valera, Salvador. 1998. On subject-orientation in English '-ly' adverbs. *English Language and Linguistics* 2(2). 263-282.

Valera, Salvador. 2014. Derivation by conversion. In: Rochelle Lieber & Pavol Štekauer (eds.), *The Oxford handbook of derivation*, 154-168. Oxford: Oxford University Press.