

In this article I explore the nature and distribution of (manner-)adverbial APs in English. Specifically, I address the following questions: (a) What is the nature of the adverbial marker –ly? (b) Why can adverbial APs be “bare” (i.e., without –ly) in postverbal position but not in preverbal position. The answer to the first question will be that –ly is the affixal realization of a functional category Pr. The answer to the second question will be tentative and much more exploratory.

1. Introduction

Ever since Bowers (1975) and Emonds (1976), it is generally assumed within generative grammar that lexical items such as those in (1), i.e. words that are traditionally classified as adverbs, really belong to the category of adjectives (see also Abney 1987).

- (1) quickly, easily, sharply, carefully

A clear indication of their adjectival nature is the fact that they can be specified by the same class of elements, viz., degree words like *so*, *too*, *how*, *very*, *less* et cetera.

- (2) a. John is [very/so/too quick]
b. John ran [very/so/too quickly]

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Their adjectival status is furthermore corroborated by the fact that in many non-standard varieties of English it is possible to realize the manner "adverb" as a bare adjective (see Bowers 1975:fn. 4, Wolfram & Schilling-Estes 1998: 337-338, Edwards 1993).

- (3) a. You pronounced that word wrong. (Schidsbye 1978)
- b. He drove dead slow round the corner. (Schidsbye 1978)
- c. Don't talk so loud! (Zandvoort 1963)
- d. I beat them easy. (Curme 1977)
- e. He ran quick. (Bowers 1975)
- f. He writes bad. (Bowers 1975)
- g. They answered wrong. (Wolfram & Schilling-Estes 1998)
- h. You're doing that a bit too slow. (Edwards 1993)
- i. It was all carpeted beautiful. (Tagliamonte and Ito 2002)

The above-mentioned phenomena suggest that the forms in (1) are not of the lexical class Adverb. They are simply instances of the category Adjective.

As noted in Sugioka and Lehr (1983) and Ross (1984), the distribution of these bare adverbial APs turns out to be restricted: they can only occur in postverbal position. If in those English varieties that permit bare APs in postverbal position, the adverbial AP appears in preverbal position, the presence of *-ly* is obligatory. This is exemplified in (4)-(6); examples are taken from Schidsbye (1965), Sugioka and Lehr (1983), and Ross (1984):

- (4) a. John ate it quick.
- b. John quick*(ly) ate it.
- (5) a. He guessed right that she was fifty.
- b. He right*(ly) guessed that she was fifty.

- (6) a. Adam wrote his name careful.
 b. Adam careful*(ly) wrote his name.

Also in standard English, a bare AP is not allowed to occur in preverbal position. This is exemplified in (7). Note that the semantically equivalent adverbial AP *quickly* can occupy the preverbal position.[†]

- (7) a. John has <*fast> left the room <fast>
 b. John has <quickly> left the room <quickly>

If the "adverbs" in (1) are adjectives (AP), the following questions arise: (a) What is the nature of the adverbial ending *-ly*? (b) How do we account for the fact that bare adverbial APs are permitted in postverbal position but not in preverbal position. In this article, I will try to give answers to these questions, some being more speculative, others less so.

The article is organized as follows: section 2 starts with a discussion of "adverb formation" in Welsh. It will be shown that (manner-)adverbial APs are typically introduced by the lexical item *yn*. I will propose that this item realizes a functional category Pr, which is a category that connects a predicate and a subject. In section 3 I propose that English adverbial *-ly*, just like Welsh *yn*, is an instance of this functional head Pr. It will be argued that its affixal status (A+*-ly*) follows from Emonds's principle of 'alternative realization'. Section 4 explores approaches towards the question as to why preverbal adverbial APs cannot be "bare" in English. Section 5 concludes this article.

2. Adverbial APs in Welsh

[†] The bare adverbial AP *fast* can occur to the left of the verb when it has undergone A-bar movement to [Spec,CP], as in:

- (i) I wonder [how fast]_i she can run t_i

Adopting Chomsky's (2001:2) Uniformity Principle, which states that "In the absence of compelling evidence to the contrary, assume languages to be uniform, with variety restricted to easily detectable properties of utterances", I will start my investigation of the nature and distribution of the English adverbial marker *-ly* with the syntax of adverbial APs in Welsh. The reason for this is that Welsh adverbial APs have a quite transparent syntactic structure. The syntactic structure that I will propose for Welsh adverbial APs will form the starting point of my analysis of English adverbial APs.

In Bowers (1993:footnote 4) it is proposed that the Welsh particle *yn*, which shows up in predicate AP and NP constructions like (8), is a realization of the functional category "Pr" (a mnemonic for predication). According to Bowers, Pr is a functional head present in the syntactic representation of all predication constructions, which functions as a mediator between a predicate (typically, the complement of Pr) and its subject (the specifier of Pr).[‡]

- (8) a. Mae Rhys yn athro
 is Rhys PTC teacher
 'Rhys is a teacher'
- b. Mae'r bws yn gynnar
 is-the bus PTC early
 'The bus is early'

Bowers proposes the following structure for a sentence like (8a):

- (9) [IP mae [_{PrP} [_{NP} Rhys] [_{Pr'} [_{Pr} yn] [_{NP} athro]]]]

[‡] Bower's proposal that predication relations involve a specific syntactic configuration involving a mediating element is quite similar to Den Dikken's (2006) proposal that predication relationships in syntax involve an abstract functional head (his Relator-head) that can manifest itself in different forms (e.g. *to be*, *as*).

The functional head *yn* in (9) takes the nominal predicate *athro* as its complement and has the subject (external argument) *Rhys* in its specifier position.

What is interesting is that the particle *yn* is also the element which is used to turn an adjective into an adverbial element. That is, what *yn* is for Welsh adverbial APs, *-ly* is for English adverbial APs. Some examples of the "adverb formation" by means of *yn* are given in (10); examples taken from King (1993).

- | | | | | | | |
|------|----|-----------|----------|-----|--------------|--------------|
| (10) | a. | cyflym | quick | a.' | yn gyflym | 'quickly' |
| | b. | gofalus | careful | b.' | yn ofalus | 'carefully' |
| | c. | prydlon | punctual | c.' | yn brydlon | 'punctually' |
| | d. | araf | slow | d.' | yn araf | 'slowly' |
| | e. | flynyddol | annual | e.' | yn flynyddol | 'annually' |

Extending Bowers' analysis of *yn* as an instance of Pr to the adverbial expressions in (10), we get the following structure for these expressions:

- (11) $[_{PrP} e [_{Pr} [_{Pr} yn] AP]]$

I propose that in a sentence like (12a), the modification relation between the verb and the adverbial expression is established by coindexation of the 'subject' of PrP (the specifier position) and the Event role associated with the verb (see (12b)); cf. Higginbotham (1985):

- (12) a. Darllenwch y llyfryn yn ofalus
 'read the book carefully'
- b. ...ddarllenwch_{<Ei>} $[_{PrP} e_i [_{Pr'} yn ofalus]]$

Note that besides simplex AP (i.e., APs that only consist of an adjectival head, as *ofalus* in (12a)), it is also possible to have more complex APs in the complement position of *yn*, for example APs that consist of an adjective and a specifying degree word:

- (13) a. Dach chi'n gyrru'n *rhy araf*
 'You're driving too slowly.'
- b. Gwna dy aith cartre'n *fwy gofalus* tro nesa
 'Do your homework more carefully next time.'

In (13a), we have the sequence '*n rhy araf*', i.e., *yn* + too + slow, and in (1b) '*n fwy gofalus*', i.e., *yn* + more + careful. Following the suggestion made in Bowers (1993) that *yn* heads PrP, we get the following structure for '*n fwy gofalus*' in (13b):

- (14) [_{PrP} e [_{Pr'} yn [_{mwy gofalus}]]] (*m* → *f* after *yn*)

3. English *-ly*

Having discussed the syntax of manner-adverbial APs in Welsh, let us now return to the English "adverbs" in (1). Adopting Chomsky's uniformity principle, I propose that an adverbial form like *carefully* has the base structure in (15). According to this analysis, *-ly* is a functional category that connects a subject (specifier) and a predicate (AP) in a predication configuration.

- (15) [_{PrP} e [_{Pr'} [_{Pr} -ly] [_{AP} careful]]]

One might hypothesize that the form *carefully* is derived by head movement of *careful* to the bound-morphemic Pr *-ly*. However, deriving a form like *carefully* by means of A-to-Pr movement seems unlikely given examples like *very carefully* and *too carefully*, where a degree word combines with the adjective. Under a syntactic head movement analysis of

carefully, we would expect word orders such as *carefully very* ($[careful_{i+ly} [_{AP} \text{very } t_i]]$) and *carefully too* to be well-formed. Obviously, they are not.

An alternative approach towards the formation of adverbial forms like (*very*) *carefully* could be based on Emonds's (1985, 1987) notion of 'alternative realization'. Alternative realization refers to the phenomenon that some grammatical feature A associated with a closed class (i.e., functional) category F surfaces as an inflectional feature on the complement C of F. Emonds argues, for example, that the English comparative bound morpheme *-er*, which is realized on the lexical head A (e.g. *tall-er*), is an alternative realization of the abstract comparative feature in Spec,AP, which in other adjectival contexts can surface as the free morpheme *more* (e.g., *more intelligent*). If *-er* is present, the free morpheme *more* must be absent (i.e., **more tall-er*); thus, Spec,AP must remain empty in that case (see (16a)). Another illustration of alternative realization comes from 'adverbial case' NPs, including, for example, German and Greek datives. Emonds argues that these are actually PPs headed by an empty P. The 'prepositional feature' is realized as a case inflection on the noun (phrase) selected by the phonetically empty P; see (16b)).

- (16) a. $[_{AP} [_{Spec} e] [_{A'} A_{[+comparative]}]]$
 b. $[_{PP} [_{P} e] [_{NP} N_p]]$

That the closed class category (i.e., functional category) must remain empty (i.e., not lexically instantiated) follows from Emonds' (1985, 1987) Invisible Category Principle (ICP), which states that a closed class category F bearing a feature A may remain empty throughout a syntactic derivation if the feature is alternatively realized in a phrasal sister of B. Thus, a pattern like *more taller* is ruled out by ICP.

Under a theory of alternative realization, the formation of adverbial APs like *carefully* can now be analyzed as follows: the mediating Pr-head is realized as a bound morpheme *-ly* on the head of its adjectival complement. Schematically:

- (17) $[_{PrP} [_{Pr} e] [_{AP} (\text{very}) \text{careful}_{[Pr]}]]$ (where affixal Pr surfaces as *-ly*)

By drawing a parallel with the internal syntax of Welsh adverbial APs, I have argued so far that English adverbial forms like *carefully* start out from the same base structure as Welsh adverbial APs, and that the two languages differ from each other in the realization of the Pr-head. In Welsh it surface as the free morpheme *yn*, in English as the affixal morpheme *-ly*. The question, of course, arises as to whether there is any independent support for the idea that *-ly* corresponds to a Pr-head, that is a head which acts as a mediator in a predication configuration. In what follows, I will try to give some substance to the idea that *-ly* is an (affixal) Pr.

A first potential argument in support of an interpretation of *-ly* as a bound morphemic manifestation of the functional head Pr is based on its relationship with the word *like*, which can be regarded as free-morphemic realization of the category Pr (see below). From a historical perspective, the relationship between *-ly* and *like* is quite clear. There is general agreement about the fact that the suffix *-ly* finds its origin in the Old English *lic*, which was a nominal element meaning ‘form, appearance, body’ (cf. Jespersen 1961; Guimier 1985; Nevalainen 1997). Jespersen (1961:377) notes that an expression like *manlik* has the ‘adjectival’ interpretation: ‘having the form or appearance of a man’ and argues that this form is pre-dated by the pattern *man ge-lic*, where *ge-lic* is an adjective carrying the meaning ‘having the same appearance with’ (as in Latin: *con-form-is*). In its adverbial use, the adverb suffix *-e* was attached to *-lic*: e.g., *man-lic-e*. In middle English, final unstressed vowels were gradually weakened and eventually became mute. This led to the disappearance of the adverbial suffix *-e*. Consequently, the adjectival suffix *-lic* and the adverbial suffix *-lice* were no longer distinguished and were both shortened into *-ly*. As Jespersen points out, in some cases we still have competing forms like *gentlemanlike* and *gentlemanly*.

In present-day English, the lexical item *like*, which thus historically relates to *-lice*, is used in contexts like those in (18):

- (18) a. Mary was like a daughter (to Bill)
b. You seem like a sensible man

In (18a), *like* establishes a predication relationship between the subject *Mary* and the predicate nominal *a daughter*. In (18b), *you* is the subject and *a sensible man* the predicate.

In the line of Bowers (1993), I will interpret *like* as a lexical realization of the functional head Pr (see also Den Dikken 2006).

- (19) a. [TP e [was [PrP Mary [Pr' like [a daughter]]]]]
 b. [TP e [seem [PrP you [Pr' like [a sensible man]]]]]

Observe that *like* contributes meaning to the predication relationship. This is clear when one compares a sentence like (18a) with a 'simple' copular construction like *Mary was a daughter of Bill*. In the latter construction, *Mary* really was a daughter of Bill. In (18a), on the contrary, *Mary* was not really a daughter of Bill; she was someone with the same qualities as a daughter. Thus, *like* contributes comparative meaning. This comparative meaning is also found in the following sentences where the *like*-phrase modifies the verb:

- (20) a. I worked [like a slave]
 b. Peter fought [like a lion]

In these examples, the *like* phrase has a (figurative/metaphorical) manner interpretation. (20a), for example, means that Peter fought in a lion-like way. Let's assume that this manner interpretation is obtained by means of a predication relationship between the simile-expression and the event argument E of the verb. More specifically, the (empty) external argument in the Spec-position of *like* is coindexed with the Event-argument E of the verb *worked*. Schematically:

- (21) I worked_{<1,Ei>} [PrP e_i [Pr' [Pr like] a slave]]

Notice here too that there is a subtle difference in meaning with a sentence like (22), which features *as* rather than *like*.

(22) I worked as a slave

Informally stated, this sentence has the meaning: 'I worked and I was a slave'. In Bowers (2001), the small clause adjunct *as a slave* is analysed as a PrP, whose subject position is occupied by PRO (coindexed with the main clause subject) and whose complement position is occupied by the predicate nominal *a slave*. Schematically:

(23) I_i worked [_{PrP} PRO_i [_{Pr} [_{Pr} as] [_{NP} a slave]]]

Let me give some additional evidence for the fact that *like* takes a predicate attribute as its complement. A first argument comes from the following examples:

- (24) a. When the car is painted, it will look [like new]
b. She was shouting [like mad]
c. You'll have to work [like crazy] to get this finished
d. I miss you [like crazy]

In these examples, *like* is followed by an AP, i.e., a category whose canonical meaning is that of a property.[§] Notice that the fact that *like* combines with an AP suggests that *like* is not a (regular) preposition, since prepositions do not generally combine with AP complements. A similar argument has been used by Bowers (1993) for the interpretation of *as*, which can also combine with an AP-complement, as in (25a). Bowers takes this fact to be in support of the existence of a functional category Pr which takes a predicate attribute as its complement, as in (25b):

[§] These are sort of fixed expressions. Note, for example, that modification of the adjective is not permitted:

- (i) a. *It will look [like very new]
b. *You'll have to work [like very crazy]

- (25) a. I regard John as crazy
 b. I regard [_{PrP} John [_{Pr'} as [_{AP} crazy]]]

Although *like* often contributes comparative (simile) meaning to the predication relationship ('in the same way as'), there are cases in which *like* does not seem to contribute comparative meaning. An interesting construction which features this characteristic is the interrogative *what...like?*-construction given in (26), which is typically used as a request for a description:

- (26) a. A: What_i is his new girlfriend [like t_i]?
 B: She is lovely.
 b. A: What's the educational system [like t_i] in your country?
 B: It's horrible.
 c. A: What's his mother [like t_i]?
 B: She's a very nice person

As is clear from the answers given by person B, *what...like* asks for a simple property. There is no way in which 'comparative meaning' is involved. Thus, *like* in these constructions is more of a "pure" mediator whose only function is to establish a predication relationship between the interrogative predicate attribute *what* and the subject, e.g. *his new girlfriend* in (26a). Adopting Bowers' PrP-hypothesis, I assign the following base structure to a sentence like (26a/A):

- (27) [_{TP} ...be [_{PrP} his new girlfriend [_{Pr'} like [what]]]]

If *like* and *-ly* are both manifestations of the Pr-head, then it is expected under Emonds's Invisible Category Principle discussed above that the two elements cannot co-occur. The patterns in (28) suggest that this is indeed the case.

- (28) a. John shouted *like* mad
 b. John shouted *madly*
 c. *John shouted *like* *madly*

4. Bare adverbial APs and "dressed" adverbial APs

Having proposed a syntactic structure for adverbial APs like *carefully*, I will address in this section two other issues that were introduced at the beginning of this article, namely (a) the existence of bare/naked adverbial APs (see (3)), and (b) the obligatory presence of *-ly* on preverbal adverbial APs (see (4)-(6)).

As for the first issue, I will simply assume, in line with Chomsky's uniformity principle, that the syntactic structure of the two adverbial APs is the same and that their difference at the surface (e.g., *quickly* versus *quick*) is purely a matter of Spell Out, i.e. morphological realization of the syntactic structure. More specifically, I will assume that in bare adverbial APs the Pr-head remains silent. In Standard English, the occurrence of silent Pr is lexically restricted in the sense that it is only possible with a limited class of adjectives (e.g., *fast* but not *quick*; see (7)). In those varieties that exhibit a larger class of bare "adverbs", the occurrence of silent Pr is more widespread (see the patterns in (3)).

- (29) [_{PrP} [_{Pr} ∅] [_{AP} careful]] (where affixal Pr surfaces as *-ly*)

Let us next turn to the arguably more interesting question: why would a bare AP be impossible in preverbal position (see (6), repeated here as (30))? Or, to put it differently, what forces the appearance of a "dressed" (morphologically overt) adverbial form (i.e. *A-ly*) when the adverbial AP is in preverbal position?

- (30) a. Adam wrote his name careful.
 b. Adam careful*(-ly) wrote his name.

Unfortunately, I have no definitive answer to this intriguing question. But what I can do is try to sketch potential approaches to this puzzle by drawing parallels with other phenomena that display an asymmetry between a postverbal occurrence of some constituent XP and a preverbal occurrence of that same constituent. Before turning to those phenomena, I will briefly say a few words about the syntactic placement of the postverbal manner-adverbial AP and its preverbal counterpart.

I assume that the base position of the manner-adverbial AP is a postverbal one and that the preverbal position is a movement-derived position. In line with the general theory of movement, the preverbal manner AP occupies a position higher in the clausal structure than its postverbal counterpart (this under the assumption that movement is to a c-commanding position). Note that such an analysis is also compatible with Kayne's (1994) Linear Correspondence Axiom (LCA), which imposes a tight relation between hierarchical structure and linear order: i.e., the linear order 'V - adverbial AP' matches with a different hierarchical structure than the linear order 'adverbial AP - V'.

It should be noted here that the movement relationship between the preverbal 'adverb' position and the postverbal one has been argued for before in Emonds (1976, 1987). He proposes a (structure preserving) "manner movement" transformation, which moves an adverbial AP under a VP-node to a position just preceding the head V. Emonds further notes that "When a manner adverbial appears in this position [i.e. a preverbal position; NC], it does not always seem to be an EXACT paraphrase of the postverbal manner adverbial, but the differences in meaning are slight and may well be due to surface structure interpretation of what represents the "focus" or "new information" of the sentence"; Emonds 1976:157. This remark of Emonds clearly fits in a theory of semantic interpretation according to which the meaning of expressions breaks up into two parts (duality of meaning): Deep Structure interpretation and Surface Structure interpretation (Chomsky 2002). In the case of argument expressions, the former semantic property has to do with thematic relations, such as Agent, Patient, *et cetera*; the latter semantic property involves scope or is more discourse-related (new/old information, topicality, *et cetera*). This duality of meaning arguably extends to predicates, such as adverbial APs. In its (postverbal) base position, the manner-adverbial AP fulfils its predicative role, and in its 'S-structure position' (i.e., the position created by Internal Merge) the adverbial AP occupies a structural position associated with some scope or discourse-related meaning property. Exactly what surface property/properties is/are associated with the displaced adverbial AP is (still) not entirely clear and in need of further investigation, but there do

seem to be certain differences in meaning and grammatical behavior between preverbal and postverbal manner APs, which suggests that the two structural positions should be formally distinguished. In what follows I will give some illustrations of the different grammatical and surface-interpretative behavior of preverbal and postverbal (manner) adverbial APs, without trying to give any deep explanation of the observed phenomena.

First of all, answers to (manner) *how*-questions typically must have the narrowly focused adverbial AP in postverbal position (# stands for ‘infelicitous’):

- (31) A: How has he answered the question?
B: He has answered the question *intelligently*
B': #He has *intelligently* answered the question

Secondly, in the following discourse fragment in which the answer of speaker B/B' carries (contrastive) focus on the verb (*writes*), it is strongly preferred to have the ‘repeated’ adverbial AP in postverbal position.

- (32) A: Mary sings beautifully
B: Yeah, and she writes *beautifully* too
B': *?Yeah, and she *beautifully* writes too

Notice further that preverbal or postverbal placement of an adverbial AP has an effect in multiple wh-contexts (the adverbial AP being one of the wh-phrases):

- (33) a. Who will drive *how quickly* to New York?
b. ?*Who will *how quickly* drive to New York?

Observe that the ill-formedness of (33b) has nothing to do with the ‘complexity’ of the adverbial AP. As shown in (34), a modified adverbial AP can occur in a preverbal position:

- (34) a. Who will drive *very quickly* to New York?
b. Who will *very quickly* drive to New York?

A further illustration that surface effects are involved in the syntactic placement of adverbial expressions comes from the distributional behavior of the adverbial pro-form *so*, which in view of the facts in (35) may be interpreted as a pro-predicate (cf. Bouton 1970, Corver 1997, Schütze 2001).

- (35) a. I was once *a Catholic* – at least my guardians tried to make me *so*.
(Thomas, Lafcadio Hearn, p. 14 (cited by Kruisinga 1932))
b. Perhaps Sue writes *kindly*, but she doesn’t speak *so*.

Note that in (35b), the so-called identifier *so* (cf. Bolinger 1972) is manner-referring; it receives its manner interpretation through the ‘antecedent predicate’ *kindly*.

As shown in (36), the manner ‘adverb’ *so* can also occur in preverbal position ((36a,b) taken from Bouton (1970)):

- (36) a. Carl was told to run *with his legs stretched* to the point of pain, and had
he *so* run, he might have won
b. Felicia advised us to fry our clams *in deep fat*, but after we had *so* fried
them, Circe said we should have eaten them raw

In these examples, *so* can be paraphrased as: '(in) that way'. As noted in Kehler and Ward (1999), the placement of the identifier *so* is dependent on the informational structure of the discourse in which it is used. They point out, for example, that postverbal *so* (as opposed to preverbal *so*) permits situationally evoked referents (i.e., referents which have yet to be actually introduced into the discourse but which nonetheless are salient due to their position in the surrounding environment). This is exemplified in (37), taken from Kehler and Ward (1999):

(37) [Andy is holding a newborn baby with one hand behind her head, and shows Gregory.]

Andy: It's important to hold her *so*, because the muscles in her neck aren't yet developed.

As regards the preverbal *so* pattern, Kehler and Ward point out that the manner-information is typically discourse-old (i.e., the 'manner referent' has already been introduced into the discourse). The interpretation of preverbal *so* in (36a), for example, can be paraphrased as "(run) in such a way that his legs are stretched". Thus, *so* represents manner information that is discourse-old.

In view of the above examples, which admittedly are in need of more extensive investigation, we may conclude that preverbal and postverbal manner 'adverbials' have a different surface interpretation, as was already hinted at in Emonds (1976). I will assume that the postverbal position is the one involved in 'Deep Structure interpretation' (i.e., the predication relation between the predicative adverbial AP and (the Event role of) the VP to which it is adjoined) and that the pre-verbal position (i.e., the landing site position) is associated with certain 'Surface Structure' interpretative effects.

Having provided some motivation for (information-)structurally distinguishing postverbal and preverbal adverbial APs and for taking the former to be base-generated and the latter to be derived, let us return to the question as to why bare adverbial APs (see (30)) are possible when they occur postverbally but not when they occur preverbally (in the so-called middle field of the sentence). For the sake of explicitness, I assume that the postverbal placement of the adverbial AP involves (base-)adjunction to VP and the preverbal placement of the

adverbial AP involves movement to the Spec-position of some functional (discourse-related) head F. Schematically:

- (38) Adam [_{VP} [_{VP} wrote his name] carefully/careful] (base position)
 (39) Adam [_{FP} carefully_i/*careful_i [_{F'} F [_{VP} wrote his name t_i]]] (derived position)

As indicated earlier, I will only sketch possible approaches towards the contrasts depicted in (38) and (39). At the moment, I have no conclusive answers. A first approach towards the asymmetry depicted in (39) may be characterized as an ECP-approach. That is, the occurrence of "bare" *careful* in preverbal position triggers an ECP-like effect. Specifically, suppose the functional head Pr can be phonetically empty when PrP is in its postverbal base position (i.e., adjoined to VP), because in that position the empty head is somehow structurally close enough to the verb to be "properly governed" by it. When PrP, however, occupies a preverbal position (the Spec of the higher FP), the empty functional head Pr is no longer within the "government domain" of the verb. Presence of an empty Pr-head in Spec,FP yields an ECP-violation. In this structural position, then, the occurrence of *-ly* as a lexical realization of Pr is obligatory (possibly as a last resort strategy). In a way, this is reminiscent of the contrast between sentential subjects and sentential objects as regards the obligatory presence of an overt complementizer:

- (40) a. Noone believed [(that) Mary was afraid of spiders]
 b. [* (That) Mary was afraid of spiders] was believed by noone

In Stowell (1981), this contrast has been interpreted in terms of ECP: in (40a), the C-head can be empty since it is properly governed by the verb. In (40b), where CP occupies Spec,TP, the empty C would not be properly governed; the structure is only well-formed if C is overtly realized.

Another line of approach towards the obligatory appearance of *-ly* on adverbial APs in preverbal position would be one which tries to make a parallel with the obligatory appearance of *to be* in Predicate Inversion constructions like (41b). As shown by the base pattern (i.e., subject-predicate word order) in (41a), the copula *to be* (which could be analyzed as an instance of Pr; see also Den Dikken's (2006) analysis of copulas as Relator-heads) is optionally present. In other words, the pattern without *to be* is permitted. In clauses in which Predicate Inversion has applied (that is, the predicate phrase has been

moved to Spec,IP leaving the subject-noun phrase *in situ*), the appearance of *to be* is obligatory (see Moro 1991, 1997). In other words, when the predicate nominal precedes the subject (i.e., the element predicated over) *to be* must surface overtly. In the spirit of this approach towards the obligatory appearance of the copula *to be*, one might want to analyze the obligatory appearance of *-ly* (an instance of Pr) on the inverted adverbial AP in (39b) along the same lines as the obligatory appearance of *to be* (also an instance of Pr) in Predicate Inversion contexts like (41b).

- (41) a. I consider [John (to be) the best candidate] (subject-predicate word order)
b. I consider [the best candidate *(to be) John] (predicate-subject word order)

Although a systematic and in-depth analysis of (39) has to await future research, it is clear from the distributional patterns in (39) that syntax is involved in the account of the distribution of adverbial *-ly*.

5. Conclusion

In this article I have explored the nature and distribution of adverbial *-ly*. I argued that *-ly* is an (affixal) realization of the functional category Pr (i.e., Predicate head), which functions as a mediating element between a predicate attribute and a subject. I have explored potential approaches to the intriguing asymmetry between postverbal adverbial APs, which can be morphologically bare, and preverbal adverbial APs, which cannot be bare and must carry *-ly*. I further tried to show that there are reasons for structurally distinguishing postverbal and preverbal adverbial APs; that is, they occupy hierarchically different positions. A precise account of the formal contrast between postverbal and preverbal adverbial APs has not been given; some potential approaches to the problem were sketched, though.

It seems fair to say that our knowledge of the syntax of adverbial APs is still very limited. In this article, I have tried to make a small contribution to the study of this empirical domain of human language by focusing on the nature and distribution of English *-ly*. Maybe the most striking puzzle remains the asymmetry in the formal appearance of postverbal and preverbal adverbial APs (i.e., with or without *-ly*). Importantly, this asymmetry is not restricted to English but is also found in other languages, as shown by the examples in (42) from Brazilian Portuguese and the examples in (43) from Welsh. In other words, it is not an “isolated” phenomenon.

- (42) a. Ela terminou a tarefa *rapidamente* / *rápido*
 She finished the homework quickly / quick
 ‘She finished the homework quickly.’
- b. Ela *rapidamente* / **rápido* terminou a tarefa
- (43) a. Mae o wedi cerdded *yn gyflym* (Tallerman 1999)
 Is he PERF walk PRED quick
 ‘He has walked quickly.’
- b. Mae o wedi *cylym* gerdded
 Is he PERF quick walk
 ‘He has walked quickly.’

(42) shows that Brazilian Portuguese does not allow the short form *rápido* (which is a masculine form used as a default form) in preverbal position. In that position, only the “richer” form *rapidamente* is permitted. Interestingly, in (43) we see the reverse from a superficial point of view: in preverbal position, the “richer” form *yn gyflym* is impossible; only the “bare” (i.e., without *yn*) form *cylym* is permitted there.

Clearly, adverbial APs deserve more systematic and in-depth investigation.

5. References

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