STUDIES IN
LANGUAGE
COMPANION
SERIES 170

Adverbs

Functional and diachronic aspects

Edited by
Karin Pittner
Daniela Elsner
Fabian Barteld

JOHN BENJAMINS PUBLISHING COMPANY

Adverbs

Functional and diachronic aspects

Edited by

Karin Pittner
University of Bochum

Daniela Elsner
University of Leipzig

Fabian Barteld
University of Hamburg

John Benjamins Publishing Company
Amsterdam / Philadelphia

DOI 10.1075/slcs.170

Cataloging-in-Publication Data available from Library of Congress:
LCCN 2015022690 (PRINT) / 2015029461 (E-BOOK)

ISBN 978 90 272 5935 6 (HB)
ISBN 978 90 272 6812 9 (E-BOOK)

John Benjamins Publishing Co. · https://benjamins.com

Adverbs

Studies in Language Companion Series (SLCS)
ISSN 0165-7763

This series has been established as a companion series to the periodical *Studies in Language.*

For an overview of all books published in this series, please see *http://benjamins.com/catalog/slcs*

Volume 170

Adverbs. Functional and diachronic aspects
Edited by Karin Pittner, Daniela Elsner and Fabian Barteld

Table of contents

Introduction

Karin Pittner, Daniela Elsner & Fabian Barteld
University of Bochum / University of Leipzig / University of Hamburg

1. Delimiting the category 'adverb'

As early as 1982 Schwarz pointed out the difficulties in delimiting the class of adverbs:

> Fast jede Arbeit zum sog. Adverb beginnt mit einer Kritik am unklaren Status dieser Kategorie. [...] Was also ist ein Adverb? Wir können die Frage nicht beantworten, weil wir den Verdacht hegen, daß es sich um eine weitgehend undefinierbare Wortklasse handelt. (Schwarz 1982: 61 and 64)

> 'Almost every study of the (so-called) adverb begins with a critique of the unclear status of this category. [...] What, then, is an adverb? We cannot answer this question because we suspect that it is a matter of a largely indefinable word class.' (Translation D.E.)

Apparently, things have not changed much in the past 30 years, as the word class 'adverb' is still considered to be a very heterogeneous, miscellaneous, and residual category. It has become a truism meanwhile that adverbs as a category are notoriously difficult to define. Adverbs have been characterized as the "most problematic major word class" (Haspelmath 2001: 16543), as "elusive" on the one hand and "vast" on the other (van der Auwera 1998: 3), as "widerspenstig" 'intractable' and "unübersichtlich" 'confusing' (Eisenberg 2013: 212). These problems can partly be traced back to the fact that as early as the grammar of Dionysius Thrax, where adverbs appeared for the first time (*epirrhema* from Greek *epi-* 'upon, on' and *rhema* 'verb'), there were hardly any clear criteria for assigning a lexeme to the category adverb. Dionysius mainly described adverbs as words that do not show inflection and that modify a verb (see also Rauh 2010: 18 and this volume).

In traditional grammar, the class of adverbs has often been treated as a kind of waste paper basket for all words that do not fit clearly into any of the major categories like nouns, verbs, adjectives, prepositions, and conjunctions. As Huddleston, Pullum et al. (2002: 564) note: "With fairly small scale exceptions (including interjections) all other words are assigned to the adverb category." This status as a pool of difficult to classify words raises the question as to what kind of relations to

DOI 10.1075/slcs.170.01int

other categories exist, especially the closely neighbouring category of adjectives. Another reason for the difficulties in distinguishing adverbs from other parts of speech is that in some languages they are not morphologically marked and if they are, it is unclear if it is really a morphological marker of the category adverb.

Due to their close connection to a syntactic function, adverbs have for a long time been treated in the context of a discussion of adverbial functions. More recently, however, the adverb's internal structure and its morphological make-up have received more attention. While much of the earlier discussion had centred on English *-ly* adverbs, the perspective has now broadened to include other types of adverbs and other languages, as well.

Since adverbs are closely related to adjectives on the one hand and to the function of adverbials on the other, we will examine these relations in the following sections. We will also discuss the possibility of treating adverbs as a prototypical category, their place among neighbouring categories and their conceptual base. Finally, historical developments which can shed new light on the structure of the category 'adverb' will be sketched.

2. Adverbs and adjectives

Adverbs are closely related to adjectives both morphologically and syntactically.

The close relation between adjectives and adverbs is suggested by the fact that many adverbs are formed from adjectival stems. Whereas many languages have an adverb marker to derive adverbs from adjectives (e.g. Engl. *-ly*, French *-ment*, Italian *-mente*), others like German can use bare adjectival stems adverbially. Therefore adjectives in an adverbial function sometimes are subsumed under the class of adverbs; as e.g. Geuder (2000: 1) puts it: "The term 'adverb' is meant to refer to adverbial modifiers which are morphologically derived from an adjectival base, or are formally identical to adjectives."

As Telschow (2014) points out, there are different possibilities of delimiting adverbs and adjectives. One that is widespread in German grammars is to assign adverbially used adjectival stems to the class of adjectives, since they may be inflected in other functions. Another possibility is to assign them to the class of adverbs, mainly on syntactic grounds. The different possibilities are the result of the application of different criteria or of a different sequence of the application of the criteria. When analysing adjectives in adverbial function as adverbs (as Geuder suggests) one usually regards syntactic criteria (distribution or function) as primary, whereas the categorization as adjectives is based on a morphological criterion. An elegant solution for this situation is offered by Rauh (2010, this volume), who distinguishes different kinds of categories that are determined by

particular criteria. A feature of lexical categories is the application of a mixture of criteria, whereas syntactic categories are established on the basis of purely syntactic criteria, mainly their distribution. In this way, the prototypically structured lexical category of adverbs can be subclassified into different syntactic categories according to precise distributional criteria.

As Telschow (2014:2) remarks, a delimitation of these two word classes in German has only been necessary since the 18th century, after the category *adjective* had been established in research as a discrete word class. What words of both categories have in common is a modifying function. Often the difference is seen in terms of distribution. Whereas the most characteristic function of adjectives is to modify nouns, it is a widely held view that "[a]dverbs characteristically modify verbs and other categories except nouns, especially adjectives and adverbs." (Huddleston, Pullum et al. 2002:563). This is also reflected in different theoretical approaches. Hengeveld (1992:137) describes adverbs as lexical modifiers of non-nominal heads within the framework of Functional Grammar. Langacker (2008:116) states, in terms of his Cognitive Grammar, that adjectives and adverbs differ only in their type of focal participants. Where for adverbs the trajector (i.e. the entity being modified in some way) is a relational expression, adjectives modify expressions that profile things (cf. Section 5).

Despite these differences in distribution, adverbs and adjectives share a number of syntactic functions. Like adjectives, some adverbs may occur predicatively as complements of copulas (1a) and some may occur adnominally as in (1b). Adjectives, like adverbs, may occur as modifiers of adverbs (1c) and other adjectives (1d).

(1) a. Die Zeitung ist *hier*.
The newspaper is *here*

b. Das Buch *dort* ist mein Lieblingsbuch.
The book *over there* is my favourite book

c. Der Apfel hängt *hoch* oben am Baum.
The apple hangs *high* up in the tree

d. Der Text ist *wirklich* hilfreich.
The text is *really* helpful.

These facts cast doubt on a complementary distribution of adverbs and adjectives (cf. Payne et al. 2010 for an analysis of English data). For the German examples in (1c) and (1d) it can be argued that the modifying words can in principle be inflected and may therefore be categorised as adjectives that modify an adverb or another adjective. Hengeveld (1992) differentiates between rigid and flexible languages and classifies German as flexible, since it uses the same lexemes for adnominal and adverbial modification, whereas English is rigid in that it differentiates

morphologically between these types of modifiers by means of the suffix *-ly*. In (1d) a difference between English and German is apparent. Whereas in German adjectives may occur as modifiers of adjectives, in Standard English an adverb is required.

However, Barteld (this volume) argues that this distinction between flexible and rigid does not suffice for German. He distinguishes three parameters according to which a language can be analysed as rigid or flexible concerning modifiers. Following Diepeveen and Van de Velde (2010), he argues that, instead of distinguishing between adjectives and deadjectival adverbs, German is rigid with regard to the phrase containing the modifier, i.e. whether the modifier is embedded in an NP or a clause, since NP-modifiers usually require inflection. However, local and temporal adverbs are not captured by this generalisation, as example (1b) shows. As Pittner (this volume) suggests, local and temporal adverbs show characteristics not shared by other adverbs, possibly due to their deictic nature. The contribution by Schäfer deals with other types of adverbs which may occur adnominally in English.

3. Adverbs and adverbials: Word class and syntactic function

One of the reasons for the difficulty of defining adverbs, which has lead to many terminological and methodological problems, is that adverbs, like no other category, are tied to a special syntactic function named *adverbial,* which is very heterogeneous in itself. Adverbial expressions may be differentiated not only by their syntactic category (PP, NP, AdvP, AdjP, clause and so on), but also by their semantic contribution to the sentence in which they occur. This traditional subclassification of adverbials into time, space, manner, sentence adverbials, etc., is reflected in a subclassification of adverbs which are related to these subclasses. A semantically based subclassification of this kind is part of traditional descriptions of the class of adverbs and illustrates its heterogeneity (cf. e.g. Abraham 1988: 19f).

Since the adverbial function may be fulfilled by elements other than adverbs, it is necessary to distinguish between the lexical category adverb and the syntactic function adverbial. But the terminology itself shows how intertwined and difficult to separate the two notions are. This holds especially for English where the adjective 'adverbial' may refer to the function or to the word class. We will argue that the term 'adverb' is used to refer to a lexical category whereas the noun 'adverbial' refers to a certain syntactic function.

Adverbs, like other adverbials, may take scope over different portions of a sentence and exhibit a wide range of possible positions. They may be subclassified accordingly. While some authors hold that their positions are largely determined

by their scope (e.g. Frey & Pittner 1998 and 1999; Ernst 2002; Frey 2003), others postulate special syntactic positions for each type of adverb. Within a minimalist framework, adverbs are analysed as specifiers of functional projections designated for each type of adverb. (cf. Cinque 1999 & Laenzlinger this volume).

In adjunction approaches, the position and function of adverbials is determined by the c-command relation that every type of adverbial must meet. For German, Frey and Pittner (1998) identify five classes of adverbials on the basis of c-command relations with regard to other types of adverbials and verbal arguments: frame and domain adverbials which c-command the base positions of sentence adverbials, which in turn c-command the base positions of event-related adverbials; event related adverbials c-command the base position of the highest verbal argument, whereas event-internal adverbials are c-commanded by the verbal argument they are related to (usually the subject) and process-oriented adverbials minimally c-command the verbal complex (cf. Frey 2003 and Abraham 2013: 736f. and 740 for a concise overview).

The c-command relations adverbials are subject to may lead to different positions of adverbial elements in OV- and VO-languages. As Haider (2010:171f.) points out, sentence negation, for instance, must c-command the verb or its trace and therefore occurs in front of the VP in VO-languages, but late within the VP in OV-languages.

From a diachronic point of view, adverbs were originally modifiers of verbs and predicates and over time "climbed up the ladder" to higher positions where they may have scope over whole sentences or utterances (cf. Section 6).

On the functional level we find that the classification and analysis of adverbials "remains a highly controversial issue" (Himmelmann & Schultze-Bernd 2005: 4), since they can have a number of different readings. Very closely related are secondary predicates, especially depictives, which are generally conceived to be participant-related, whereas adverbials are often considered to be related to the event. According to Geuder (2000: 179) the presence of adverbial morphology often suggests a predication over an event, whereas the absence of adverbial morphology suggests a predication over a participant; the distinction is captured in (2).

(2) a. leave(e) (x, Mary) & sad(x) [depictive]
b. leave(e) (x, Mary) & sad(e) [adverbial]

However, the distinction is far from clear, as pointed out by Himmelmann & Schultze-Berndt (2005) and Geuder (2000). Depictive predicates are also related to the event, since they indicate temporal overlap between the state of a participant and the event described by the surrounding sentence, which is not captured by the formula in (2a). And certain adverbials are not only related to the event but also

to one of the participants. So, for instance, adverbs expressing the psychological state of an individual (i.e. transparent adverbs in Geuder's terms, e.g. *angry, sad, proud*) are similar to depictives in that both ascribe a certain state to an individual. It is pointed out by Geuder (2000: 191) that these adverbs cannot be paraphrased by 'in an X manner'. In contrast to a depictive, which only indicates a temporal overlap between the two predicates, an adverbial establishes a deeper relation to the main predicate, such as a psychological causation as in e.g. *John angrily read the review* (Geuder 2000: 193). The similarity between depictives and certain manner adverbials is reflected by the fact that in some languages there is no morphosyntactic marking for distinguishing the two uses (e.g. German and Dutch). Himmelmann & Schultze-Berndt (2005: 66) show that cross-linguistically there is considerable variation in the morphological marking of event- versus participant-orientation. While there are languages that do not mark this semantic difference morphologically – like German or Dutch – English, for instance, differentiates between them by the presence or absence of adverbial morphology. Moreover, languages may vary diachronically with respect to the functional differences that are marked morphologically, as the contribution by Barteld shows for earlier stages of German.

4. Adverbs as a prototypical category

An obvious way to deal with the difficulties of delimiting the hard-to-define category of adverbs is to conceive of it as having a prototypical structure, as has been proposed most prominently by Ramat and Ricca (1994). They suggest that the "macro-category" adverb may fall into several subsets which are related by family resemblances (*Familienähnlichkeiten*) in the sense of Wittgenstein (1953). Ramat and Ricca (1994: 210) take the subset of *-ly* adverbs as a starting point for their discussion of the advantages and difficulties of a prototypicality approach. While they consider "Predicate Manner Adverbs" as the central subclass both in terms of their syntactic behaviour and their semantics, they also point out that this assumption is not unproblematic, because most languages possess lexical items usually subsumed under the class of adverbs which are more frequent than manner adverbs. Among them are items denoting spatial or temporal settings, time quantifiers, degree adverbs, and focussing items. As Ramat and Ricca observe, this "heterogeneous core-group" can be assigned prototypical status on the basis of its cross-linguistic frequency (ibid. 316). Additional support for this view comes from language-specific token frequency. Moreover, Ramat and Ricca see structural evidence for the prototypicality of

this group, because these items often are unanalysable and monomorphemic at least from a synchronic point of view. It remains unclear, however, why this should be counted as evidence for prototypicality, since, on the basis of type frequency, the prototypical adverb in English is a *-ly* adverb and in some Romance languages a *-ment(e)* adverb.

Lists of the 50 most frequent *-ly* adverbs show that there are only a few manner adverbs among them (ibid. 317). Ramat and Ricca see these numbers as "heavily disconfirming a central status of Predicate Manner Adverbs even in their most favourable domain". Frequency lists of Spanish and Italian *-mente*, French *-ment* lead to similar results (ibid. 319ff.). Conversely, the list of the 60 most frequent adverbs in the British National Corpus shows that among them are only a few *-ly* adverbs (Payne et al. 2010: 70). However, one should keep in mind that frequency should be seen rather as a symptom of prototypicality than as its cause (cf. Taylor 2003: 56).

Ramat and Ricca come to the conclusion that "the main difficulty for prototype theory does not reside in discovering prototypes, but in establishing the sets among which they can be looked for" (ibid. 322). Possibly, local and temporal adverbs (mostly without *-ly*) form a class by themselves which is related to other adverbial subclasses by their most frequent syntactic function as adjuncts and their corresponding semantics as modifiers.

What can be concluded from Ramat & Ricca's study is that even within a prototypical approach there remain many problems with defining and structuring the class of adverbs because it is very difficult to determine what a prototypical adverb is.

Taylor (2003: 55) notes that the "degree of category membership can be readily elicited from speakers of a language". Assuming that word classes form prototypical categories, it seems highly unlikely that people would be able to name prototypical adverbs like they are able to name prototypical pieces of furniture or birds. Rauh (this volume) notices this problem and argues that adverbs as a lexical category do not have a prototypical structure that captures all lexemes that are treated as adverbs in different grammars of the English language. In her view the category adverb solely serves the function of pooling all words that cannot be categorised as a different part of speech, and in many cases category membership is not even determined by family resemblances.

Nevertheless, prototypicality can be applied to subclasses of items often subsumed under adverbs, as the contribution by De Cesare demonstrates for focussing adverbs. In addition, the delimitation of adverbs and adjectives in Dutch can be captured by means of a prototype approach, as the contribution by Diepeveen shows.

5. The place of the category 'adverb' among other lexical categories

If it is possible to delimit the category of adverbs, the question arises: what is its place among other lexical categories? Is it on a par with major lexical categories like noun, verb and adjective or does it play only a marginal role, as a kind of an appendix to the category of adjectives, as Giegerich (2012) suggests?

It is now widely held that lexical categories have a conceptual basis. So the question of the place of adverbs among other word classes is related to the question of whether they can be assigned their own conceptual base or whether adverbs are merely the result of grammaticalisation, as has been suggested by Rissanen et al. (1997), whereby frozen forms of other categories like inflected adjectives or noun phrases become adverbs by univerbation.

That adverbs have their own conceptual basis is argued for by Payne et al. (2010). They see this as a reason for "postulating a major category of adverbs in English" (ibid. 72). As they note, typological investigations of a universal basis for the category of adverbs lag behind studies of a universal conceptual base for other word classes, notably of the closely related category of adjectives.

In Cognitive Grammar, too, parts of speech are generally assumed to be semantically definable and it is argued that at least classes that are "universal and fundamental" can be ascribed schematic conceptual definitions (Langacker 2008:95f). Adverbs are not universal, as typological studies have shown (e.g. Hengeveld 1992). So the question remains whether they are fundamental enough to be defined on a conceptual basis.

To shed some light on this question, we will take a look at its characterisation within the framework of Cognitive Grammar. Cognitive Grammar conceives of the lexicon, morphology, and syntax as a continuum. Parts of speech are regarded as symbolic structures just like any other building block of language. Specific lexemes, parts of speech, phrases, and clauses differ according to their complexity and schematicity.[1] Furthermore, a symbolic structure consists of a semantic[2] and a phonological pole and each pole can have a different level of schematicity. Specific lexemes like *cat*, for example, have a low complexity and a non-schematic semantic

1. A third parameter, degree of entrenchment/conventionality (see Langacker 2008:21), is neglected here.

2. The semantic pole, that is the meaning that is associated with the phonological pole of a symbolic structure, is connected to "a particular mental representation termed a concept" (Evans & Green 2006:7). Concepts are built on the basis of the perception of the world. However, there is a bidirectional connection between concepts in the mind and the semantic pole, meaning that the semantic pole is not only derived from concepts but has itself an influence on the concepts.

and phonological pole which would be represented as [[CAT]/[cat]] (Langacker 2008: 15). A plural morpheme like *-s*, on the other hand, has a schematic semantic pole and a non-schematic phonological pole [[PLURAL]/[s]]. Through a combination of both non-complex structures a composite structure with greater symbolic complexity is produced: [[[CAT]/[cat]] – [[PLURAL]/[s]]].

The traditional parts of speech are treated as "grammatical classes" (Langacker 2008: 23), where a class "resides in a set of symbolic structures that function alike in certain respects" (ibid.). Two things should be noted here: (i) even though symbolic structures are assigned to a certain grammatical class because of a similar function, the grammatical class itself is defined in terms of a semantic characterization, and (ii) Langacker not only subsumes non-complex structures but also complex structures under grammatical classes. So, for example, not only the lexeme *moon* is regarded as an instantiation of the abstract grammatical class [[THING]/[...]] but also *moonless night* (ibid. 23). For grammatical classes in general, this means that they have a schematic semantic pole, whereas no particular phonological properties are specified, and they can either be complex or non-complex.

Adverbs in Cognitive Grammar are described as nonprocessual[3] relations just like prepositions and adjectives. It should be noted, however, that "what determines an expression's grammatical category is not its overall conceptual content, but the nature of its profile", i.e. what an expression designates (ibid. 98). The abstract symbolic structure is [[NONPROCESSUAL RELATION]/[...]]. What does it mean to say that adverbs profile a [[NONPROCESSUAL RELATION]/[...]]? In very general terms a relation is the establishment of a connection between two entities.[4] By stating that it is nonprocessual it is pointed out that "evolution through time is not in focus" (ibid. 99). By defining adverbs, adjectives, and prepositions as nonprocessual relations Langacker assumes that they are conceptualized in the same way (cf. Rauh 2010: 241; Langacker 2008: 100), which accounts for a certain similarity and explains difficulties in delimiting adverbs from the other grammatical classes. According to Langacker (2008: 116), adverbs differ from other nonprocessual relations in terms of the entities they are connecting. Whereas the trajector of adjectives is characterized as [[THING]/[...]], the trajector of adverbs is [[RELATION]/[...]]. Prepositions are not specified regarding the nature of their trajector, i.e. the trajector can be either [[THING]/[...]] or [[RELATION]/[...]]. Additionally, adjectives and adverbs have just a single focal participant, i.e. they profile a relationship with only one participant. In contrast

3. or atemporal.

4. Langacker (2008: 98) defines entity as a maximally general term that can be used to refer to any kind of conceptual structure.

to adverbs and adjectives, whose landmark remains implicit, the landmark of prepositions is always elaborated (i.e. they take a complement). The contribution by Waldenberger makes use of these distinctions in order to explain how prepositional phrases may become adverbs.

Even though Langacker's conceptual definitions of nouns and verbs seem reasonably plausible, his explanations of adverbs (as well as adjectives and prepositions) are far less convincing as he mainly resorts to the prevalent claim that adjectives modify nouns (= THING) and adverbs modify all other elements (= RELATION). His class of nonprocessual relations, which also includes infinitives and participles that are described as complex nonprocessual relations (Langacker 2008: 117ff.; Evans & Green 2006: 571), is too heterogeneous to allow for new insights regarding the part of speech 'adverb', as its conceptual basis is too general, comprising many more grammatical classes than just adverbs.

A slightly more differentiated account of the various subclasses of adverbs is offered by Nakamura (1997), who uses Cognitive Grammar to specify what kinds of items are modified by which kinds of adverbs. For example, for manner adverbs (process adjuncts in his terms) he states that they "involve a perfective process" (Nakamura 1997: 267), meaning that the verb they modify needs to profile a relation changing through time. For adverbs in general Nakamura states that they all cause a change with regard to the mode of scanning[5] of the whole event. However, as Nakamura follows Langacker with regard to the conceptual basis of adverbs, he only provides more detailed descriptions of the types of trajectors of adverbs and of the composite structures that emerge from the integration of adverbs into clauses. But he hardly provides more information about the conceptual basis of adverbs in general.

So, to conclude, Cognitive Grammar does not succeed in providing a conceptual characterization of adverbs which is able to differentiate them from related grammatical classes like adjectives and prepositions other than by their syntactic distribution. The question remains as to whether adverbs have a conceptual basis of their own.

6. Historical perspectives

Adverbs are also an intriguing word class with regard to their diachronic development and the word formation processes involved. Arguably due to their

5. Langacker (2008: 109f) describes scanning as a mental operation that allows for a seamless perception of the constitutive parts of an event or an object.

categorial indeterminacy, adverbial expressions are prone to category changes of various kinds and often become adverbs. Hence, the class of adverbs is extended – diachronically – by members of different classes, which adds to the heterogeneity of the word class. Adverbially used inflected nouns are one example. They may be reanalysed as adverbs (cf. Ramat 2002), with the result that former inflectional endings are reanalysed as adverb-markers. For instance, the genitive ending *-s* which often occurred in adverbial phrases in earlier stages of German was reanalysed as an adverb suffix which could then be attached to nouns that had no genitive *s* as well as noun phrases in order to derive an adverb (cf. Pittner, this volume).

Even whole phrases can be reanalysed as adverbs, e.g. the noun phrase **hiu dauga* '(an) diesem Tage'/'(at) this day'→ *heute* 'today'). Another example are adverbial prepositional phrases that may be subject to lexicalisation processes and are reanalysed as adverbs (cf. the contribution by Waldenberger). Sometimes this process also leads to derivational adverb-markers, e.g. in the case of German *-weise* (cf. the contribution by Elsner) or English *-ly*, which originate from parts of compounds or phrases. Often these markers are not general adverb markers but mark a specific subgroup of adverbs, thereby morphologically dividing the class of adverbs into subclasses. The diachronic development of adverbial suffixes is still a somewhat neglected field. As various contributions show, adverbial suffixes are on the borderline between inflectional and derivational elements and may change their nature during the course of history.

Change can not only be observed regarding members of other categories becoming adverbs but also as shifts in the category itself. As their historical development shows, adverbs are very flexible. They may extend their range of application from one adverbial subclass to other subclasses. The flexibility of adverbs is also reflected in their syntactic versatility. Adverbs may occur in various positions in the sentence, which influences their interpretation.

A change from one subclass of adverbs to another, which has been noted early for English (Swan 1988) and has been characterised as a unidirectional path (e.g. by Traugott 1986 and 1989), is the development of sentence adverbs out of manner adverbs (cf. Ramat & Ricca 1998: 243f). This change from the more concrete meaning of a manner adverb to the more subjective, speaker-oriented meaning of a sentence adverb can be seen as an instance of subjectification in the sense of Traugott, who observes that "over time, meanings tend to come to refer less to objective situations and more to subjective ones (including speaker point of view)" (Traugott 1986: 540). Subjectification is often seen as concomitant to grammaticalisation of certain elements.

There are also developments that lead to the recategorisation of adverbs as element of other categories. Examples are the developments of adverbs into discourse markers and into modal particles. Again, the semantic change involved in