Rezensionen


Having been neglected for a long time, adverbs and adverbials have recently moved into the centre of attention of quite a number of syntacticians and semanticists. Adverbs provide an interesting field for study of the relations between syntax and semantics and the nature of the syntax-semantics interface in general.

Chapter 1 gives a brief outline of the problems that will be treated in this study which pursues a purely syntactic approach to adverbs. The main goal is to account for their distribution and licensing conditions within an antisymmetric and minimalistic approach to syntax. The data are mostly from Greek, but examples from other languages, especially English and Italian, are taken into account.

The central thesis of the book is that adverbs are licensed as specifiers of functional projections by the relevant feature of the respective functional head.

A preliminary description of the properties of adverbs in the first chapter states that adverbs are mostly adjuncts and that they modify verb phrases or sentences. Among the VP-adverbs are manner, completion or resultative adverbs (entirely, completely) aspectual/quantificational adverbs (e.g. always), besides time, frequency and location adverbs which the author also counts among VP-adverbs. What the basis for these decisions is, remains unclear, since no criteria are given.

ALEXIADOU makes a distinction between complement type adverbs (all VP-adverbs apart from aspectual and frequency ones) on the one hand, and specifier-type adverbs, which include all sentence adverbs and aspectual/frequency adverbs. Complement type adverbs are generated within the complement domain of the verb, specifier-type adverbs are generated in the specifier positions of functional projections. Apart from differences in position, these classes do not appear to be very well motivated. The author states that complement type adverbs are "thematically related", but this notion is not further explained.

Strict sequences of adverbs observed in a number of languages (e.g. of the kind speaker oriented adverb > subject oriented adverb > manner adverb) are taken to follow from a more fundamental property of clause structure. The distribution of adverbs is briefly lined out, using English and Greek examples, and the question is raised what the reason for their relatively free distribution is, also in contradistinction to PPs in an adverbial function that are more restricted in their positions. If an adverb can appear in several positions, this may have the following reasons:

- the "transportability" of adverbs
- accidental homophony
- the adverb moves
- other constituents move around the adverb

The preliminary remarks in this chapter on the positions of adverbs which are the central topic of this book are not very illuminating however. In fact, they are leaving the reader quite bewildered, since no clear picture emerges and the facts are often not interpreted carefully enough. For instance, on p. 11, it is stated that in Greek adverbs like kala 'well' cannot appear in final position. It is not pointed out that in English, manner adverbs may appear finally, nor is any explanation given. On p. 12 it is maintained that some adverbs change their meaning when they appear in a preverbal instead of in a final position, like carefully, while others do not, like quickly. It has been pointed out by various authors, however, that quickly in a preverbal position does not modify a process, but the event as a whole. These are slight, but crucial semantic differences. On p. 14f. one finds the statement that there are adverbs which are passive-
sensitive like *carelessly* and that these are always agent-oriented. One of the examples the author gives, however, shows clearly that *carelessly* is not agent-oriented, but oriented towards the subject: In *Fred *carelessly will be arrested by the police* it is Fred who is careless, not the police which is agent.

So on the whole, this chapter does not introduce the basic notions clearly for the reader not yet familiar with them. Rather, even the reader who has a good knowledge of the subject will have to take care not to become confused.

At the end of the chapter the central thesis already mentioned above is developed. Complement type adverbs move to the specifier position of the related functional projection, either overtly or covertly, specifier type adverbs are directly generated there.

The licensing of adverbs by functional projections is taken to be the explanation for the limited number of adverbs per sentence and their rigid order.

Chapter 2 outlines KAYNE’S (1994) antisymmetry hypothesis and CHOMSKY’S minimalist program (CHOMSKY 1995). According to the antisymmetry approach, linear ordering and hierarchical structure are closely tied together. The Linear Correspondence Axiom (LCA) states that asymmetric c-command relations determine linear ordering. According to this approach, trees are always strictly binary branching.

The consequence of the antisymmetry requirement due to the LCA is that only one non-head may adjoin to a non-head. Phrases must be either complements of heads or specifiers of maximal projections. A further important consequence is that right adjunction is impossible.

Next, the minimalist program is briefly outlined. In contradistinction to earlier frameworks in generative grammar, only the levels of PF (Phonetic Form) and LF (Logical Form) are assumed. According to this approach, a language consists of a lexicon and a computational system. Functional projections play an important role, and the IP ("inflection phrase") of earlier models is split up into several functional projections which are related to features of verbal inflection: agreement subject phrase (AgrSP), agreement object phrase (AgrOP), tense phrase (TP) and others. Elements move to have their features checked in the respective functional projections and this movement may be overt (in the case of "strong features") or it may be covert. Covert movement is preferred to overt movement by the computational system and this is referred to as the "Principle of Procrastinate". Feature matching also takes place in the operation called "Merge", where maximal phrases are directly generated in suitable specifier positions. This is the operation by which specifier-type adverbs are introduced into the structure.

KAYNE’S antisymmetry approach is briefly compared to CHOMSKY’S (1995) view of phrase structure. An important difference with regard to the topic treated in this book is that CHOMSKY permits multiple specifiers whereas KAYNE permits only one specifier per head. ALEXIADOU decides to follow KAYNE in this respect. One of the reasons given is that this view can account better for the fact that a German "Vorfeld" (taken to be [Spec, IP]) can contain only one constituent. Also it seems to her to be the way to be able to make more interesting conclusions concerning crosslinguistic differences in word order.

Several approaches to adverbial licensing are discussed. A "predication theory" treats adverbs as predicates: they do not assign θ-roles, but share selectional properties with predicates, as suggested by ROBERTS (1987). This approach is dismissed on the grounds that in *to speak loudly, speak* would be both a predicate and an argument of another predicate, which is considered inappropriate. In view of the fact to treat adverbs as predicates has a long tradition in various semantic approaches, a predication theory of adverbs is dismissed far too quickly and without any convincing reasons.

A second approach is to treat adverbs as heads. TRAVIS (1988) slates that they do not project to X^{max}, which means that adverbs are heads. Arguments the author raises against their head status are that they do not block V-movement and that they can be modified and sometimes also take complements.
Next various versions of an "adjunct theory" are considered, among them the following principle formulated by SPORTICHE (1988):

(1) **Adjunct Projection Principle**

If some semantic type X modifies some semantic type Y, and X and Y are syntactically realized as a and b, a is projected as adjacent either to b or to the head of b.

This approach, though admitted to have some advantages, is seen to be too limited for expressing possible structures and possible positions for adverbs. In later work, SPORTICHE suggests that adverbials assign an "adjunct thematic role" to their host, without a directionality requirement, so that they can appear either to the right or to the left of their host. BARBIERS (1995), on the contrary, assumes that the VP moves to the left of a PP predicated of it, and this view is compatible with the assumption that right adjunction is impossible (cf. also CINQUE 1999). The disadvantage, however, is that no valid reason for the movement of the VP around the adverbial can be given.

This movement, called "intraposition", is used by CINQUE (1999: 35) to account for the fact that scope relations between adverbials are reversed at the right periphery of the sentence (i.e. what is right has scope over what is left):

(2) *John knocked on the door intentionally twice.* ('two instances of intentional knocking')

Since intraposition is rejected and no other attempt at an explanation of adverb sequences at the right periphery of the sentence is made, data as in (2) are not covered at all.

ÅFARLI (1995) invokes the "third dimension" to capture the facts of adverbial positions. To dominate and precedence relations that are expressed by conventional constituent structure he adds a depth dimension on which an adverbial is adjoined to a phrase. The process of ordering in this dimension into a conventional tree is called "bending". This process is seen as responsible for the various positions of adverbs. Although it allows for some flexibility in adverbial positions, it cannot capture why bending is not always fully optional. Also it provides no principled way to explain differences in adverbial positions between e.g. Celtic, where all adverbs appear in final position and French, where they occur in VP-final positions, inside the InfP-projection and in higher positions.

The alternative considered in this study is the antisymmetric approach and the following **Adverbial Licensing Principle** is formulated:

(3) Adverbs are licensed either as Specifiers of Functional Projections or via incorporation into the verbal head by the relevant (semantic) feature associated with the head.

The author considers it as an advantage of this approach that it need not be stipulated that adverbs appear to the left of the head and can be crossed by V-movement. since this follows from the universal location of specifiers.

Chapter 3 formulates basis assumptions about the structure of the Greek sentence. Greek is a prodrop language that allows for dropping of subjects and subject-verb-inversion. SVO order involves a topic subject whereas VSO signals a thiotic sentence. A clitic left-dislocated nature of preverbal subjects is argued for. Furthermore it is pointed out that Greek VSO orders differ from Celtic VSO patterns and Icelandic transitive expletive constructions (TECs) in that they involve VP internal subjects. This is due to the fact that Greek does not make use of functional specifiers as landing sites for A-movement of subjects.

VOS orders in Greek are due to object movement over the subject. The trigger for this movement is taken to be a focus feature [+F] on the subject (signalling the most prominent
accent of the sentence). Since this feature is carried by the most deeply embedded element and the object does not bear this feature, the object is forced to move out. Finally, it is argued that the CP-projection in Greek like in other languages, can be splitted into several functional categories. Here the author follows recent suggestions in this respect and concludes that the CP in Greek comprises a RelativeP, TopicP, FocusP, Wh-P and another TopicP.

Chapter 4 deals with aspectual and temporal adverbs in Greek and it is argued that they are licensed as specifiers of Aspect Phrase (AspP) und Tense Phrase (TP) respectively. The term "aspect" is used with reference to the perfective / imperfective distinction. The distinction is present in Greek in all tenses, moods and both voices and in this study it is taken to have an own functional projection with the feature [XX perfective]. In contradistinction to aspectual adverbs like akomi 'still', aktionsart adverbs like xana 'again' are not sensitive to the perfective vs. imperfective distinction: they refer to situations as whole entities. They also show a different behaviour in that they can incorporate into the verb just as manner and directional adverbs whereas temporal and aspectual adverbs cannot. Rivero (1992) claims that aktionsart adverbs are complements of the verb.

Aspectual adverbs that are compatible with imperfective aspect are durative and indefinite frequency and point adverbs. These compatibilities are taken to be due to agreement with the relevant head via feature matching. It is pointed out that aspectual adverbs cannot appear in final position nor be complements to verbs. They can occur in sentence initial position (in [Spec. FP]) when they are focussed.

Temporal adverbs are treated as referential expressions (an operator approach to tense is consequently rejected) and this seems to me a very reasonable decision. Temporal adverbials refer in various ways, namely as deictic expressions, calendar/clock or context dependent expressions. The close relations between tense and temporal adverbs signal a very close relation to T^0, checking an agreement relation in a Spec-head-configuration in TP A sentence-final position is explained as the result of their status as complement-type adverbials that can also appear as V-complements. Hence, the author assumes that their appearance in [Spec. TP] is the result of movement. How can these assumptions be motivated? Temporal adverbials as referential expressions must originate inside the VP originally since this is the domain of \( \theta \)-assignment. They move to TP, if the movement is overt they appear in mid-position (in [Spec. TP]), if it is covert, they remain in final position.

The status of temporal adverbials as complement-type adverbials is a bit problematic, however. The common view is that there are no verbs that select temporal adverbs (though there are some that take a durational adverb as complement like (to last). How well do these assumptions capture the positioning of temporal adverbials? Since TP is lower than AgrSP, it would be expected that the position behind the subject is an unmarked position for temporal expressions. No explanation is given for the fact that temporal adverbials often appear sentence initially. Also, the question arises how local adverbials are to be treated in the framework presented. It is to be expected that they, as referring expressions, are generated within VP as well. Can they be moved into a functional projection as well and what would this projection be? No answer to these questions is given. Also, it can be observed, at least for English, that temporal adverbials are a bit more natural in a sentence-initial position than local adverbials (cf. Frey/Pittner 1998 for an explanation). The author does not observe these facts, let alone give an explanation for them.

The chapter concludes with reflections on the role of tense and aspect in recent generative theory, where Tense and Aspect are seen to be directly related to subject and object placement facts. The author argues that [Spec. TP] is a landing site for subjects in Celtic and Icelandic, but not in Greek, Spanish or English. In Greek and Spanish it can be filled by a temporal adverb whereas in the Celtic languages all adverbs, including temporal ones follow all complements.
which means that temporal adverbs cannot occur in [Spec. TP]. The view that AspP is a licensing position for objects is rejected altogether.

Chapter 5 deals with manner adverbs, completion adverbs like completely (a subclass of manner adverbs), negative adverbs like pja 'anymore', akomi 'yet' and aspectual adverbs. It is argued that manner adverbs are generated as V-complements. Manner and completion adverbs occur after aspectual adverbs, aspectual adverbs occur after negative adverbs. Two negation phrases are assumed. A fact to be explained is why manner can appear V-finally but also in a position outside the VP which is lower than the aspectual phrase. Here it is proposed that manner adverbs occurring outside that VP are placed in [Spec. VoiceP], a projection reflecting the [XXactive] distinction. It is suggested that a manner adverb is licensed by the voice features of a verb. What might support this view is that in some instances there is a relation between passivization and the presence of a manner adverb (as already pointed out by CHOMSKY 1965: 101-105). Furthermore in middle constructions a manner adverb is obligatory.

Besides the question how well motivated a relation of manner adverbs to a VoiceP is, the question poses itself whether a positioning of manner adverbs in VoiceP can capture the various positions of manner adverbs. Since VoiceP is outside the VP, positions of manner adverbs between verb and object or between objects are not captured by this assumption:

(4) a. John has spoken nicely about the book.
    b. John has spoken about the book nicely to his mother.¹

Apart from this, ALEXIADOU does not take into account that also bare manner adverbs cannot always appear higher than the verb in the English sentence:

(5) a. He will dance with Mary marvellously.
    b. *He will marvellously dance with Mary.
    c. She has shot at Paul badly.
    d. *She has badly shot at Paul.
    e. She has played the violin beautifully.
    f. *She has beautifully played the violin.
    g. John learned French perfectly.
    h. *John perfectly learned French.

FREY/PITTNER (in press) argue that this is due to a semantic difference within the class of "manner adverbs". That there is a difference becomes clear by examples like the following:

(6) a. John has been cleverly answering all questions stupidly. (cf. CINQUE, p. 29)
    a.' John hat schlau alle Fragen dumm beantwortet.

It is important to observe that there is no contradiction in (a). Furthermore it is important that cleverly is not a subject-oriented adverb. This becomes clear by the German translation where the adverb cleverly is translated by schlau, not by schlauerweise which would be a subject-oriented adverb. FREY/PITTNER (in press) argue that the "manner adverb" appearing immediately before the main verb is characterizing the subject during the action performed. In German these adverbials allow a paraphrase of the following kind:

¹ For a discussion of examples like these the reader is referred to FREY/PITTNER (in press), which argue that the manner adverbial in both (a) and (b) is in its base generated position.
All adverbs that appear immediately before the main verb allow this paraphrase, whereas the adverbs that are ungrammatical in this position do not. This means that ALEXIADOU, besides making wrong predictions for a number of adverbs, misses a fine semantic difference when she postulates that a position of manner adverbs before the main verb is merely a result of a movement.

A question that arises in this context is the trigger for the movement of the manner adverbs, which is restricted to bare adverbs. The author draws a parallel to movements of weak elements in other languages like pronoun shift in Icelandic and particle shift in English. According to her, a manner adverb can only remain in situ if it shows internal complexity. Being focussed is suggested to be a form of complexity, focussed manner adverbs in Greek may remain in their final position. Here it remains unclear whether this analysis is also applicable to English. In English, a bare manner adverb can occur in final position even if it is not stressed (e.g. *She was reading the BOOK carefully*), so that ALEXIADOU would be making wrong predictions for that language.

Special attention is paid to manner adverbs in sentences with periphrastic tenses. Although the author argues for a biclausal analysis of these sentences, in which the auxiliary is treated as a main verb heading an own sentence, the author sees difficulties in determining the category of the participial clause, which is seen as a complement to the clause headed by the auxiliary. What is important, is that in Greek and the Romance languages other than French, both the auxiliary and the participle can move. This leads to an explanation of an interesting difference between Greek and Italian on the one hand and French on the other. Whereas in French the participle occurs lower than a manner adverb, in Greek and Italian it occurs higher. This is seen, following CINQUE (1995), as the result of movement of the participle in Greek and Italian where the participle moves obligatorily to Asp\(^0\). The participle moves to this position because it carries aspectual features whereas in French it does not have these features and consequently remains in situ. The passive participle in Greek, however, can occur lower than manner adverbs if the sentence has a generic reading. The author assumes that the passive participle can remain in Voice\(^0\), but in order to have an eventive reading has to move to Asp\(^0\) responsible for event features.

The last part of this chapter deals with sentence adverbs. Epistemic sentence adverbs (*probably*-type) are placed in [Spec. MoodP], speaker oriented adverbs (e.g. *fortunately*) are placed in [Spec. RelativeP], the highest CP-projection and for domain adverbs the existence of a DomainP is postulated.

This chapter concludes with some remarks on parenthetical adverbs which are pointed out as an area for future research.

In Chapter 6 the issue of adverb incorporation is addressed. According to BAKER (1988), only the heads of arguments can incorporate. The author assumes that adverb incorporation in Greek is a case of syntactic movement. RIVERO (1992) shows that adverb incorporation in Greek can apply to goal/resultativ, direction, manner adverbs and aktionsart adverbs, i.e. only to complement type adverbs. This is taken as evidence against a position of manner adverbs in [Spec. VP] that was suggested by CINQUE (1995) and others. A semantic restriction on adverb incorporation is that only dynamic event predicates can incorporate adverbs. The view that the incorporation is in fact a case of composition is rejected on several grounds: incorporation structures have no idiosyncratic meaning like compounds often have but exhibit a compositional semantics. A restriction that does not hold for compounds but can be observed here is that only lexically selected adverbs incorporate. Also long distance incorporation into the auxiliary can occur and this is not possible with compounds.
The support her view that adverbs can incorporate, the author briefly lists the facts about noun incorporation. The picture of noun incorporation that is drawn in this chapter presents a somewhat simplified view of a complicated and diverse phenomenon. It is assumed that noun incorporation applies only to bare nouns without complements and without a D0-head. This finds a parallel in the fact that only bare adverbs can incorporate, no modifier may be stranded. Since temporal adverbs were also argued to be complement type adverbials the question poses itself why they cannot incorporate. The reason given for this is that their features are checked in T0. Adverb incorporation is taken to be a further argument for movement of adverbs.

Chapter 7 deals with the well-known parallels between adverbs and adjectives. The main argument in this chapter is that these two word classes form one lexical category. The adverbial part of this class is licensed in specifier positions by verbal head features, whereas the adjectival part of this class is licensed by nominal head features. The author goes so far as to state that the adverbial affix (e.g. -Iy in English) has "nominal character" in some abstract sense. "Nominal" obviously then means only that it shows the kind of agreement relations a word enters in. But this hides a fundamental difference, namely that nominal inflection shows the agreement features whereas -ly or other adverbial affixes usually do not exhibit the features that must agree with the relevant head, since adverbial "agreement" is based solely on semantic properties of the word, not on any morphosyntactic features.

That adverbs usually cannot occur inside the DP is taken to he due to the fact that nouns do not have the verbal agreement features necessary for the licensing of adverbs.

The remainder of the chapter is mainly devoted to the ordering and cooccurrence restrictions of adjectives inside the DP. The order of adjectives often mirrors the order of adverbs in the sentence:

(8) a. The probable easy invasion
    b. *The easy probable invasion

Thus, the question that poses itself is whether inside the DP the same hierarchy of functional projections has to be assumed, as suggested by Cinque: (1993, 1999). The author rejects this view. Apart from the fact that the existence of certain functional projections inside the DP is hard to motivate, as for instance of an AspP (aspectsual phrase) or a MoodP (mood phrase), since these are clearly related to verbal inflection, she also shows that certain combinations cannot occur and that the occurrence of adjectives is a lot more restricted and limited in number than the occurrence of adverbs in the sentence.

The relation of predicative and attributive adjectives is discussed briefly. The view is set forth that attributive adjectives may be the result of the movement of a predicative adjective into the specifier of a noun, or it may be base generated there by a Merge operation (in the case of adjectives that can occur only attributively). Since predicative and attributive adjectives on the one hand and adverbs on the other hand are pointed out to be closely related in that chapter, it becomes all the more unclear why the author rejected a predication theory of adverbs in Chapter 2. Predicative adjectives are clearly predicates, hence attributive ones as well and why shouldn't adverbs be predicates too? No satisfying answer to this question is given in this book.

Another question that poses itself in view of the observed ordering restrictions between adjectives is whether they have to be captured in terms of a hierarchy of functional projections at all. This is not very plausible if one considers orderings like the following (pointed out by Cinque 1993, cit. according to Alexiadou):

(9) a. possessive > cardinal > ordinal > quality > size > shape > color > nationality

Here it seems plausible that the orderings might simply reflect an inherent semantic/logic hierarchy of the elements involved. The question arises whether this does not also apply to the
ordering relations between adverbs. This view gains plausibility in view of the fact that similar ordering restrictions also obtain between elements being in a complement relation (cf. SHAER in press):

(10)  a. the probability of the quickness of the destruction
     b. *the quickness of the probability of the destruction
     c. It is lucky for us that it is probable that it is easy for John.
     d. *It is probable that it is lucky for us that it is easy for John.

Here, no syntactic reason whatsoever can be given for the observed restrictions that are clearly due to the semantic relations between the elements involved. This renders the claim less plausible that ordering restrictions in other cases are due to syntactic functional projections and their hierarchy.

The main claims of the book, namely that the rigid order and the limited number of adverbs in a sentence is due to the fact that they are created in specifier positions of a universal hierarchy of functional projections is not entirely convincing. The relatively rigid order may simply be due to scope relations that are reflected in c-command relations. Also the “limited number” of adverbs per sentence is not necessarily due to syntactic restrictions. Adverbs of the same class often cannot occur together because they would be semantically incompatible. Also between adverbs of different classes incompatibilities may arise.

Nevertheless, a wide range of syntax is treated in this book that is of special interest to linguists working within a minimalistic framework and to those interested in Greek. Chapter 3 can be read independently of the rest of the book by readers interested in the structure of Greek.

On the whole, the chapters are well organized and the book is written in a concise style that is to the point. The analysis that is presented here (and in CINQUE 1999) is thought-provoking and still a matter of an ongoing debate that will hopefully shed light on the nature of the syntax-semantics interface.

Literature


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