Povolná, Renata

# Some notes on spatial and temporal adverbials in English conversation

Brno studies in English. 1998, vol. 24, iss. 1, pp. [87]-108

ISBN 80-210-2013-X ISSN 1211-1791

Stable URL (handle): https://hdl.handle.net/11222.digilib/104018

Access Date: 16. 02. 2024

Version: 20220831

Terms of use: Digital Library of the Faculty of Arts, Masaryk University provides access to digitized documents strictly for personal use, unless otherwise specified.



## RENATA POVOLNÁ

# SOME NOTES ON SPATIAL AND TEMPORAL ADVERBIALS IN ENGLISH CONVERSATION

This paper is an attempt to show how the present stage of the study of English adverbials, namely those of time and space, can be extended. After drawing attention to some previous research and explicating my classification of the material under investigation, which includes not only adverbials, but also to a certain extent, verbal tenses and aspects, some preliminary results from my corpusbased pilot analysis are presented.

#### 1. Previous research

In this part of my paper several linguists who have done research into adverbials, above all those of time (T) and space (S) are mentioned. While discussing their work, emphasis is placed on some of the criteria they used in their classifications and analyses of adverbials as well as some of their conclusions which are relevant for my present investigation.

One of the authors who studied adverbials is Sven Jacobson. In his descriptive work 'Adverbial Positions in English' (1964), written mostly within the framework of structuralist grammar, he offers an overview of adverbial classes according to their form, meaning and function. As to their realization form for instance, he distinguishes between adverbs, adverbial clauses and adverbial phrases and, unlike many others, includes what is elsewhere known as noun phrases, e.g. that evening, and prepositional phrases, e.g. for many years. Jacobson pays great attention to adverbial placement, which is viewed in terms of slots and fillers, listing up to sixteen possible adverbial positions, all being defined 'in relation to the other sentence elements' (1964:53). The second half of his study is in fact a dictionary of adverb placement listing adverbs with their frequencies in certain positions.

Of the four authors of 'A Comprehensive Grammar of the English Language' (CGEL) (1985), which is the main source for my classification framework, it was above all **Sidney Greenbaum** who did research into adverbials. The importance of his work 'Studies in English Adverbial Usage' (1969) for my re-

search lies in the fact that he introduced the **definition of adjuncts**. Although he hardly touched upon the area of T or S adjuncts in his work, he had to define the category of adjuncts, notably in contrast to the categories of disjuncts and conjuncts. Although his study concerns mainly adverbs, he managed to bring some order into the very complex area of adverbials, which, besides adverbs, comprises also many other realization types. For instance, constructions with an adverbial function that are not adverbs he labelled as **correspondences**, e.g. *I am thankful (that) he didn't do it* corresponding to *Thankfully, he didn't do it* (1969:224). Greenbaum's classification framework, particularly the distinction he draws between classes of adverbs, i.e. **adjuncts, disjuncts** and **conjuncts**, has been adopted in the above–mentioned grammar and has proved useful to many other studies of adverbial usage.

The co-author of CGEL Sir Randolph Quirk also paid attention to the study of adverbials. In his article 'Recent work on adverbial realization and position' (1984) he lists four parameters within which the adverbial operates. These are: a) semantic role, b) grammatical function, c) formal realization and d) linear position, which are the same criteria as those applied in my investigation. What is worth mentioning is the fact that, unlike Greenbaum (1969), Quirk suggests four possible grammatical functions of adverbials. Besides adjuncts, conjuncts and disjuncts, he distinguishes the category of subjuncts and subdivides all four grammatical functions of adverbials into several sub-functions. CGEL is based on this approach.

One of the authors who adopted Quirk et al.'s classification of adverbials is **Hans Lindquist**. In his study 'English Adverbials in Translation, A Corpus Study of Swedish Renderings' (1989) he concentrates on the semantic and realizational aspects of adverbials and tries to explain how translators from English into Swedish can find appropriate ways to express the same meanings in two different languages. Although his work is a contrastive study, it is relevant for my investigation because before comparing English and Swedish it deals separately with English adverbials and because it examines very similar features to those used in the present analysis, namely realization type, grammatical function, semantic role and position of adverbials.

For Lindquist the realization type of an adverbial is subordinate to its semantic role and he shows that the majority of English adverbials (84%) in his corpus were translated into Swedish by an item which had exactly the same semantic label. As to the role of adverbial position in comparison to that played by semantic role and realization type, Lindquist maintains that 'in normal sentence production, the unmarked sequence of decisions would be: semantics — position — realization' (1989:64). In this order of decisions the label semantics comprises both the semantic role and grammatical function, referred to as grammatico—semantic function, because they are, as Lindquist holds, so closely related that for instance 'certain semantic roles occur only with certain grammatical functions' (Lindquist 1986:191–200).

Tuija Virtanen, who published her study 'Discourse Functions of Adverbial Placement in English: Clause-Initial Adverbials of Time and Place in Narra-

tives and Procedural Place Descriptions' in 1992, deals only with adverbials occurring in clause-initial position, all the other positions being totally excluded. The main reason seems to lie in her belief that all text strategic T or S adverbials occur in initial position, which is in her opinion 'important from a textual point of view, since the element placed here may easily assume various functions in relation to the preceding and following text. Adverbials appearing clause-initially or sentence-initially are liable to function in the service of the text, e.g. as markers of a temporal or locative text strategy and of text segmentation. Furthermore, initial position is syntactically marked for most categories of adverbials' (1992:29). These are probably the reasons for Virtanen's main hypothesis that adverbial placement depends on text genre. For her analysis she has chosen mostly homogeneous, 'unitype' texts, 'which clearly manifest a temporal or a locative text strategy' (1992:74). The problem, however, is that the vast majority of naturally occurring texts are not homogeneous. For instance daily face-to-face private conversation, which is under my investigation. is without doubt a highly heterogeneous, 'multitype' text, in which it is arguably very difficult to work with text strategies.

Much of Virtanen's work has been influenced by Nils Erik Enkvist. One of the basic concepts he has introduced into the domain of text linguistics is the notion of text strategy, which he defines as 'a goal-oriented weighting of decision parameters' (Enkvist 1987: 203). As Virtanen puts it, 'a text usually consists of more than one strategy, though one of them may often be called dominant' (Virtanen 1986:348). Enkvist distinguishes between five main text types: narration, instruction, description, exposition and argumentation, each of which uses a different text strategy or rather 'reveals whole hierarchies of strategies'. Under the influence of Enkvist's opinion that 'in spontaneous unscripted dialogue, planning spans can be very restricted, and strategies may have to be constantly revised and modified as responses to feedback from one's conversation partners' (Enkvist 1976:166), I take the already above-indicated view that in the analysis of authentic conversation it is not possible to apply Enkvist's theory in which he states that different text genres have different text strategies. Nevertheless, his theory is interesting and useful, particularly for the analysis of 'unitype' texts, the kind of analysis that has been carried out for instance by Virtanen.

Let me now turn to Enkvist's essay 'Notes on valency, semantic scope, and thematic perspective as parameters of adverbial placement in English' (1976). in which he tries to define some concepts that are, in his opinion, relevant to the study of adverbial placement. He distinguishes between what can be called valency adverbials and adverbials of setting. The former are those that 'can be treated as part of the semantic specification of the verb: for certain verbs of movement, valency adverbials are adverbials of place; for verbs of duration, adverbials of time; and so forth' (1976:54). Adverbials of setting are 'those adverbials of T and S that do not describe features essential to the action itself. or features necessarily implied by the verb, but which indicate the place-andtime-bound setting in which the action takes place' (1976:55). For Enkvist

adverbials of setting are only those adverbials of T or S that are not valency adverbials. In his opinion, the same adverbial can function both as an adverbial of valency (e.g. For three years, Susie lived in Paris.) and as an adverbial of setting (e.g. Susie made a special point of reading Moliere in Paris.).

As to semantic scope, Enkvist maintains that there is a difference between homosemantic sequences, consisting of adverbials of the same semantic category, and heterosemantic sequences, consisting of adverbials that belong to different semantic categories. In the former, the word order is to some extent constrained by realities of the physical world with the 'most inclusive, hierarchically highest adverbial being placed furthest to the right', e.g. 'John sat down in his favourite chair in his study at Buckley House' (1976:58). With the latter, however, the situation is different and factors such as text strategy and communicative dynamism (CD) and thus thematic perspective are more freely reflected in the word order.

The role of CD as one of the factors of functional sentence perspective (FSP)<sup>1</sup> in the placement of adverbials has been studied for instance by Eva Horová. Her contrastive study 'On position and function of English local and temporal adverbials' (1976) presents an analysis of English and Czech sentences containing at least one adverbial of S and one of T. It is worth mentioning here the distinction she draws between the setting and the specification of an action, as expressed by local and temporal adverbials. Based on the theory of FSP, as developed and refined by Jan Firbas (1992), she distinguishes between a local/temporal setting, which is a non-essential element in the sentence, with a relatively slight amount of CD even if conveying new information, and a local/temporal specification, which is an essential element in the sentence, with a considerable amount of CD if contextually independent.

The most recent study on spatial and temporal adverbials, to my knowledge, is Hilde Håsselgard's doctoral dissertation 'Where and When? Positional and Functional Conventions for Sequences of Time and Space Adverbials in Present—Day English' (1993). She concentrates on T and S adverbials occurring in sequences in order to find out about the relative order of such adverbials as well as their placement in general. Her classification framework is taken from CGEL and her data are naturally occurring texts that comprise both written and spoken material. The latter has been taken from the London—Lund Corpus of Spoken English, which is the same source as that used for the present paper.

Håsselgard studies her data from several angles, drawing on text linguistics as well as syntax. In her conclusion she states that 'the organization of T and S adverbials in sequences is not just a matter of syntax ... nor is it a matter of style, but the result of a complex interplay between syntactic, semantic, pragmatic,

According to FSP, communicative dynamism is 'an inherent quality of communication and manifests itself in constant development towards the attainment of a communicative goal; in other words, towards the fulfilment of a communicative purpose'. By a degree of CD Firbas understands 'the relative extent to which a linguistic element contributes towards the further development of the communication' (Firbas 1992:7-8).

and textual factors' (1993:265). Unlike Håsselgard and Horová, who have excluded from their studies sentences containing only one adverbial, thus studying only certain instances of T and S adverbials, the present analysis has included not only sequences of T and S adverbials, but also the occurrences of single adverbials of T or S in any sentence position. Moreover, verb tenses and aspects have also been considered, although so far only to a limited extent, because I hold the view that especially in daily face-to-face private conversation, they influence the overall interpretation of texts and participate in the expression of what I call the spatio-temporal setting (S-T setting).2

## 2. Language material

This pilot study is corpus-based because I believe that at the present moment and with the present state of linguistic studies the most appropriate field for any analysis of naturally-occurring spoken language is corpus linguistics. Moreover, as Jan Svartvik points out: 'To linguists who are non-native speakers, even those with a good command of the language, introspection is, strictly speaking, ruled out, and elicitation testing often awkward to perform unless they happen to be staying in a native environment' (Svartvik 1992:10).

The material for the present analysis consists of three conversational texts from 'A Corpus of English Conversation' edited by Jan Svartvik and Sir Randolph Quirk in 1980.<sup>3</sup> All the three texts, S.1.1, S.1.3, and S.1.5, were recorded in the middle of the 1960s. Each of them comprises 5,000 words, which means that the total amount of text under investigation amounts to 15,000 words. From this about 2,100 occurrences of finite verb phrases (FVPs) with or without any spatio-temporal amplification (S/TA) have been excerpted. The number of FVPs having some type of S/TA is, however, lower. They are represented by approximately 600 occurrences, i.e. FVPs connected with some amplification of T, S, or T and S occurring together, and these are the core of my analysis.

All the texts are accompanied by information about the speaker's age, sex and occupation, as illustrated here:

<sup>2</sup> My delimitation of setting, which will be discussed later, is different from that used within the theory of FSP. According to Firbas, 'an adverbial is induced to perform one of three communicative (dynamic) functions in the act of communication'. One of them is to convey 'a setting' (Firbas 1992:49). He states that the adverbials conveying 'mere background information participate in laying the foundation upon which the core of the message is presented' and 'if context-dependent, the adverbial serves as a setting. It does so irrespective of semantic character and sentence position' (1992:50).

<sup>3</sup> This corpus represents spontaneous conversation among British speakers, mostly educated to university level. Most of them are academics or have some connection with University College London. It is face-to-face conversation which was in the majority of cases recorded without the prior knowledge of its participants.

Fig	ure	2.	1

S.1.1	A B	male academic, age c. 44 male academic, age c. 60
S.1.3	A b (B) c (C)	female undergraduate, age c. 36 female undergraduate, age c. 30 male undergraduate, age c. 36
S.1.5	A B C D	female secretary, age c. 21 female academic, age c. 25 female secretary, age c. 35 female secretary, age c. 21

Each text is in the form of a dialogue. There are always at least two speakers sharing the same situational frame of reference who take their turns in the flow of conversation and who interact with each other, which distinguishes it e.g. from a monologue. All kinds of features typical of spoken human interaction, such as false starts, repetitions, simultaneous speech, silent and voice-filled pauses, and back channels are recorded both in the book and computer forms of the above-mentioned corpus.

As for topics of the individual conversational texts, text S.1.1 is a discussion between two colleagues about problems connected with their work at university, e.g. about essays written by their students, departmental meetings and new academic posts. The topics in text S.1.3 are more personally oriented. It is a conversation about knitting, acquiring a sewing machine, and especially about an interview at one university college with many insights into its queer atmosphere. Text S.1.5, being a chat between several secretaries, concerns administrative matters, such as replacement of secretaries, interviews, lectures, seminars, and also personal relationships between academic staff.

## 3. Classification framework

The bulk of the classification framework used in this paper has been taken, as already mentioned, from CGEL. I fully agree with B.Aarts and F.Meyer when they say that Quirk et al.'s 'approach to the description of English ... has greatly influenced current research in corpus linguistics' and 'specifically demostrated that it is important to base one's description of English on real linguistic examples taken from actual usage' (B. Aarts & Ch. F. Meyer 1995:13–14).

#### 3.1 Discussion on adverbials

Following CGEL, the label adverbial is used to refer to a clause element which is distinct from the other clause elements, such as subject, verb, object and complement. In accordance with some previous research mentioned above

(e.g. Quirk 1984, Lindquist 1986, 1989), four main criteria have been applied for the present analysis:

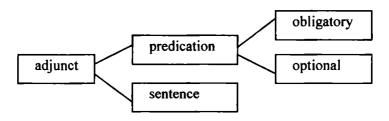
- 1. realization type
- 2. grammatical function
- 3. position
- 4. semantic role

As to realization type, adverbials can be realized by several different structures, either phrases, i.e. adverb phrase (headed either by a closed-class adverb or by an open-class adverb), noun phrase, prepositional phrase, or clauses, i.e. finite clause, nonfinite clause, verbless clause. In order to contrast adverbials expressed by phrases with those expressed by clauses, the labels phrasal and clausal amplification are used respectively. For the material under investigation, the most typical realization type is that of prepositional phrase (e.g. he went up to Exton on Tuesday evening, S.1.3. 1069), only second comes the adverb phrase realized by a closed-class adverb (e.g. he was ever so nice beforehand, S.1.3.1054).

As to grammatical function, adverbials can be divided into adjuncts, disjuncts, conjuncts and subjuncts (Greenbaum 1969, Quirk 1984, Quirk et al.1985). Since my study deals only with T and S adverbials, which can never fulfil the function of disjuncts and conjuncts, these categories are not taken into account at all. The problem, however, is whether to distinguish adjuncts and subjuncts from each other, or not. Subjuncts are 'adverbials which have, to a greater or lesser degree, a subordinate role in comparison with other clause elements' (Quirk et al.1985:566). On the other hand, adjuncts, which are by far the most common category, 'closely resemble other sentence elements such as S, C and O. Like them, for example, and unlike the other adverbials, an adjunct can be the focus of a cleft sentence' (1985:504). All S adverbials and most T adverbials are classified as adjuncts. There is only a small group of time subjuncts expressing time relationship, time duration and time frequency, e.g. already, still, yet, just, ever, never, rarely, seldom (1985:579-582), and some of them can be classified also as adjuncts. This is possible because sometimes it is difficult to say whether a particular adverbial has the function of adjunct or that of subjunct and, besides that, sometimes a certain subjunct may 'have some of the character of adjuncts, especially when premodified or focused, as in the following example: It is very seldom that I write poetry these days' (1985:582). in which the subjunct very seldom is in the focus of a cleft sentence. These are the reasons why there is no strict line between temporal adjuncts and temporal subjuncts and why they are treated with regard to their grammatical function as one category in the present investigation.

According to CGEL adjuncts can be subdivided into several subcategories, as illustrated in the following figure:

Figure 3.1 Main types of adjuncts (based on Quirk et al.1985;505)



For this paper, however, I make a distinction between obligatory and optional adverbials only. Although at first sight it does not seem to be in agreement with CGEL, in fact it is. If one considers the role of sentence adjuncts in the clause (e.g. Bill did no teaching till last year, S.1.5.441), it is clear that their role in the syntactic structure of the clause is more peripheral than that of predication adjuncts, both obligatory (e.g. it lasted till about nine fifteen, S.1.5.86; I went upstairs, S.1.5.844) and optional (e.g. you could still come back here, S.1.5.1111), and consequently, as Håsselgard holds, 'the more peripheral status of sentential adjuncts makes them inherently optional' (1993:48). Accordingly, there can be, in my opinion, only two groups of adverbials, obligatory and optional. Obligatory adverbials are those adverbials that are required by the verb to form a clause that is grammatically correct and acceptable. According to CGEL, predication adjuncts occur in end (E) position and what distinguishes them from sentence adjuncts is their lack of mobility within the clause. 'The most obvious way in which sentence adjuncts mark themselves off from predication adjuncts is by their relative freedom to occur in initial (I) position as well as E' (1985:511). Sometimes, however, some optional predication adjuncts can be moved, e.g. to I position. In Håsselgard's opinion, the result 'is that the predicational adjunct (which is optional) assumes sentential function when it is fronted' (1993:49), which she illustrates on the following set of examples:

a/ Foreign ministers of the 12 meet in Brussels today ...

b/ In Brussels foreign ministers of the 12 meet today ...

At this point it is interesting to mention again Enkvist's distinction (1976:56) between valency adverbials and adverbials of setting, as explicated in part 1 above. While using mainly semantic criteria, Enkvist counts as valency adverbials also those that complement the meaning of the verb, not only those that are needed by the verb to form a grammatically correct clause. In this respect his distribution seems very close to that of CGEL.

David Crystal in his paper 'Neglected grammatical factors in conversational English' (Greenbaum, Leech & Svartvik 1979:164), in which he draws attention among other things also to adverbials, distinguishes between syntactic and semantic obligatoriness of adverbials. In his opinion semantically obligatory adverbials are those that are crucial for and thus necessary in a given context. He illustrates semantic obligatoriness on the following sentence: Did we get that

in Cyprus? which relates to something (the Cyprus theme) that had been discussed earlier.

It would be very difficult to disagree with Håsselgard's opinion that 'the problem of keeping sentential and predicational adverbials apart seems to stem from the fact that phenomena belonging to syntax and semantics respectively are treated on the same level. Thus the explanation given in CGEL, based predominantly on syntax, fails when semantics and syntax disagree' (1993:50). After indicating some of the problems connected with the differences between obligatory and optional, predicational/valency and sentential/setting adverbials, I trust it is obvious that no clear-cut borderlines exist in this area.

As to adverbial placement, following CGEL there are three main adverbial positions, initial, medial and end position, which are further subdivided into seven subtypes, each being defined in relation to the other clause elements. For the present investigation, however, only the three basic positions are considered. The reasons are twofold: partly the lack of space in this paper and partly the character of the verb phrase and consequently the character of the whole clause structure typical of conversational English. As Jan Svartvik puts it, 'it is often hard to divide a spoken conversation into separate sentences' (Svartvik 1994:18). Moreover, the typical syntactic structure in unplanned conversation is a clause, very often an uncompleted clause, not rarely containing uncompleted or split verb phrases (e.g. how did (e) how would I explain this, S.1.3.412-3; so it'll so anybody who is looking for (em) a a niche to fit it a ready-made niche in English grammar to fit it into is sort of begging for the moon you see, S.1.1.740-744), in which it is very difficult to distinguish, for instance, initial medial, medial medial and end medial positions from each other. These are some of the possible positional subtypes of adverbials that are mostly dependent on the type of the VP which they complement.

For the classification of adverbial placement Hasselgard's distinction between clusters and combinations of adverbials, which helps to reflect the very complex picture of adverbial placement in spontaneous conversation, has been adopted. She makes a difference between continuous and discontinuous sequences of adverbials. The former are labelled clusters and the latter combinations, clusters being groups of adverbials occurring one after another in the same position in the clause, e.g. Celia came to London a little over a year ago, and combinations being adverbials occupying different positions or rather two or more adverbial slots in the same clause structure, e.g. Celia came to London on her own a little over a year ago (1993:53).

As to the last criterion, semantic role, it follows already from the very fact that only T and S adverbials are under investigation that the distinction will be between temporal, spatial and spatio-temporal amplification. For this paper no other subclassification has been applied, although according to CGEL both T and S adverbials can be further subdivided into several semantic subtypes. What has been applied, however, is the above-mentioned distinction between homosemantic (e.g. normally I don't eat for three days before an interview, S.1.3.520, with three adverbials of the same semantic role) and heterosemantic

adverbials (e.g. people just don't work <u>Saturday mornings</u> oficially <u>in London</u>, S.1.5.264–8, with two adverbials, each of a different semantic role), as suggested by Enkvist (1976) and applied for instance by Håsselgard (1993).

## 3.2 Discussion on verbs

The classification of verbs does not require too much space here because for this paper verbs are taken into consideration only to a certain extent and, besides that, their classification is in full agreement with CGEL (1985:173-239).

The analysis concerns only FVPs because they have the tense contrast, i.e. the distinction between present and past tenses. As to the relationship between the form and its meaning, the form is decisive for me. In this respect I agree with Dell Hymes that the form of the message is fundamental and that the means of expression condition and sometimes control content (Gumperz & Hymes 1972). Apart from the basic difference between the present and the past tense, which typically refer to present and past time respectively and which can combine with two aspects, the perfect and the progressive, modal verbs are treated as a separate group and also combined with the two aspects. It is necessary to emphasize here that morphologically there is no future form of the verb in English, which means that the forms with shall/will are in the same group as the other modal verbs.

With CGEL in contrast to the 'unmarked' indicative mood, the distinction is made between the 'marked moods' imperative, although it lacks tense distinction, and subjunctive, traditionally called the present and past. The overall survey of tenses and aspects will be illustrated later in Tables 4.2a and 4.2b together with some preliminary results.

Let me now mention the ways in which all kinds of false starts, repetitions and ellipses, which frequently occur within one FVP in English conversation, are treated. If there is a change of tense or aspect within one FVP, the form that comes second is decisive (e.g. which was very (em) — — well it's very pleasant, S.1.5.941-2). It seems that the interlocutor very often switches to a different structure than the originally intended one, usually after some hesitation in order to express his idea as best as possible, or as David Crystal and Derek Davy say 'many sentences or clauses are incomplete. This is sometimes due to a 'syntactic anacoluthon' on the part of a speaker, a restarting of a sentence to conform more to what he wanted to say' (Crystal & Davy 1969:111-112). If for instance an auxiliary is repeated, then such a structure is counted as one FVP (e.g. you can't (e) as you say you can't (me) you can't (pr) premodify it in that way, S.1.1.664-666). If there is an ellipted subject, then such a FVP is counted as a complete phrase, its subject being clear either from the context, i.e. the whole conversational situation itself, or it is identical with the subject of the preceding FVP, as illustrated here: Harold is still winding up his PhD but has been teaching for longer (S.1.5.445-446). The two FVPs are counted separately in the present analysis.

FVPs which appear in comment clauses (CCs) are not taken into account (e.g. I must go down to the bank you see, S.1.1.423). The reasons are twofold: if one is to investigate the spatio-temporal setting with a view to the use of tenses, it is necessary to exclude CCs and therefore tenses and aspects in which they are expressed, because otherwise the real picture of tense distribution with regard to the spatio-temporal setting will be distorted. Moreover, the main function of CCs is to 'express the speakers' comments on the content of the matrix clause or to convey the speakers' view on the way they are speaking' (CGEL 1985:1112). With regard to their function of claiming the hearer's attention, CCs are closely related to tag questions (TQ) (e.g. it's pretty tedious though isn't it, S.1.5.353) and therefore the latter have been excluded from further consideration, too. Surprisingly, unlike CCs they are not numerous. There were only about 10 occurrences of TOs in every analysed text.

# 3.3 Spatio-temporal setting

According to the Longman Dictionary of Applied Linguistics (1992) setting is 'the time and place of a speech event. For example, a conversation can take place in a classroom' and 'it can take place at any hour of the day. The setting of a speech event may have an effect on what is being said and how it is said' (Richards, Platt, Weber 1992:257). The very last sentence is important. Hopefully, there is no doubt about the setting being determined by the whole speech event, which also comprises its verbal expression at any particular moment, e.g. in a conversation. Sometimes it is necessary to express the setting verbally, sometimes it is not, simply because it is clear from the conversational situation itself, or because it has already been or will soon be expressed verbally in the surrounding context. It is, however, arguably important to distinguish between spatial and temporal setting because it is only the latter that can be expressed more or less implicitly, i.e. only by verbal tenses and aspects without any explicit temporal amplification. This issue will be discussed and exemplified later in the present analysis.

Let me now finish this part of my paper with an interesting quotation by John Lyons, which explains why I trust that both spatial and temporal setting should be investigated together: 'Every actual utterance is spatiotemporally unique, being spoken or written at a particular place and at a particular time; and provided that there is some standard system for identifying points in space and time, we can, in principle, specify the actual spatiotemporal situation of any utterance act' (Lyons 1977:570).

# 4. Analysis of conversational texts

From the three texts comprising altogether 15,000 words 2,076 FVPs have been excerpted, all non-FVPs being excluded, as stated in parts 2 and 3.2 above. This number, however, does not include FVPs used in CCs and TQs, which represent 13% of all FVPs. The proportions indicated in **Table 4.1a** show striking similarities between all three texts. The similarity is probably above all due to the same number of words under investigation in each text. Only a deeper analysis will discover, whether there are certain regularities, e.g. in the manner and frequency with which FVPs with some kind of spatial and/or temporal amplification (S/TA) occur in English conversation in order to express the spatiotemporal setting.

Table 4.1a
Distribution of all FVPs

Table 4.1b

Comparison between pure and amplified FVPs

Type of FVP	All FVPs	FVPs CC QT	FVPs
S.1.1	812	114	698
S.1.3	804	111	693
S.1.5	776	91	685
Total (No.)	2392	316	2076
Total (%)	100	13	87

Type of FVP	FVPs	Pure FVPs	Amplified FVPs
S.1.1	698	507	191
S.1.3	693	509	184
S.1.5	685	461	224
Total (No.)	2076	1477	599
Total (%)	100	71 .	29

Under consideration from now will only be those FVPs listed in the column under 'FVPs', which represent 87% of all excerpted FVPs. What is relevant in this analysis is the comparison of FVPs having some kind of S/TA, labelled as **amplified FVPs**, with what I call **pure FVPs**, i.e. FVPs without any S/TA, which is indicated in **Table 4.1b**.

The percentage of pure FVPs in each text is really very high, representing 71% of all FVPs under investigation. These results are in accordance with my hypothesis that in conversational English, it is in the majority of cases the communicative situation itself that expresses the spatio-temporal setting. The tendency to express the setting more or less implicitly, i.e. without any S/TA, is well evidenced by all the analysed texts. In this respect I agree with Urbanová's hypothesis that 'the setting in the language of conversation is to a considerable extent mediated by the communicative situation itself, therefore it is not necessary to express it verbally' (Urbanová 1984:37). It is necessary, however, to make a distinction between spatial and temporal setting. In the material under investigation the spatial setting is always connected with some kind of spatial amplification. On the contrary, the temporal setting is frequently expressed more or less implicitly, i.e. without any explicit temporal amplification. Such cases are represented by the category of pure FVPs in the present analysis, as can be seen from Table 4.1b. In consequence of what has just been indicated, it is doubtful whether one can speak about implicit expression of temporal setting, particularly in cases in which it is in fact expressed by verbal tenses and aspects.

Table 4.2a Distribution of tenses & aspects with pure and amplified FVPs (all texts taken together)

All texts together	Pure	FVPs	Amplified FVPs	
Tense & aspect	No.	%	No.	%
Present Simple	718	48.6	197	32.9
Present Continuous	36	2.4	49	8.2
Past Simple	399	27.0	149	24.9
Past Continuous	27	1.8	12	2.0
Present Perfect	28	1.9	35	5.8
Present Perfect Cont.	1		5	0.8
Past Perfect	14	0.9	12	2.0
Past Perfect Cont.	1		2	0.3
Modal + Present Inf.	218	14.8	121	20.2
Modal + Pres. Inf. Cont.	4	0.3	3	0.5
Modal + Perfect Inf.	10	0.7	7	1.2
Modal + Perf. Inf. Cont.	0		0	
Imperative	20	1.4	7	1.2
Present Subjunctive	0		0	—
Past Subjunctive	1		0	
Total	1477	100.0	599	100.0

Table 4.2a offers an overall picture of the distribution of tenses and aspects both within the category of pure FVPs and within that of amplified FVPs. Since the analysis of verbal categories has been included in the present paper to a limited extent, only some results are presented here and all three texts are taken as a whole. Owing to the variety of topics discussed in the individual texts, there are, of course, differences betweeen them, e.g. in S.1.3, which deals mostly with an interview that took place in the past, the number of past tense forms is much higher than in the other two texts. As for the distribution of tenses and aspects, the two basic tenses, present simple and past simple, are the most frequent of all. They dominate especially in the category of pure FVPs, where they represent altogether 75.6% in contrast to 57.8% of amplified FVPs. This result is in agreement with my hypothesis that with tenses that express the basic tense distinction between the present and the past, it is less necessary to express the temporal setting explicitly than with the other tenses which do not express this basic distinction.

The results in Table 4.2b, which do not include tenses and aspects with zero or very low frequencies, indicate that with the majority of tenses and aspects the percentage of pure FVPs is much higher than that of amplified FVPs, sometimes being almost twice as high as that with some kind of S/TA. The only two exceptions are present continuous and present perfect, which means the tenses and aspects that are as a rule complemented by an adverbial (e.g. *I'm going to Burgos Wednesday week*, S.1.1.546-8; oh *I've finished now*, S.1.3.179-180).

Table 4.2b

Comparison between pure and amplified FVPs
(according to tense & aspect distribution)

All texts taken together	Pure	FVPs	Amplifi	ed FVPs
Tense & aspect	No.	%	No.	%
Present Simple	718	78.5	197	21.5
Present Continuous	36	42.4	49	57.6
Past Simple	399	72.8	149	27.2
Past Continuous	27	69.2	12	30.8
Present Perfect	28	44.4	35	55.6
Past Perfect	14	53.8	12	46.2
Modal + Present Infinitive	218	64.3	121	35.7
Modal + Perfect Infinitive	10	58.8	7	41.2
Imperative	20	74.1	7	25.9

The proportion of FVPs with some kind of **amplification** amounts to 29% of all FVPs, as can be seen from **Table 4.1b** above. These are complemented by adverbials, realized either as **phrases** (e.g. *I'll be stuck until about the twentieth*, S.1.1.108) or as **clauses** (e.g. *you should wait until the man is just ready*, S.1.1.507). The proportion between **phrasal** (PA) and **clausal amplification** (CA) is presented in **Table 4.3**. In all three texts, even when taken separately, the proportion between PA and CA is 90% versus 10%, **with phrasal amplification** being **unambiguously dominant**. My results, acknowledging that subordinate clauses of T or S are not frequent, are in full agreement with Urbanová's statement that 'in conversation the total frequency of subordinate clauses is low, the typical syntactic structure are simple and compound sentences and a characteristic feature is what we call loose coordination' (1984:14).

Table 4.3

Proportion between phrasal and clausal amplification
(all semantic roles together)

Type of A	All amplified FVPs	Phrasal A	Clausal A
S.1.1	191	172	19
S.1.3	184	165	19
S.1.5	224	202	22
Total (No.)	599	539	60
Total (%)	100	90	10

For the present analysis of adverbials four main criteria have been used. As to realization type, the basic distribution between PA and CA has already been illustrated in Table 4.3 above. Before going into a deeper analysis, it must be said that verbless and non-finite clauses of T or S functioning as A element in the sentence structure have not been found in the analysed material at all, indicating that the category of clausal amplification comprises only finite adverbial clauses of T or S. Adverbials expressed by phrases that occur in subordinate clauses of T or S (e.g. *I did it when I first came*, S.1.5.10) are not counted separately. They are viewed as part of S/TA, as it is expressed by a clause in which they occur.

Table 4.4a

Realization types of spatial and temporal adverbials

(all sematic roles taken together: T, S and T+S)

Type of A		Phrasal amplification				
Text	Closed-class adv.	Open-class adv.	Noun phrases	Prep. Phrases	Clauses	No.
S.1.1	78	4	19	130	19	250
S.1.3	75	7	18	115	19	234
S.1.5	122	11	32	101	22	288
Total (No.)	275	22	69	346	60	772
Total (%)	35.5	3	9	45	7.5	100

The distribution between individual types of phrases and clauses is presented in Table 4.4a. It must be stated that for the analysis of realization types, all the occurrences of adverbials occurring with FVPs (with the exception of those specified above) are counted. Altogether they represent more items than the total amount of amplified FVPs. The reason is that very often in the examined material there is more than one adverbial used with one FVP, often expressed by different realization forms (e.g. normally I don't eat for three days before an interview, S.1.3.520; how could I know at this stage when it came to actually being asked on the spot in the interview, S.1.3.383). This accounts for the differences in numbers of items under investigation between Table 4.3 and Table 4.4a, e.g. with text S.1.1 there are only 191 occurrences of amplified FVPs in Table 4.3 whereas in Table 4.4a 250 occurrences of some S/TA must be considered. The two last-mentioned examples show the very complex manner in which the spatio-temporal setting is expressed in English conversation. If one compares the individual texts, the situation in S.1.5 is slightly different with the highest number of closed-class adverbs and noun phrases, probably at the expense of prepositional phrases, which are nevertheless relatively very fregment due to the fact that the total amount of any S/TA in S.1.5 is higher than that in the other two texts. Such differences are due to the different topics discussed in the individual texts.

Taken together, all the texts show that the most common realization type is that of prepositional phrase, very often a complex one, which can include even a repetition (e.g. <u>at about nine o'clock in the evening I was walking along along a long deserted corridor</u>, S.1.3.1085-6). If another criterion, namely that of semantic role, is taken into consideration, and if accordingly spatial and temporal adverbials are put into contrast, the picture is slightly different, as can be seen from Tables 4.4b and 4.4c below.

Table 4.4b

Realization types of spatial adverbials

Type of A		Phrasal amplification				Total
Text	Closed-class adv.	Open-class adv.	Noun phrases	Prep. phrases	Clauses	No.
S.1.1	17	0	0	57	6	80
S.1.3	10	0	3	57	1	71
S.1.5	35	0	0	46	2	83
Total (No.)	62	0	3	160	9	234
Total (%)	26.5	0	1.5	68	4	100

Table 4.4c

Realization types of temporal adverbials

Type of A		Phrasal amplification				Total
Text	Closed-class adv.	Open-class adv.	Noun phrases	Prep. phrases	Clauses	No.
S.1.1	43	4	15	38	_ 13	113
S.1.3	46	6	9	37	18	116
S.1.5	55	7	21	30	20	133
Total (No.)	144	17	45	105	51	362
Total (%)	40	4.5	12.5	29	14	100

With spatial A it is definitely the prepositional phrase (68%) that dominates, while for instance open-class adverbs have zero occurrence. With temporal A there is more balance between individual realization forms with a relatively high occurrence of noun phrases (12,5%), e.g. the second the second time an academic year goes round, S.1.5.1261-2, and particularly that of closed-class adverbs (40%), e.g. and then vanishes again quietly, S.1.5.776, which is in all the analysed texts even higher than the occurrence of prepositional phrases (29%).

If the criterion of semantic role is taken into account on its own, there are three types, spatial, temporal, and spatio-temporal amplification. Table 4.5 indicates that temporal amplification prevails in all the texts, amounting to the average of 50% of any A. The co-occurrence of T and S adverbials in compari-

son with T or S adverbials used on their own is quite low, representing only 16% of any kind of S/T amplification in the examined data.

Distribution of adverbial amplification (according to semantic roles of adverbials: T, S or T+S)

Table 4.5

Semantic role	Time	Space	Time + Space	Total
S.1.1	93	68	30	191
S.1.3	92	63	29	184
S.1.5	118	71	35	224
Total (No.)	303	202	94	599
Total (%)	50	34	16	100

Within the scope of this paper detailed results of the combination of the two criteria under discussion cannot be indicated. Therefore, in order to illustrate at least the overall proportions between PA and CA within the individual semantic roles, the results in **Table 4.6** are presented only in percentage of occurrences. Moreover, all the texts are taken as a whole because the situation in all of them is very similar. **Phrasal amplification is generally preferred to clausal amplification**. This is true above all for adverbials of S, where the results of PA are 97% whereas those of CA only 3%. In fact, it has been very difficult to find an example of SA expressed by a clause in the examined material. For instance, in text S.1.3 only one clause of S has been found: *I got all the way through the college to where the car was at the parking meter at the other end*, S.1.3.27. This result is in full agreement with the above—mentioned tendency that the frequency of subordinate clauses in the language of conversation is very low (Urbanová 1984). Moreover, it can be said that if they do occur, then clauses of **T prevail over those of S**.

Table 4.6

Proportions between phrasal and clausal amplification
(with regard to semantic roles of adverbials)

Type of amplification	Phrasal A	Clausal A
Time	82%	18%
Space	97%	3%
Time + Space	77%	23%

As for the third criterion, grammatical function, the distinction is made only between obligatory and optional adverbials. Both my reasons and my criteria, which are exclusively grammatical, have been explicated already in part 3.1. Within the scope of this paper it is not possible to take into account e.g. the dif-

ference between syntactically and semantically obligatory adverbials, as suggested by Crystal (1969).

Table 4.7a

Proportions between obligatory and optional adverbials
(according to semantic roles)

Semantic role	Time	Space	Time + Space
S.1.1	15%	32%	25%
S.1.3	1%	40%	19%
S.1.5	7%	53%	32%
Average	8%	42%	25%

The comparison between obligatory and optional adverbials within the individual texts and with regard to their semantic roles can be seen from **Table 4.7a**. In fact it provides only information about obligatory adverbials explicitly. The results referring to optional adverbials can be derived in the following way: e.g. in text S.1.1 there are 15% of obligatory T adverbials, which means that the remaining 85% are optional adverbials; in text S.1.5. there are 53% of obligatory S adverbials in contrast to 47% of optional adverbials; and so forth. The results in **Table 4.7a** indicate that **obligatory adverbials of S unequivocally prevail** with the average of **42%** in all the examined data. The total amount of obligatory SA is in fact even higher because in all the cases in which T and S adverbials co—occur, it is always the adverbial of S that functions as an obligatory sentence element (e.g. I haven't been in the academic world long enough or widely enough, S.1.3.1182; I tried to go to America earlier this year, S.1.5.1044).

Table 4.7b

Proportions within obligatory adverbials (according to semantic roles)

Semantic	Time		Spa	ace	Time -	Total	
role	No.	%	No.	%	No.	%	No.
S.1.1	14	27.5	23	45.0	14	27.5	51
S.1.3	1	3.0	26	72.0	9	25.0	36
S.1.5	7	10.0	40	57.0	23	33.0	70
Average (%)		13.5		58.0		28.5	157

Table 4.7b, although based on exactly the same material as Table 4.7a, offers completely different results. Here all the three possible semantic roles (T, S, T+S) are compared within the category of obligatory adverbials. With regard to what has just been said about the co-occurrence of T and S adverbials, it is evident that obligatory adverbials of S dominate, amounting to about 86% of all occurrences of any obligatory adverbials, 58% being represented by SA (e.g. let

me put this in my bag, S.1.1.69) and about 28% by S/TA (e.g. I am going to Madrid on the tenth, S.1.1.91-2). It may be of interest to relate these results to the topics discussed and accordingly to the types of verbs used in the examined material. It will arguably throw more light upon the differences between the individual texts. Unfortunately, such an analysis is beyond the scope of this paper.

The results of the application of the last criterion, position of adverbials, notably in combination with that of semantic role are presented in Tables 4.8a and 4.8b. Before going into details, it must be stated again that on the one hand, there is a difference between clusters and combinations of adverbials, as exemplified in part 3.1 above (Håsselgard 1993), and on the other hand, the distinction between homosemantic and heterosemantic sequences of adverbials is made, as explicated already in part 2 (Enkvist 1976).

Table 4.8a

Homosematic sequences of adverbials according to their position

No. of	Sin	gle adve	rbial	More than one adverbial						
adverbials					Cluster	Combination				
Position	I	M	Е	I	M	at any position				
Time	51	57	132	3	0	8	18			
Space	18	0	159	0	0	17	0			
Total (No.)	69	57	291	3	0	25	18			
Total (%)	16.5	13.5	70	11		89				

The results in Table 4.8a indicate that the E position is dominant for any semantic type of adverbial amplification. 70% of single T or S adverbials (e.g. I rang up on Thursday, S.1.5.173) occur in E position. With SA (e.g. they are probably teaching elsewhere, S.1.5.781) the percentage is even higher (90%), which is above all due to the fact that not a single adverbial of S has been found in medial position in the examined material. Moreover, my statement that the E position is predominant is evidenced by 89% of homosemantic sequences of adverbials, i.e. sequences of more than one adverbial of the same semantic role, occurring in E position (e.g. I've got a job at Columbia University in New York, S.1.5.1049-50). The last example is in full agreement with Enkvist's opinion that the word order in homosemantic sequences of adverbials is to some extent constrained by realities of the physical world with the 'most inclusive, hierarchically highest adverbial being placed furthest to the right' (1976:58), as exemplified already in part 1 above.

Table 4.8b

# Heterosemantic sequences of adverbials Comparison between clusters and combinations

No. of adverbials	2 adve	erbials	More than 2 adverbials				Total		Any No. of adv.			
Type of sequence	T+S	S+T	TTS	TST	TSS	SST	STS	STT	No.	%	T→S	S→T
Cluster (E pos.)	8	35	0	0	1	1	1	8	54	70	17%	83%
Combination	15	0_	1	3	2	0		1	23	30	91%	9%
Total No. (%)	58 (	75%)	19 (25%)					77	100	29	47	

Table 4.8.b presents the results of the analysis of heterosemantic sequences of adverbials, i.e. the co-occurrences of T and S adverbials either in clusters or in combinations with one FVP. A typical sequence (75%) consists of two adverbials, one of S and one of T, occurring either in cluster, e.g. I just couldn't face going all the way back again, S.1.3.32-33 (70%), or in combination, e.g. then I looked down into the body of the hall, S.1.3.772 (30%). Only 25% of sequences comprise more than one adverbial. They also occur either in clusters (e.g. I shall not be away from home then until at any rate the end of about the end of August, S.1.1.94-100) or in combinations (e.g. then I happily sat in college for two years, S.1.5.939). Some details of the possible sequences of T and S adverbials provided in Table 4.8.b show that the situation is really very complex with space-time sequence being typical of clusters (83%) and timespace sequence being typical of combinations (91%). It is interesting that in the examined material only one heterosemantic cluster has been found in I position (one day here you know it was slack, S.1.5.313-315), all the other clusters being placed in E position, which is unambiguously the most preferred position for the placement of any S/TA.

Several above-mentioned examples contain a deictic adverb then, which is typically found in time-space sequences occurring in combinations. It may be of interest to carry out deeper investigation into the role of deictic spatial and temporal elements in the expression of the spatio-temporal setting. These deictic expressions, very frequent in the analysed material, comprise, besides adverbs now, then, here, and there, also other adverbials, such as yesterday, today, last week, this week, and so forth. Moreover, verb tenses are also 'one basic (often unrecognized) type of temporal deixis in English' (Yule 1996:14), which accounts, in my opinion, for the above-indicated high percentage of pure FVPs, i.e without any explicit amplification, nevertheless expressing the temporal setting implicitly. The analysis of deictic elements will arguably throw light upon the very complex way in which the setting tends to be expressed in English conversation.

## 5. Conclusions

The present analysis of conversational texts has shown how spatial and temporal adverbials in co-operation with verbal tenses and aspects function in order to express the **spatio-temporal setting**. It has indicated that in the majority of cases the **temporal setting** is expressed **more or less implicitly**, i.e. by verbal tenses and aspects and above all by the communicative situation itself. The implicitly expressed temporal setting is typical of tenses that express the basic tense distinction between present and past, the present and past tense, which are at the same time the most frequent tenses of all. Otherwise some kind of temporal or spatio-temporal amplification is required together with the above-mentioned verbal categories. As for the **spatial setting**, if it is expressed at all, then it is **expressed explicitly**, i.e. by some kind of spatial or spatio-temporal amplification.

Based on striking similarities between all the analysed texts, it may be of interest to examine whether there are certain regularities or circumstances under which the spatio—temporal setting must be expressed explicitly on the one hand and on the other hand, however, whether there are circumstances under which it is not necessary because it is sufficiently expressed by the communicative situation itself.

Having finished the application of four main criteria, realization type, semantic role, grammatical function and position of adverbials, it has become evident that phrasal amplification prevails over clausal amplification with the most typical realization form of all being that of prepositional phrase. The most frequently expressed semantic role is that of time, expressed mostly either by a closed—class adverb or by a prepositional phrase. The most preferred position is definitely the E position both for single adverbials of T or S and for sequences of two or more adverbials, either in clusters or combinations. About a quarter of adverbials under investigation are obligatory adverbials with spatial amplification being prevalent, unambiguosly in cases in which T and S adverbials co—occur.

In the present analysis it is mostly grammatical and partly semantic criteria that have been applied. Only further research along with the application of other semantic criteria as well as pragmatic and textual factors will arguably throw valuable light upon the whole complexity with which the spatio—temporal setting is expressed in English conversation. In agreement with Håsselgard (1993:70) I trust that this complexity is the result of an interplay of many factors, some of which are 'predominantly sentence internal' (syntax and semantics), while the others are 'predominantly contextual (pragmatics and text linguistics)'.

#### REFERENCES

- Aarts, B., Meyer, Ch., F. (eds) (1995). The Verb in Contemporary English. Theory and Description. Cambridge University Press.
- Crystal, D. (1979). 'Neglected grammatical factors in conversational English'. In: Greenbaum, S., Leech, G., Svartvik, J. (eds), Studies in English Linguistics for Randolph Quirk. Longman. London and New York.
- Crystal, D., Davy, D. (1969). Investigating English Style. English Language Series. Longman.
- Enkvist, N. E. (1976). 'Notes on valency, semantic scope, and thematic perspective as parameters of adverbial placement in English'. In: Enkvist, N., E. & Kohonen, V. (eds) Reports on Text Linguistics: Approaches to Word Order. Åbo: Åbo Akademi: 51-74.
- Enkvist, N. E. (1987). 'Text strategies: single, dual, multiple'. In: Steele, R. & Threadgold, T. Language topics. Essays in Honour of Michael Halliday. Amsterdam: John Benjamins. Vol.II.:203-211.
- Firbas, J. (1992). Functional Sentence Perspective in Written and Spoken Communication. Studies in English Language. Cambridge: Cambridge University Press.
- Greenbaum, S. (1969). Studies in English Adverbial Usage. London: Longman.
- Hymes, D. (1972). Models of the interaction of language and social life. In: Gumperz, J. J. & Hymes, D. (eds) Directions in Sociolinguistics. The Ethnography of Communication.
- Håsselgard, H. (1993). Where and When? Positional and Functional Conventions for Sequences of Time and Space Adverbials in Present-Day English. Doctoral dissertation, University of Oslo.
- Horová, E. (1976). 'On position and function of English local and temporal adverbials' In: Brno Studies in English 12: 93-123.
- Jacobson, S. (1964). Adverbial Positions in English. Stockholm: Studentbok.
- Leech, G., Svartvik, J. (1994). A Communicative Grammar of English. Longman. London and New York.
- Lindquist, H. (1986). 'The frequency and distribution of English adverbials'. In: Lindblad, I., Ljung, M. (eds) *Proceedings from the Third Nordic Conference for English Studies*. Almqvist & Wiksell International. Stockholm. Vol. I.: 191–204.
- Lindquist, H. (1989). English Adverbials in Translation, A Corpus Study of Swedish Renderings. Lund: Lund University Press.
- Lyons, J. (1977). Semantics. Cambridge: Cambridge University Press.
- Quirk, R. (1984). 'Recent work on adverbial realization and position'. In: Aarts, J., Meijs, W. (eds). Corpus Linguistics. Recent Developments in the Use of Computer Corpora in English Language Research. Rodopi. Amsterdam. Vol. 45: 185-192.
- Quirk, R., Greenbaum, S., Leech, G., Svartvik, J. (1985). A Comprehensive Grammar of the English Language. London: Longman.
- Richards, J., Platt, J., Weber, H. (1992). Longman Dictionary of Applied Linguistics. Longman.
- Svartvik, J., Quirk, R. (1980). A Corpus of English Conversation. Lund: CWK Gleerup.
- Svartvik, J. (ed) (1990). The London-Lund Corpus of Spoken English. Lund: Lund University Press.
- Svartvik, J. (1992). 'Corpus linguistics comes of age'. In: *Directions in Corpus Linguistics. Proceedings of Nobel Symposium 82*. Stockholm 1991. Trends in Linguistics. Studies and Monographs 65. Mouton de Gruyter. Berlin. New York: 7–13.
- Urbanová, L. (1984). Prozodická realizace anglického určitého slovesa ve spojení s adverbiálním určením z hlediska aktuálního členění. (Prosodic realization of the English finite verb in relation to the adverbial modifiers with regard to FSP). Unpublished doctoral dissertation. Brno: Masaryk University.
- Virtanen, T. (1992). Discourse Functions of Adverbial Placement in English: Clause-Initial Adverbials of Time and Place in Narratives and Procedural Place Descriptions. Åbo: Åbo Akademi University Press.
- Yule, G. (1996). Pragmatics. Oxford Introductions to Language Study. Oxford: Oxford University Press.