1 Introduction

This paper is part of a larger study dealing with spatial and temporal adverbiacls of all possible realization types and the ways in which they cooperate with finite verb phrases in order to express what is called the spatio-temporal setting, notably in authentic face-to-face private conversation\(^1\).

2 Material under investigation

The present contribution is concerned with the results drawn from the application of the FSP theory to five texts taken from A Corpus of English Conversation edited by Svartvik and Quirk in 1980\(^2\). All the texts, namely S.1.1, S.1.3, S.1.5, and S.1.6, represent spontaneous conversation among educated British speakers. Most of them are academics or have some other kind of connection with University College London. They are native speakers of British English and speak a fairly standard educated language. The texts analysed were in the majority of cases recorded surreptitiously, i.e. without the prior knowledge of their participants. They were recorded in the 1960s and all of them are accompanied by information about the speakers’ age, sex, and occupation.

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1 The spatio-temporal setting as understood in the above-mentioned study is the notion mediated in a given clause by temporal and/or spatial adverbials together with verbal tenses and aspects about the time and place of a particular situation. This delimitation of setting differs from that used within the FSP theory. 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”. 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” (Firbas 1992:49–50).

2 A Corpus of English Conversation represents spontaneous conversation among educated British speakers. Most of them are academics or have some other kind of connection with University College London. They are native speakers of British English and speak a fairly standard educated language. The texts analysed were in the majority of cases recorded surreptitiously, i.e. without the prior knowledge of their participants. They were recorded in the 1960s and all of them are accompanied by information about the speakers’ age, sex, and occupation.
S.1.5, S.1.6, and S.1.8, represent authentic face-to-face private conversation and each of them comprises 5,000 words, which means that the total size of text under investigation is 25,000 words.

3 Theoretical preliminaries

Functional sentence perspective (FSP) is the outcome of an interplay of FSP factors. In written language, three non-prosodic FSP factors, the contextual factor, the semantic factor, and the factor of linear modification (listed in order of importance), operate within an interplay the outcome of which is the distribution of various degrees of communicative dynamism (CD) over the sentence elements (for a detailed description of the operation of non-prosodic FSP factors, see Firbas 1992.21ff). “In spoken language, the interplay of FSP factors is joined by intonation. It operates through degrees of prosodic prominence (PP), represented by a scale covering absence of stress (zero prominence), degrees of non-nuclear stress and degrees of nuclear stress” (for more information, see Firbas 1992.143-221).

“The prosodic features described here in terms of stress are the signals yielded by intonation. As an FSP factor, intonation does not operate on its own independently of the other factors. The distribution of degrees of PP either perfectly reflects the distribution of degrees of CD as determined by the interplay of the non-prosodic FSP factors or deviates from it. The deviations are functional, creating prosodic intensification and raising the degrees of CD. Acting as a reflector of the degrees of CD as determined by the non-prosodic factors, intonation constantly provides a running commentary on the attitudes of the speaker to the content of his/her utterance” (Firbas 1998.58). Information conveyed by intonation participates in the development of communication.

Consequently, the present inquiry has to take intonation into account while analysing the possible dynamic semantic functions (DSFs) of spatial and temporal adverbials in the act of communication. However, it does not aim at a detailed analysis of the degrees of PP of the individual adverbial elements under investigation.

While taking into consideration all the four FSP factors, my tentative goal is to distinguish between adverbials belonging to the thematic sphere of the sentence and those that belong to its rhematic sphere. The former perform the DSF of Setting (Set) and the latter that of Specification (Sp). The DSFs of adverbials depend on the degree of CD as well as that of PP they carry in relation to the other sentence elements within the same distributional field.

With temporal adverbials referring to indefinite time, the situation is

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3 According to O’Connor and Arnold’s approach (1973), there are four degrees of stress, also recognized by the FSP theory: absence of stress, unaccented stress, accented stress, and nuclear stress.
slightly more complicated. Apart from the two aforementioned DSFs, notably that of Set and that of Sp, these adverbials can become part of the transitional sphere of the sentence (Tr), in which case they serve as transition proper oriented elements (for more details, see Firbas 1992). This possibility concerns indefinite temporal adverbials of position, frequency and relationship.

The four main criteria commonly used to the analysis of adverbials (e.g. Lindquist 1986, 1989; Quirk 1984, 1995) and presented, for instance, in Povolná 1998, 1999 will be related to their analysis with regard to FSP. They are the grammatical function, the semantic role, the realization type, and the position of adverbials in the clause structure.

In agreement with these criteria, adverbials realized by phrases, i.e. through phrasal amplification, and those realized by clauses, i.e. through clausal amplification, will be considered separately. Apart from that, however, within phrasal amplification, occurrences of one adverbial, i.e. single adverbials, and co-occurrences of two or more adverbials, i.e. multiple adverbials, will be distinguished. Therefore, the following inquiry will be concerned first of all with single spatial and single temporal adverbials and only then with multiple adverbials. With the latter, a distinction is drawn between continuous and discontinuous sequences, i.e. clusters and combinations (for more information, see Hasselgård 1993) on the one hand and on the other hand there is a difference between homosemantic and heterosemantic sequences (for a discussion on adverbial sequences, see Enkvist 1976).

Another important distinction is drawn between adverbials of time and those of space, and, whenever relevant, also those of time & space co-occurring with one FVP. Moreover, it must be stated that in the present investigation, spatial and temporal adverbials are juxtaposed.

Apart from the three basic semantic roles, spatial, temporal, and spatio-temporal, for most considerations semantic classification of adverbials will be included and related to their DSFs. Spatial adverbials are distinguished from one another according to whether they express position (P), direction (DIR), or distance (D), while temporal adverbials are subdivided into adverbials of position (POS), duration (DUR), frequency (F), and relationship (R).

The position of adverbials in the clause structure will also be related to their possible DSFs. With one modification, specified below, only three basic clause positions, initial (I), medial (M) and end (E), are recognized in the present inquiry.

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4 It must be stated that all wh-elements introducing interrogative wh-clauses have been excluded from the following analysis. With regard to FSP they are heterogeneous and therefore require a separate analysis which is, unfortunately, beyond the scope of the present study. Let me at least note that Firbas holds the view that "apart from serving in the transition, they also display thematic and rhematic features" (for a discussion on wh-elements, see Firbas 1996:67-70).

5 Following Quirk et al. (1985), the three main adverbial positions in the clause structure can be subdivided into seven subtypes, each being defined in relation to the other clause elements. However, owing to the character of the verb phrase (e.g. incomplete or split verb phrases) and consequently the character of the whole clause structure (i.e. in unplanned face-
As for the grammatical function of adverbials, it must be stressed that only adverbials functioning as A-elements in the clause structure (adjuncts) and complementing finite verb phrases (FVPs) have been taken into account. Therefore, all the remaining grammatical functions of adverbials, subjuncts, disjuncts, and conjuncts, have been excluded. As for the main distinction drawn with regard to the grammatical function, i.e. the distinction between syntactically obligatory and syntactically optional adverbials, it will be included in the following analysis only when relevant.

Accordingly, the main distinctions that will be applied to the subsequent analysis of spatial and temporal adverbials and related to the DSFs performed by them in the act of communication are the following:

1. the distinction between phrasal and clausal amplification;
2. the distinction between spatial and temporal adverbials;
3. the semantic classification of spatial and temporal adverbials;
4. the distinction between single and multiple adverbials;
5. the distinction between homosemantic and heterosemantic sequences of adverbials;
6. the distinction between continuous and discontinuous sequences of adverbials, i.e. between adverbials occurring in clusters and those found in combinations.

4 Analysis

4.1 Phrasal amplification

The main distinction drawn in the present inquiry with regard to the realization type of adverbials, the distinction between phrasal and clausal amplification, is also important in their analysis with regard to FSP, particularly in connection with distributional fields. The A-element in the clause structure is expressed either by a phrase or by a clause. In the case of a phrase, only one FVP must be taken into consideration, notably the one occurring in the same clause as the A-element expressed by a phrase, as in:

Example 1:

$I^\text{must go :down to the !bank}#$ (S.1.1.423).

The S adverbial to the bank in Example 1 occurs in the same distributional field as the verb must go down which it complements. In this case they are competitors with regard to the degree of CD carried by each of them within the field...
SOME NOTES ON SPATIAL AND TEMPORAL ADVERBIALS WITH REGARD
TO FUNCTIONAL SENTENCE PERSPECTIVE

provided by the whole clause. The field is perspectived away from the subject I
towards the adverbial to the bank, which performs the DSF of Sp, thus being a
rhematic sentence element. Intonation, a nucleus placed on the noun bank, re-

flects the distribution of degrees of CD as determined by the non-prosodic FSP
factors; consequently, the above example illustrates perfect correspondence
between the two distributions, the distribution of CD and that of PP (for
more details, see Firbas 1992).

On the other hand, when the A-element is expressed by a clause, then there
are regularly two verbs involved, one in the subordinate clause and the other in
its superordinate clause. The subordinate clause itself represents a distributional
subfield within which different degrees of CD as well as PP are distributed over
the individual sentence elements. At the same time, however, the subordinate
clause as a whole represents only one communicative unit within the distribu-
tional field of its superordinate clause. As a whole the subordinate clause is con-
sidered in relation to the other sentence elements within the distributional field
provided by its superordinate clause, as in:

Example 2:

\[ ^{\text{\textit{oh I knew Malcolm}}} ^{\text{\textit{when he was in knickerbockers}}} \]
(S.1.6.34-35).

The above example comprises two adverbials, one spatial and one temporal.
The spatial adverbial expressed by the prepositional phrase in knickerbockers
functions as a Sp within the distributional subfield provided by the subordinate
temporal clause when he was in knickerbockers. The nucleus placed on the noun
knickerbockers reflects the distribution of CD as determined by the non–prosodic
FSP factors: (1) the adverbial in knickerbockers is context–independent; (2) it is
semantically required as complementation of the verb to be; and (3) it is placed
in end position. The temporal adverbial expressed by a clause functions as an
A-element within its superordinate clause I knew Malcolm. It performs the DSF
of Sp within the distributional field provided by its superordinate clause and
therefore it is a rhematic sentence element.

4.1.1 Single spatial adverbials

The results drawn from the analysis of single occurrences of spatial adverbi-
als of any realization type co-occurring with one FVP within the same clause
are shown in Table 1 below. It indicates the DSFs of single spatial adverbials
with regard to their position in the clause structure as well as with regard to
their semantic classification, distinguishing spatial adverbials of position, di-
rection, and distance.

Based on the results presented in the table, it can be stated that spatial ad-
verbials most frequently fulfil the function of Specification, thus belonging
to the rhematic sphere of the sentence. This applies to all semantic roles under
present investigation: spatial adverbials expressing position (67%), direction
(74%), and distance (50%).

The above results are in agreement with Uhlířová's conclusions (1974.99-106) drawn from her analysis of the relationship between semantic categories of adverbials and their thematic and rhematic functions. She maintains that the functions performed by adverbials in the act of communication depend, to a great extent, on their semantic categories. Moreover, she emphasizes the importance of subclassifying, for instance, spatial adverbials into at least two semantic classes: position and direction. The necessity of subdividing spatial adverbials has been borne out by the present analysis and the results presented in Table 1 indeed show some important differences between the semantic classes.

The following set of examples illustrates all the three aforementioned semantic classes of adverbials, notably when placed in end position. The placement of an adverbial functioning as a Sp in end position is in accordance with what Firbas (1992.10) labels as the basic distribution of degrees of CD over the sentence elements which consists in a gradual rise from the beginning to the end of the sentence.

Example 3:

\[ \text{well I've ^been accepted at Pemberton Hall# (S.1.3.1028).} \]

Example 4:

\[ ^\text{one _we lost# ^Mr Carter# . ^he _went to } \text{Turkey#} \ (S.1.6.764–766). \]

Example 5:

\[ I ^\text{think I -- -- ^can't re'member the tube station# ^"wasn't very :far a:way#} \ (S.1.6.103-105). \]

All the above examples illustrate typical tokens of spatial adverbials placed in end position. All of them convey context-independent information and in the absence of any successful competitor perform the DSF of Sp. Moreover, a nucleus placed on these adverbials or rather on the head words within their phrases makes them also most prosodically prominent. Therefore, it is possible to speak about perfect correspondence between the distribution of CD as determined by the non-prosodic FSP factors and the distribution of PP as determined by intonation.

The spatial adverbial in Examples 4 and 5 represents obligatory complementation of the verb which it complements. This fact makes the adverbial semantically more important than the verb itself, which is reflected by intonation: the adverbial carries a higher degree of PP than the predicative verb. In the former example, it is the verb of motion to go, in the latter, the verb to be, which means that in both cases they are verbs requiring some complementation. In the case of the verb to go, adverbial complementation is required (for more information, see Firbas 1992.52).
As can be seen from the table, there are only two cases in which an adverbial functioning as a Sp is placed initially. Since such a placement does not correspond to the basic distribution of CD over the sentence elements, these cases require some exemplification. For instance, in the following example, the spatial adverbial *here* is placed initially because its fronting is required by information processing:

Example 6:

*I* ^may have one# "[m]# ^here’s a ‘pen Br/enda# (S.1.8.362-364).

The adverbial *here* in the distributional field provided by the clause *here’s a pen* is the carrier of the highest degree of CD as determined by the non-prosodic FSP factors, the other elements being the verb *is* (transition), its temporal and modal exponents (TMEs) (transition proper) and a context-dependent noun *pen*, belonging to the thematic sphere of the given field. Moreover, the adverbial *here* is also the most prosodically prominent element of its distributional field. Although the distribution of PP reflects the distribution of CD as determined by the non-prosodic FSP factors, it is not possible to speak about the basic distribution of CD in the above example (compare with Examples 3-5 above). On the contrary, Example 6 illustrates a gradual fall in degrees of CD from the beginning to the end of the given distributional field.

As for the spatial adverbials performing the DSF of Setting, they reach 25-31% of all adverbials within the individual semantic classes. This result is in accordance with Urbanová’s conclusions (1984.134-135) stating that adverbials functioning as a Set are less frequent than those functioning as a Sp. Moreover, she points out that the former are more flexible with regard to their clause position, which is due, for instance, to their context dependence (compare with Table
2 below covering the results from the analysis of single temporal adverbials).

As can be seen from Table 1 above, the spatial adverbials performing the DSF of Set may, but need not, occur in initial position. In fact, when referring to distance, they have not at all been found in initial position in the data analysed. On the contrary, the end position is predominant with all the three semantic classes. Two tokens of spatial adverbials, both referring to position, are presented below.

Example 7:

\[and \ ^{I \ thought \ . \ I \ would \ just \ !d\ie \ in \ this \ s/et-up# \ (S.1.3.867).\]

Example 8:

\[^{I \ can \ re!member \ s\omebody \ (#saying \ th\is#\) \ that \ at \ ^{these \ sort \ of \ :formal. \ uni:versity \ s\et-ups# \ ^{people \ have \ [s \ em] \ a \ :number \ of \ conver:s\ation \ _points# \ . \ ^{in \ m\ind# \ (S.1.3.677-680).\]

The spatial adverbials in the above examples are both context-dependent, which is indicated by the presence of demonstratives, \textit{this} in the prepositional phrase \textit{in this set-up} and \textit{these} in the prepositional phrase \textit{at these sort of university set-ups}. Although the former adverbial is placed in end position and the latter in initial position, both of them perform the DSF of Set, thus belonging to the thematic sphere of their fields.

Example 7 illustrates the case in which a high fall is followed by a low rise and in which the sentence element with a high fall (the notional component of the predicative verb \textit{die}) is more prosodically prominent than the element with the following low rise (the noun \textit{set-up} in the prepositional phrase \textit{in this set-up}). As for intonation in Example 8, the adverbial \textit{at these sort of university set-ups} is followed by two nuclei, one on the noun modifier \textit{conversation} and the other on the noun \textit{mind}, both making the phrases to which they belong more prosodically prominent than the preceding nucleus placed on the noun \textit{set-ups}.

Another case which must be illustrated in connection with single spatial adverbials is the \textbf{existential sentence \textit{there} + \textit{be}}:

Example 9:

\[<<\text{there were}>> \ ^{no \ l/ights \ on \ in:side# \ (S.1.3.1089).\]

The above example is a typical existential sentence with a Phenomenon to be presented\(^7\), expressed by the noun phrase \textit{no lights}. The following spatial adver-

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\(^7\) According to the \textbf{DSF of the verb}, Firbas distinguishes \textbf{two types of dynamic semantic scales}: the presentation scale and the quality scale. In the \textbf{presentation scale}, the \textbf{notional component of the verb} performs the DSF of \textbf{Presentation} and the \textbf{subject} performs the DSF of \textbf{expressing the Phenomenon to be presented}. The information conveyed by the subject completes the development of the communication within the distributional field. The \textbf{adverbial} conveys only background, concomitant information, performing the DSF of \textbf{Setting}. The adverbial expresses the scene and the subject the person or the thing appearing on the scene. In the \textbf{quality scale}, the \textbf{notional component of the verb} performs the DSF of expressing a
brial *inside*—in spite of being context-independent—is only concomitant in character, and therefore serving as a Set. Moreover, intonation makes the noun phrase *no lights* the most prominent sentence element of all, thus belonging to the rhematic sphere of the given distributional field. As for the adverb *there* used in the existential sentence, it functions as a grammatical subject, it is context-dependent and invariably performs the DSF of Set (for exemplification of the cases in which a spatial adverbial(s) in the existential sentence function as a Sp, see Section 4.1.3 below, especially Example 19).

As for the spatial adverbials operating in the transitional sphere of the sentence, those that are under present investigation are all *wh*-elements introducing either nominal *wh*-clauses or relative clauses functioning as postmodifications in noun phrases (for a modification concerning *wh*-elements in interrogative *wh*-clauses, see footnote 4). Owing to their low frequency of occurrence they are not represented by any example here.

### 4.1.2 Single temporal adverbials

The results drawn from the analysis of single temporal adverbials of any realization type co-occurring with one FVP within the same clause are presented in Table 2 below. Similarly to single spatial adverbials, this table indicates the DSFs of single temporal adverbials with regard to their position in the clause as well as with regard to their semantic classification, distinguishing temporal adverbials of position, duration, frequency, and relationship.

Unlike spatial adverbials, the majority of which perform the DSF of Sp, notably when placed in end position, temporal adverbials behave slightly differently. The preference to perform the function of Specification applies only to two semantic classes, notably temporal adverbials referring to position and those relating to duration. The former represent more than 50% and the latter about 78% of all temporal adverbials within their semantic classes. When performing the DSF of Sp, the above-mentioned temporal adverbials are always placed in end position in the data analysed, as illustrated by Examples 10 and 11 below:

Example 10:  
*they ^interviewed the Edinburgh girl Nast# (S.1.3.492).*

Example 11:  
*<em>well ^I ha<<dn’t>> 'done any 'English at :all# ^you kn/ow# ^since NQ-'level# (S.1.5.30-32).*

The temporal adverbials *last* and *since O-level*, both placed in end position, are context-independent and both carry the highest degree of CD as well as PP within their distributional fields. Consequently, they perform the function of Sp, belonging to the rhematic sphere of their fields.

*Quality* and the subject performs the DSF of expressing the Bearer of quality. As Firbas states (1992.66), the verb perspectives the communication "towards the Quality ascribed to the Phenomenon expressed by the subject or beyond this quality towards its Specification".
### Table 2

Single temporal adverbials with regard to FSP (semantic role and position included)

<table>
<thead>
<tr>
<th>Semantic role</th>
<th>Position</th>
<th>Duration</th>
<th>Frequency</th>
<th>Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SET</td>
<td>TR</td>
<td>SP</td>
<td>SET</td>
</tr>
<tr>
<td>FSP</td>
<td>SET</td>
<td>TR</td>
<td>SP</td>
<td>SET</td>
</tr>
<tr>
<td>Placement</td>
<td>I M E</td>
<td>I M E</td>
<td>I M E</td>
<td>E I M E</td>
</tr>
<tr>
<td>S.1.1</td>
<td>6 1 9</td>
<td>0 0 0</td>
<td>0 24</td>
<td>4 0 0 0</td>
</tr>
<tr>
<td>S.1.3</td>
<td>4 1 5</td>
<td>0 1 0</td>
<td>0 19</td>
<td>2 0 0 0</td>
</tr>
<tr>
<td>S.1.5</td>
<td>9 4 14</td>
<td>0 4 0</td>
<td>0 24</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>S.1.6</td>
<td>4 1 7</td>
<td>0 5 0</td>
<td>0 15</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>S.1.8</td>
<td>2 2 7</td>
<td>0 2 0</td>
<td>0 8</td>
<td>3 1 0 0</td>
</tr>
<tr>
<td>Total (Placement)</td>
<td>25 9 42</td>
<td>0 12 0</td>
<td>0 90</td>
<td>9 1 0 0</td>
</tr>
<tr>
<td>Total (FSP) No.</td>
<td>76 12 90</td>
<td>9 1 35</td>
<td>10 49 13</td>
<td>31 13 17</td>
</tr>
<tr>
<td>Total (FSP) %</td>
<td>42.7 6.7 50.6</td>
<td>20.0 2.2 77.8</td>
<td>13.9 68.1 18.0</td>
<td>50.8 21.3 27.9</td>
</tr>
</tbody>
</table>
The two remaining semantic classes of **temporal adverbials**, **frequency** and **relationship**, have also been found when performing the function of Sp. However, their frequency of occurrence in this function is considerably lower, representing 18% with adverbials of frequency and almost 28% with those of relationship. Unlike temporal adverbials of position and duration, those of frequency and relationship also occur in medial position when performing the DSF of Sp (6 cases). An example of such an adverbial follows:

**Example 12:**

<<but I mean>> I’ve ^always 'led# ^that sort of life#
(S.1.5.96-97).

The adverbial *always*, referring to frequency, carries the highest degree of CD as well as PP. Unlike the other sentence elements, it is context-independent and, while carrying a nucleus (fall), it is more prosodically prominent than the context-dependent object *that sort of life*, which also carries a nucleus (rise), placed on the noun *life* (for another case in which a high fall is followed by a low rise, see Example 7 above). It is worth mentioning that the adverbial *always* is an adverb of indefinite time, which frequently serves as a transition proper oriented element. As illustrated in Example 12, an adverbial can gain in CD it carries and become part of the rhematic sphere of the given field when the interplay of the FSP factors permits it. This can happen, for instance, when the speaker wants to place emphasis on a particular notion (for more information on the running commentary on the attitudes of the speaker to the content of his/her utterance, see Firbas 1992.143ff).

The above example illustrates what Firbas labels as **re-evaluating prosodic intensification**: a sentence element (the adverbial *always*) that would be determined as non-rhematic (thematic or transitional) by the interplay of the non-prosodic FSP factors carries the most prominent nucleus and thus becomes rhematic within the given distributional field. Another element within the same field (the context-independent predicative verb *led* in Example 12 above) that would be determined by the non-prosodic FSP factors as rhematic and which is placed after the element that carries a nucleus appears in the post-intonation-centre prosodic shade and is re-evaluated to a thematic element.

As for the **medially placed temporal adverbials** labelled in Table 2 as elements **performing the function of transition**, they are all temporal adverbials **referring to indefinite time**. In fact, this applies to all semantic classes of adverbials found in medial position: **position**, **frequency**, and **relationship** (for a modification concerning temporal adverbials of indefinite time placed before a complement, see below). All these adverbials are framed in between the subject and the notional component of the predicative verb and all of them operate in close cooperation with the TMEs of the notional verb with which they co-occur, thus serving as **transition proper oriented elements** (for more information, see Section 3 above), as in:
Example 13:

\[\text{and} \quad ^{\wedge}\text{we never } \text{see 'half of them} \ (S.1.5.876).\]

The occurrence of temporal adverbials of frequency and relationship when serving as transition proper oriented elements placed before a complement requires further explanation. All adverbials of this type are adverbials placed in what according to Quirk et al. (1985.498-500) is the initial end (iE) position, i.e. the position after the predicative verb, as in:

Example 14:

\[\text{and was } ^{\wedge}\text{still the _sixth 'form} \ (S.1.6.304).\]

As can be seen from the above example, the iE position is not the very final position in the clause. The adverbial \textit{still}, referring to indefinite time, although placed after the verb, is not placed after the complement expressed by the noun phrase \textit{the sixth form}. Since the present study does not distinguish any subpositional variants of the three basic clause positions, initial, medial, and end (for more information, see Quirk et al. 1985.490-501), the adverbials placed in iE position are listed together with adverbials placed in E position, i.e. the position after all obligatory sentence elements. That is the reason why such adverbials are listed in the columns under the label E position, not M position, which is otherwise a typical clause position of adverbials referring to indefinite time. This modification concerns all temporal adverbials of frequency and relationship found in the data that serve as transition proper oriented elements and which are listed in the columns for the E position in Table 2 above (altogether 7 occurrences).

As for the \textit{temporal adverbials performing the DSF of Setting}, the individual semantic classes behave differently. As can be seen from Table 2 above, the only semantic category that has been found only in one clause position, notably in \textit{end position}, when performing this function, is \textit{duration} (20% of all adverbials of duration), illustrated by the example that follows:

Example 15:

\[\text{I've been }^<<^{\wedge}\text{piecing}>> \text{it 'out all the 'time} \ (S.1.8.177).\]

The adverbial \textit{all the time}, though context-independent, is not the element to which the distributional field in which it occurs is perspected. It expresses mere background information and performs the DSF of Set, thus belonging to the thematic sphere of its field. The subject \textit{I} and the object \textit{it} are both context-dependent, thus allowing the notional component of the predicative verb to exceed them in CD. In addition, this fact is reflected by intonation because the notional component of the verb \textit{to piece out} is prosodically the most prominent element of all, which is indicated by a nuclear tone (fall) placed on the adverb particle \textit{out}. The notional component of the predicative phrasal verb carries the highest degree of CD as well as PP.
As for the temporal adverbials referring to position, they are most frequently placed in end position when performing the DSF of Setting, although they have been found also in all the other clause positions in the data, for instance, in initial position, which is illustrated by the example that follows:

Example 16:

«at>> ^this :point 'somebody excl/aimed# «an>> in\'finity ' of in\'finities# (S.1.6.998-999).

The initially placed adverbial at this point is context-dependent (indicated also by the demonstrative this) and therefore it conveys only concomitant information. It functions as a Set, thus a thematic sentence element. This is reflected by the distribution of PP. The above adverbial while being unstressed is followed by two nuclei within the same distributional field, one on the predicative verb exclaimed and the other on the noun infinity, thus both being prosodically more prominent than the adverbial at this point. In this case, it is possible to speak about the basic distribution of CD (for more information, see Section 4.1.1 above).

When performing the DSF of Setting, the temporal adverbials of frequency and those referring to relationship fairly frequently occur also in initial position, with the latter it being the unambiguously predominant possibility.

Example 17:

where oc^casionally I'd say something :funny# (S.1.3.477).

Example 18:

and ^then they 'sort of they ^score them \up# (S.1.5.534).

The above examples show temporal adverbials of frequency and relationship when performing the DSF of Set. They convey concomitant information and provide a foundation for the message to be completed in the given distributional field. Consequently, they belong to the thematic sphere of their fields. In both the examples, the adverbials have successful competitors with regard to the degree of CD they carry relative to the other sentence elements. In the former example, the most prominent element with regard to CD as well as PP is the adjective funny, while in the latter example, it is the notional component of the predicative phrasal verb to score up, having a nucleus on the adverb particle up. These most prosodically prominent elements perform in each of the above cases the DSF of Sp.

4.1.3 Multiple homosemantic adverbials

As stated above, multiple homosemantic adverbials are co-occurrences of two or more adverbials of the same semantic role with one FVP within the same clause, which in the present investigation only implies sequences of either spa-
tial or temporal adverbials. It must be stated, however, that the results concerning more than two adverbials co-occurring with one FVP will not be presented in any table here. The reason is their low frequency of occurrence, which, for instance, in the case of multiple spatial adverbials is one token only.

For the analysis of multiple homosemantic adverbials with regard to FSP, not only the criterion of the semantic role of adverbials, but also the distinction between two types of adverbial sequences—clusters and combinations—has been applied. In addition, all the adverbials analysed have been semantically classified: spatial adverbials into those relating to position (P), direction (DIR), and distance (D), and temporal adverbials into those expressing position (POS), duration (DUR), frequency (F), and relationship (R).

Table 3
Multiple spatial adverbials with regard to FSP

<table>
<thead>
<tr>
<th>Semantic Role</th>
<th>FSP</th>
<th>Clusters</th>
<th>Combinations</th>
</tr>
</thead>
<tbody>
<tr>
<td>P P</td>
<td>Set Set</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Set Sp</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Sp Sp</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>DIR DIR</td>
<td>Sp Sp</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>DIR P</td>
<td>Sp Sp</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Total (No.)</td>
<td></td>
<td>19</td>
<td>19</td>
</tr>
</tbody>
</table>

Let me make a few remarks on the DSFs performed by spatial adverbials in the act of communication. As can be seen from Table 3, when two spatial adverbials co-occur with one FVP, then clusters are unambiguously preferred. Moreover, based on my results, it can be stated that the spatial adverbials co-occurring in clusters tend to perform the same dynamic semantic function in the further development of communication. This conclusion is evidenced by the overwhelming majority of two co-occurring spatial adverbials (18 occurrences), notably while both performing the DSF of Specification (17 occurrences), as in:

Example 19:

^I should 'think there were !just as 'many M/uslims [in ^/India#)]# as in ^Paki!st\an# (S.1.6.563-4).

The two adverbials in the above example express a comparison of two positions realized by two prepositional phrases, in India as in Pakistan. There is no doubt that such a comparison is semantically important and conveys information that is context-independent. In addition, the above comparison is the most prosodically prominent sentence element of all, having a nucleus placed on each alternative. Accordingly, the adverbials perform the DSF of Sp, thus belonging to the rhematic sphere of the given distributional field. On the other hand, the
notional subject expressed by the noun phrase many Muslims is reduced to a thematic sentence element. The adverbial there functioning as a grammatical subject performs the DSF of Set, thus belonging to the thematic sentence elements.

Owing to the extremely low frequency of occurrence, the remaining cases presented in Table 3 above will not be discussed and exemplified here.

Let me now turn to the results based on the analysis of multiple temporal adverbials. They are presented in Table 4 below, indicating the relationships between their semantic classification, the type of sequence in which they occur, and above all their dynamic semantic function. It is evident that, unlike multiple spatial adverbials, multiple temporal adverbials are as frequent in clusters as in combinations. The following notes will be concerned only with the most frequent cases, having more than two occurrences in the material examined.

Of the discontinuous sequences, the most typical case is a combination of two temporal adverbials, one performing the DSF of Set, placed in initial position and the other performing the DSF of Sp, placed in end position. Adverbials co-occurring in this type of sequence are above all two adverbials of position, or a combination of one adverbial of relationship and the other of position, as the two following examples illustrate, respectively:

**Example 20:**
combination of initial and end position: position + position

^last y/ear# [e:] he ^should have had his dissertation Vin# <<<at the>>> be^ginning of MVay# (S.1.1.72-75).

**Example 21:**
combination of initial and end position: relationship + position

and "^then they ^rang up# about ^six months Vater# ^thr
ee months Vater# (S.1.3.134-136).

Each of the above examples comprises two adverbials. The first adverbial is placed in initial position and conveys mere background information. Therefore it performs the DSF of Set and belongs to the thematic sphere of the given distributional field. The other adverbial is placed in end position and conveys context-independent information towards which the given distributional field is perspectived. It performs the DSF of Sp, thus belonging to the rhematic sphere of the given field and of all sentence elements contributing most to the further development of the communication. In Example 20, there are three nuclei which gain in PP with linear modification. The first nucleus (rise) is placed on the noun year, thus making the adverbial last year prosodically intensified, at the expense of the transitional elements, nevertheless remaining in the thematic sphere of the given distributional field and performing the DSF of Set (for more information about selective non-reevaluating intensification, see Firbas 1992.159). The third nucleus (fall-rise) in the above sequence is placed on the noun May, thus making the adverbial at the beginning of May most prosodically prominent of all the sentence elements in the above clause. In Example 21, the
initially placed adverbial *then* while having no stress at all is followed by four nuclei, three of them placed on the adverbial *about six months later three months later*, thus making it the most prosodically prominent element of all within the given distributional field.

Table 4

Multiple temporal adverbials with regard to FSP

<table>
<thead>
<tr>
<th>Semantic Role</th>
<th>FSP</th>
<th>I Clusters</th>
<th>Combinations</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS POS</td>
<td>Set Set</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Set Sp</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Tr Set</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Tr Sp</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sp Sp</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Sp Set</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>DUR DUR</td>
<td>Sp Sp</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>F F</td>
<td>Sp Sp</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>R R</td>
<td>Set Set</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Set Sp</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>POS F</td>
<td>Set Tr</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sp Sp</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>POS R</td>
<td>Set Set</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Set Tr</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Set Sp</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>DUR POS</td>
<td>Sp Sp</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Sp Set</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>F POS</td>
<td>Tr Set</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Tr Sp</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sp Set</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>R POS</td>
<td>Set Set</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Set Sp</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>37</td>
<td>2</td>
<td>16</td>
</tr>
</tbody>
</table>

Unlike the discontinuous sequences, discussed above, the continuous sequences frequently comprise two temporal adverbials both performing the DSF of Sp (13 cases of 16 clusters). This finding is similar to the results drawn from the analysis of multiple spatial adverbials (compare with Table 3 above).

Example 22:

cluster in end position: position + position

^you would !see her !literally^ at ^eleven o’clock at night^  
(S.1.8.1075-1076).
In Example 22, there are two temporal adverbials placed in end position. They carry the highest degrees of CD within their distributional field. Unlike, for instance, the subject you and the object her, they are both context-independent and more dynamic than the transitional predicative verb to see and its TMEs. The distribution of degrees of CD as determined by the non-prosodic FSP factors is reflected by the distribution of degrees of PP: there are two nuclei, one on the adverbial literally (fall) and the other on the adverbial at night (fall). The latter nucleus is more prominent than the former, which reflects that the whole sequence of two temporal adverbials at eleven o'clock at night functions as a Sp. It is possible to speak about linear modification fully asserting itself, both with regard to degrees of CD as determined by the non-prosodic FSP factors and with regard to degrees of PP as indicated by intonation. In connection with the above example, it is worth mentioning Bolinger's paper "Linear modification" (1965.288), in which he holds that "gradation of position creates gradation of meaning when there are no interfering factors". This is exactly what Example 22 illustrates.

Based on the results presented in Table 4, it can be claimed that whenever there are two temporal adverbials co-occurring in a cluster placed in end position, then at least one of them, if not both, performs the DSF of Specification.

On the contrary, when there are two temporal adverbials co-occurring in a cluster which is placed in initial position, then if the interplay of all the FSP factors permits it, they both perform the DSF of Set. One of two cases found in my data is presented below:

**Example 23:**

*cluster in initial position: relationship + position*

\[
\text{and } \text{then the second year} \text{ I found that although the place } \text{ was a } \text{frustrated} \text{ at not using it at all} \text{ (S.1.5.1253-1256).}
\]

Example 23 comprises two temporal adverbials both placed in initial position and both performing the DSF of Set. The former adverbial referring to relationship relates what follows to the preceding context, whereas the latter—although also context-independent—conveys information that is only concomitant in character, thus carrying a low degree of CD. The highest degree of CD is expressed by the whole that-clause which consists of several subordinate clauses, i.e. distributional subfields. Nevertheless, as a whole the that-clause (beginning with that although the place and so forth) functions as an object in the basic field provided by the superordinate clause: and then the second year I found.

As can be seen from Table 4 above, **multiple temporal adverbials placed in initial position are not at all frequent** in the data analysed. This finding is in contrast to the results based on the analysis of single adverbials, which has proved that single temporal adverbials, particularly those of relationship, occur in initial position fairly frequently.
4.1.4 Multiple heterosemantic adverbials

The results based on the analysis of heterosemantic sequences of adverbials, i.e. co-occurrences of at least one spatial and at least one temporal adverbial with one FVP in the same clause, are presented in Tables 5 and 6 below. As for co-occurrences of more than two adverbials with one FVP, the results drawn from their analysis will not be presented in any table here, the reason being their low frequency of occurrence. Table 5 comprises heterosemantic adverbials with S→T word order and Table 6 those with T→S word order, both occurring either in clusters or combinations. Let me now turn to their DSFs performed in the act of communication, notably with regard to their semantic classification.

The S→T word order is typical of continuous sequences of co-occurring spatial and temporal adverbials, whereas T→S word order is more common with their discontinuous sequences. This result is similar to Horová's conclusions (1976).

Table 5 clearly indicates that clusters with S→T word order have been found only in end position in the texts analysed. In the majority of cases (40 of 46 clusters), they perform the DSF of Specification. This function is performed either by both of the co-occurring adverbials (13 occurrences), as in Example 24 below, or by at least one of them. In the latter case, the function of Sp is performed either by the first adverbial (9 cases), illustrated by Example 25 below, or, more frequently, by the second of the two adjacent adverbials (18 cases), as in Example 26 below. Let me briefly illustrate the three above-mentioned types, notably with the most typical semantic classes of adverbials.

Example 24:
cluster in end position: direction (space) + position (time)

because I'm going to Madrid on the tenth (S.1.1.91-92).

The spatial adverbial to Madrid as well as the temporal adverbial on the tenth convey context-independent information. With regard to the meaning it carries, the former adverbial is more important than the predicative verb am going which it complements. Consequently, it is its successful competitor with regard to the degree of CD carried by each of them and it performs the DSF of Sp, belonging to the rhematic sentence elements. By specifying the time at which the action expressed by the predicational verb will take place, the temporal adverbial on the tenth conveys important information and also performs the DSF of Sp. Both the adverbials are placed in end position, which is in agreement with the basic distribution of CD. This distribution is reflected by intonation, placing two nuclei on the above-mentioned adverbials.
Table 5
Multiple heterosemantic adverbials with regard to FSP (S→T word order)

<table>
<thead>
<tr>
<th>Semantic Role</th>
<th>FSP</th>
<th>Clusters E</th>
<th>Combinations</th>
</tr>
</thead>
<tbody>
<tr>
<td>P POS</td>
<td>Set Set</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Set Sp</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Sp Sp</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Sp Set</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>P DUR</td>
<td>Set Set</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Set Sp</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Sp Set</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>P F</td>
<td>Sp Sp</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>P R</td>
<td>Set Set</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Set Tr</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>DIR POS</td>
<td>Set Sp</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Sp Sp</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Sp Set</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>DIR F</td>
<td>Sp Set</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>DIR R</td>
<td>Sp Set</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>D R</td>
<td>Sp Set</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total (No.)</td>
<td>47</td>
<td>46</td>
<td>1</td>
</tr>
</tbody>
</table>

Clusters comprising one spatial adverbial performing the DSF of Specification and the adjacent temporal adverbial serving as a Setting have lower frequency than those with two adverbials both performing the DSF of Sp. The most frequent types occur with the following semantic classes: position (space) + position (time), direction (space) + position (time). All the other cases are rather exceptional, not reaching more than 2 occurrences in the data analysed. One token of a more frequent type follows:

Example 25:
cluster in end position: position (space) + position (time)

he would be :awfully :gr\ateful# if you could –^see him in your
office sometime# (S.1.1.574-575).

The above example comprises one spatial adverbial in your office and one temporal adverbial sometime. Both of them convey context-independent information and are placed adjacent to each other in end position. The former adverbial performs the DSF of Sp, thus belonging to the rhematic sentence elements, whereas the latter adverbial serves as a Set, thus operating within the thematic sphere of the given distributional field. This distribution of CD as determined
by the non-prosodic FSP factors is reflected by the distribution of PP. The former adverbial carries a nucleus (fall on the noun *office*) which—although followed by another nucleus (rise on the adverb *sometime*)—is the most prominent nuclear tone of all. As stated above a low rise after a high fall is in the post-intonation-centre prosodic shade and all elements occurring within this shade are thematic. In fact the adverbial *sometime* is diathematic (for more information on *diatheme*, see Svoboda 1981).

Clusters comprising one spatial adverbial performing the DSF of Setting and the adjacent temporal adverbial with the DSF of Specification are even more frequent than the cases described above. The most frequent types, each having 5 to 7 occurrences in my data, occur with the following semantic classes: position (space) + position (time), direction (space) + position (time), and position (space) + duration (time), the last-mentioned type being illustrated by the example that follows:

**Example 26:**
cluster in end position: position (space) + duration (time)

$I^[k]I^[s]at there\ all the\ time# (S.1.3.1103).

The above example comprises two adverbials, placed adjacent to each other in end position. The spatial adverbial *there* is context-dependent and conveys mere background information. It performs the DSF of Set, thus belonging to the thematic sentence elements. On the contrary, the temporal adverbial *all the time* is context-independent and conveys important information. It performs the DSF of Sp, thus operating in the rhematic sphere of the given field. This distribution of CD is reflected by the distribution of PP, the most prominent intonation nucleus being placed on the noun *time*, thus making the whole noun phrase *all the time* carry the highest degree of CD as well as PP.

The last case that will be illustrated in connection with the sequences of adverbials having S→T word order is a cluster of two adverbials both performing the DSF of Set. Clusters of this type have 6 occurrences in the data analysed, the most frequent being two adverbials, one spatial and one temporal, both referring to position:

**Example 27:**
cluster in end position: position (space) + position (time)

*there's a ^wireless out'side now* (S.1.8.615).

The above example presents the existential sentence *there + be*, accompanied by both a spatial and a temporal adverbial. The whole distributional field is perspective towards the Phenomenon to be presented (see footnote 7 above), which is expressed by the notional subject *a wireless*. This is reflected by intonation, the most prominent nucleus falling on the noun *wireless* (fall). The following two adverbials convey only concomitant information, thus serving as a Set. The adverbial *now* is semantically more important than the adverbial *out-*
side because it expresses contrast in the above example. This is reflected by the
distribution of degrees of PP: while the former adverbial carries unaccented
stress, the latter adverbial carries a nucleus (rise), thus being more prosodically
prominent. However, both the adverbials occur in the post-intonation-centre
prosodic shade and are therefore thematic. As for the adverb there in the above-
illustrated existential sentence, it functions as a grammatical subject, it is con­
text-dependent and invariably performs the DSF of Set (for exemplification of
the cases in which a spatial adverbial(s) in the existential sentence function as a
Sp, see Section 4.1.3 above, especially Example 19).

Summing up my results based on the analysis of the multiple heteroseman­
tic sequences of adverbials with S→T word order, it can be maintained that
clusters clearly predominate. They tend to occur in end position and in the
majority of cases at least one of the two co-occurring adverbials performs
the DSF of Specification, thus belonging to the most dynamic sentence ele­
ments within their distributional field.

As for the results of the heterosemantic sequences with T→S word order,
they are presented in Table 6 and manifest a great variety of possibilities with
regard to the DSFs that can be performed by two co-occurring adverbials in the
act of communication. Let me make a few remarks on those semantic types that
have more than two occurrences in my corpus.

Table 6
Multiple heterosemantic adverbials with regard to FSP (T→S word order)

<table>
<thead>
<tr>
<th>Semantic Role</th>
<th>FSP</th>
<th>I Clusters E</th>
<th>Combinations</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS P</td>
<td>Set Set</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Set Sp</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Sp Sp</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Sp Set</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>POS DIR</td>
<td>Set Set</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Set Sp</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Sp Sp</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Sp Set</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>POS D</td>
<td>Set Set</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Set Sp</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>DUR P</td>
<td>Set Sp</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sp Sp</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>F P</td>
<td>Tr Set</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Tr Sp</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Sp Set</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>R P</td>
<td>Set Set</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Set Sp</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>R DIR</td>
<td>Set Sp</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Total (No.)</td>
<td>43</td>
<td>1</td>
<td>12</td>
</tr>
</tbody>
</table>
As can be seen from the table, the sequences of heterosemantic adverbials with T→S word order tend to occur in combinations (30 occurrences). Nevertheless, clusters with T→S word order are fairly frequent (13 occurrences), one of them, placed in initial position, being shown in the following example:

Example 28:
cluster in initial position: position (time) + position (space)

though in ^fact# "^one day here# you ^know# it was ^slack# (S.1.5.312-315).

Example 28 represents the only case found in my data in which a cluster of two heterosemantic adverbials is placed in initial position. The clause in which the two adverbials co-occur, the T adverbial one day and the S adverbial here, is perspectived towards the complement expressed by the noun slack. It is context-independent and carries the highest degree of CD as determined by the non-prosodic FSP factors. This is reflected by intonation: the placement of the most prominent nucleus (fall) on the noun slack. This complement represents syntactically obligatory complementation of the predicative verb to be, which it exceeds in CD. The above-mentioned adverbials perform the DSF of Set, thus belonging to the thematic sphere of the given field. They co-constitute the foundation upon which the core of the message is further developed. Being both prosodically intensified, they represent what Firbas labels as selective non-reevaluating prosodic intensification (for more information, see Firbas 1992.156ff.). This intensification is in harmony with the tendency to underline the theme-rheme relationship by giving relative prominence to diatheme (for more information about diatheme, see Svoboda 1981).

As for the heterosemantic clusters with T→S word order placed in end position, none of the semantic types found in the texts analysed has more than one occurrence. That is the reason why they are not illustrated by any example here.

Let me now make a few remarks on the heterosemantic sequences of adverbials with T→S word order occurring in combinations. With this word order, combinations are clearly preferred to clusters. All the four more frequent types, each having 3 to 7 occurrences, comprise two adverbials, one temporal, placed initially and performing the DSF of Set, and one spatial, placed finally and performing the DSF of Sp. It is in agreement with the basic distribution of CD which consists in a gradual rise in CD from the beginning to the end of the sentence and which is represented by 23 of 30 combinations with T→S word order found in my material.

The more frequent combinations with T→S word order are the following semantic classes: position (time) + position (space), position (time) + direction (space), relationship (time) + position (space), and relationship (time) + direction (space). The two last-mentioned types follow:
Example 29:
combination of initial and end position: relationship (time) + position (space)

and \( ^\text{then} \) she got a – research fellowship at \:GN\text{asgow}\# (S.1.3.1224).

Example 30:
combination of initial and end position: relationship (time) + direction (space)

\( ^\text{then} \) he’d !gone up to \:D\text{urham}\# (S.1.6.704).

Both the above examples comprise two adverbials. The first adverbial in each of them is the temporal adverbial of relationship \( \text{then} \), usually placed in initial position and in the majority of cases performing the DSF of Set. It performs a cohesive function because it clearly connects what has been said in the preceding context with what will be said next. The spatial adverbial in each of the above examples (at Glasgow and to Durham respectively in Examples 29 and 30) is the sentence element towards which the distributional field provided by the whole clause in which it occurs is perspectived. It is context-independent, in Example 30 both syntactically and semantically required, and always placed in end position. The distribution of degrees of CD as determined by the interplay of the non-prosodic FSP factors is reflected by intonation: the spatial adverbial is the most prosodically prominent element of all, carrying in each case the only nucleus in its field.

The above results are also in agreement with Uhlifova’s conclusions presented in her article (1974.99-106) in which she deals with the semantics of adverbials and their roles in FSP. She points out that temporal adverbials frequently convey only concomitant information, thus being communicatively less important than the notional component of the predicative verb with which they co-occur in the same clause. Consequently, they usually serve as a Setting. On the other hand, spatial adverbials frequently convey more important information than that conveyed by the predicative verb which they complement; therefore while being communicatively important they serve as a Specification.

Let me finish the illustrations of the heterosemantic combinations with T→S word order with one token, in which both the initially placed T adverbial and the finally placed S adverbial perform the DSF of Set. Cases of this type have only 3 occurrences in my corpus.

Example 31:
combination of initial and end position: relationship (time) + position (space)

– \( ^\text{then} \) she did \([e:m]\) – – :\text{MS}\:C \:at/\:Oxford\# (S.1.3.1222).

The same explanation that applies to the adverbial \( \text{then} \) in Examples 29 and 30 above, applies to \( \text{then} \) in Example 31. Unlike them, however, the last-
mentioned example comprises a finally placed spatial adverbial that conveys context-dependent information (the adverbial *at Oxford*). It is exceeded in the degree of CD it carries by the preceding object *MSC*, which is context-independent and the whole distributional field provided by the above clause is perspectived to this most dynamic element. The distribution of CD as determined by the non-prosodic FSP factors is reflected by intonation. Both the object *MSC* (fall) and the adverbial *at Oxford* (rise) carry nuclear tones, nevertheless the former nucleus is more prosodically prominent (for more information about a low rise after a high fall, see Firbas 1992.152).

Based on the results presented in Table 6 above, it can be summed up that **multiple heterosemantic sequences of adverbials with T→S word order have a tendency to occur in combinations**. In the majority of cases, the **first adverbial in such a combination performs the DSF of Setting**, whereas the **second adverbial**, placed in end position, **serves as a Specification**. Nevertheless, clusters with T→S word order occur and, similarly to multiple heterosemantic sequences of adverbials with S→T word order, they frequently comprise at least one adverbial functioning as a Sp.

### 4.2 Clausal amplification

As stated in Section 4.1 above, the present study draws a distinction between adverbials expressed by phrases, i.e. through **phrasal amplification**, and those expressed by clauses, i.e. through **clausal amplification**. This distinction with regard to FSP has been exemplified in the aforementioned section. Let me now present the results based on my analysis. Tables 7 and 8 below offer surveys of all clauses found in the data examined, the former table covering spatial, and the latter table temporal, amplification.

Table 7, offering the details about **spatial clausal amplification**, gives evidence of the extremely low frequency of spatial clauses in my corpus. If they occur at all (only 3 occurrences), they are placed in end position within their superordinate clause. They perform the DSF of Sp, thus as a whole belonging to the rhematic sphere of the distributional field provided by their superordinate clause. One token of such a clause follows:

**Example 32:**

```plaintext
and I got ^all the 'way 'through the c\ollege^ to ^where the c\ar
was^ at the ^parking meter at the :other end^ (S.1.3.27-29).
```

The above example comprises five adverbials, four phrases, *all the way*, *through the college*, *at the parking meter*, and *at the other end*, and one clause *where the car was at the parking meter at the other end*, which itself comprises two of the above-mentioned phrases. This example illustrates an interesting case which comprises a **string of several adverbials, adjacent to each other and all performing the DSF of Specification**. The two adverbials placed last in the string function as a Sp within the subfield provided by the aforementioned S
clause. This clause as a whole functions as a Sp within the superordinate field provided by the whole sentence in the above example. The S clause is placed last in a string of Specifications within this superordinate clause, the two preceding Specifications being the first two phrases mentioned above. This distribution of CD is reflected by intonation. Within the S clause, there are two nuclear tones, one on the subject car (fall) and the other (fall) on the adverbial at the other end (or rather on its part: the determiner other). The last-mentioned nucleus is the most prominent of all, which accounts for the fact that the adverbial at the other end is the most prominent element within the distributional field of the above-illustrated S clause, thus representing it in the distributional field of its superordinate clause. In the superordinate clause and I got all the way through the college to, there is also a nucleus. It is placed on the noun college, thus making the adverbial expressed by the prepositional phrase through the college prosodically prominent. Nevertheless, being followed by the S clause comprising two nuclear tones, it is prosodically less prominent than the adverbial expressed by the S clause itself. Example 32 illustrates a case with a long string of Specifications, expressed by different realization types of adverbials.

Table 7
Spatial clauses with regard to FSP

<table>
<thead>
<tr>
<th>FSP</th>
<th>Set</th>
<th>Sp</th>
</tr>
</thead>
<tbody>
<tr>
<td>FVP + SC</td>
<td>I</td>
<td>M</td>
</tr>
<tr>
<td>FVP(T/S) + SC</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>FVP + SC (T/S)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>FVP (T/S) + SC (T/S)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>FVP (T/S) + SC (T/S)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: The only two abbreviations which have not yet been explained above are T/S and SC. The former stands for a phrase, either temporal or spatial, the latter for a spatial clause.

The details connected with temporal clausal amplification are presented in Table 8 below. Owing to the extremely low frequency of spatial clauses, to compare spatial and temporal clausal amplification is irrelevant in the present inquiry. As can be seen from the table, temporal clauses can perform either the DSF of Sp or that of Set, with the former function occurring exclusively in end position, whereas with the latter function being found in all the three basic clause positions.

A temporal clause with the DSF of Sp has been illustrated by Example 2 in Section 4.1 above. Let me present still another example here. Unlike Example 2, which represents the type FVP + TC (T/S), the following temporal clause comprises some phrasal amplification both in the superordinate and its subordinate
clause, thus representing the type FVP (T/S) + TC (T/S), indicated in Table 8 below.

Example 33:

^but^ ^anyway^ ^this is _his!Nine! and ^he's st\icking 'to it# at the ^m\oment^ ^till he 'changes 'next :yYear# (S.1.6.393-398).

Example 33 comprises three temporal adverbials, two expressed by a phrase and one by a clause. Within the distributional field of the T clause _till he changes next year_, the most dynamic sentence element is the adverbial _next year_. It is context-independent and the distributional subfield provided by the T clause is perspectived to it. In addition, it is the only element having a nucleus (placed on the noun _year_), thus being also most prosodically prominent. Therefore, the adverbial _next year_ represents the T clause as a whole and this clause functions as a Sp. Neither the nuclear tone placed on the notional component of the predicative verb _is sticking_, nor that placed on the prepositional phrase _at the moment_ are more prosodically prominent. Example 33 lends further support to Firbas’s statement that **prosodic features of the same rank gain in PP in the direction from the beginning to the end of the distributional field** (for more details, see Firbas 1992.154ff).

Table 8

Temporal clauses with regard to FSP

<table>
<thead>
<tr>
<th>FSP</th>
<th>Set</th>
<th>Sp</th>
</tr>
</thead>
<tbody>
<tr>
<td>FVP + TC</td>
<td>1</td>
<td>M</td>
</tr>
<tr>
<td>FVP(T/S) + TC</td>
<td>18</td>
<td>2</td>
</tr>
<tr>
<td>FVP + TC (T/S)</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>FVP (T/S) + TC (T/S)</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>FVP (T/S) + TC (T/S)</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: The abbreviation TC stands for a temporal clause. Compare with Table 7 above.

As for the **temporal clauses functioning as a Setting**, the following set of three examples illustrates them in three different clause positions, initial, end, and medial, listed in order of decreasing frequency as found in the data examined:

Example 34:

^when you were in the :d\esert# . ^you were very th\irsty# (S.1.3.1139-1140).

Example 35:

_the^ ^<<very j\aggly>> 'one# im^pr\oves# – when you ^\look at it# (S.1.8.257).
Example 36:

\(^\text{Grace}\) when - \(^\text{she was leaving}\) sort of \(^\text{said}\) \(^\text{well}\) - \\
\(^\text{he 'ought to 'make him'self a \!'time'table}\) (S.1.5.629-632).

All the temporal clauses illustrated above convey only background information and perform the DSF of Set, thus belonging to the thematic sphere of the distributional field provided by the superordinate clause to which they belong. Let me take them one after another.

Example 34 represents the most frequent cases: a temporal clause serving as a Set placed in initial position. In fact, this example illustrates what I call **spatio-temporal amplification**, i.e. co-occurrence of at least one spatial and at least one temporal adverbial, irrespective of their realization type. The above example comprises two adverbials, one S adverbial expressed by the prepositional phrase *in the desert* and one T adverbial expressed by the clause *when you were in the desert*. The S adverbial carries the highest degree of CD within the subfield provided by the T clause which in its turn functions as one communicative unit, namely a Set, within its superordinate field provided by the superordinate clause *you were very thirsty*. The distribution of degrees of CD as determined by the non-prosodic FSP factors is reflected by the distribution of PP: there are altogether two nuclei (falls) in Example 34, one on the noun *desert* making the prepositional phrase *in the desert* most prosodically prominent within the aforementioned T clause, nevertheless being exceeded in PP by the complement *very thirsty*, in which the nucleus is placed on the adjective *thirsty*.

Example 35 shows a T clause functioning as a Set, nevertheless placed in end position. The clause *when you look at it* conveys information that is only concomitant in character because the topic discussed is paintings and the interlocutors study the paintings and comment on them. Consequently, the T clause performs the DSF of Set, which is reflected by intonation. Although the clause contains a nucleus, placed on the predicative verb *look*, this nucleus (rise) is less prosodically prominent than the preceding nucleus—fall or rather two falls, one placed on the subject *the very jaggly one* and the other on the predicative verb *improves* (for more details about a high fall followed by a low rise and its interpretation, see Section 4.1.4 above).

Example 36 illustrates a T clause performing the DSF of Set when placed in medial position within the distributional field of its superordinate clause. The whole sentence in the above example is perspectived away from the subject *Grace* towards the object expressed by a *that*-clause following the predicative verb *said*. The distribution of CD as determined by the non-prosodic FSP factors is reflected by intonation. There are several nuclear tones gaining in PP from the beginning to the end of the sentence.

Summing up, it can be stated that there is a **strong tendency to place both spatial and temporal clauses in end position when performing the DSF of Specification**. Not a single occurrence of a spatial or temporal clause functioning as a Sp placed in initial or medial position has been found in the texts analysed. On the other hand, when serving as a Setting, the preference is given to
the initial position, though both the medial and the end position within their superordinate clause is also possible. However, the last remark concerns T clauses only, because, probably owing to the generally extremely low frequency of S clauses in my corpus, not a single spatial clause functioning as a Set has been found.

In conclusion, it remains to say that the above-presented results concerning the placement of adverbials performing the DSF of Set in initial position and those performing the DFS of Sp in end position lend further support to Uhňová’s conclusions (1974.99-106). Her investigation testifies to the impact the semantic roles of adverbials have on the dynamic functions performed by them in FSP (see Firbas 1992.58-59).

5 Conclusions

The present analysis has illustrated that single spatial adverbials of all semantic classes tend to perform the DSF of Specification, placed mostly in end position in this function. When performing the DSF of Setting, which concerns only adverbials referring to position and direction, they are placed either in initial or end position, the latter position being predominant.

The preference to perform the DSF of Specification applies only to two semantic classes of single temporal adverbials, notably those of position and duration, placed invariably in end position in this function. The medially placed temporal adverbials, referring to position, relationship and frequency, perform the DSF of transition, for the last-mentioned semantic class it being the most typical function. On the contrary, for temporal adverbials of relationship, the most typical DSF is that of Setting, placed in the majority of cases in initial position when performing this function.

As for multiple spatial adverbials occurring in clusters, my results indicate a tendency to perform the same function, most frequently that of Specification. As for multiple temporal adverbials, being almost as frequent in continuous as in discontinuous sequences, they tend to perform the same function when occurring in clusters, whereas in combinations, the most typical case is one temporal adverbial placed initially with the function of Setting and one placed finally with the function of Specification.

As for DSFs performed by heterosemantic sequences of adverbials, based on the above investigation it can be concluded that clusters with S→T word order placed in end position tend to perform the DFS of Specification, if not both, then at least one of them. As for combinations with T→S word order, there is a great variety of possibilities with regard to the DSFs such co-occurring adverbials can perform in the act of communication, the most typical case being an initially placed temporal adverbial with the function of Setting and a finally placed spatial adverbial with the function of Specification.

The present inquiry has shown that subordinate temporal clauses—in spite of being found in all positions within the structure of their superordinate
clause—tend to be placed in end position, notably when performing the DSF of Specification. When placed in initial position, they serve as a Setting, although they have been found in this function also in the other clause positions. As for subordinate spatial clauses, they have been found only in end position, invariably performing the DSF of Specification.

The analysis of conversational texts with regard to FSP has proved that the dynamic semantic functions performed by spatial and temporal adverbials in the further development of communication depend on the interplay of all the four FSP factors.

WORKS CITED


