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The London-Lund Corpus of Spoken English

Description and Research

edited by
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Contents

Preface 5

Prosodic symbols 7

PART I: DESCRIPTION

- 1 The London-Lund Corpus of Spoken English 11
- Appendix 1: The complete London-Lund Corpus 19
- Appendix 2: Publications using Survey material 47
- Sidney Greenbaum & Jan Svartvik*

PART II: RESEARCH

- 2 The TESS project 63
Jan Svartvik
- 3 Tagging and parsing on the TESS project 87
Jan Svartvik
- 4 An automatic word class tagger and a phrase parser 107
Mats Eeg-Olofsson
- 5 Lexical items peculiar to spoken discourse 137
Anna-Brita Stenström
- 6 Spoken English and the dictionary 177
Bengt Altenberg
- 7 Some functions of the booster 193
Bengt Altenberg
- 8 Pauses in monologue and dialogue 211
Anna-Brita Stenström
- 9 Adverbial commas and prosodic segmentation 253
Anna-Brita Stenström
- 10 Graphic English prosody 267
Jan Svartvik

Access to structural descriptions:

GET_HEAD_WORD find head word in structure

Access to tagged Brown corpus input in 'vertical' format:

| | |
|---------|--|
| HAS_TAG | access to full word class tag (including length) |
| PURETAG | access to word class tag proper (not including length) |
| WORD | access to word body |

String handling:

| | |
|--------|-----------------|
| PREFIX | test for prefix |
| SUFFIX | test for suffix |

List handling: (standard)

| | |
|--------|--------------------|
| APPEND | list concatenation |
| MEMBER | list membership |

Lexical items peculiar to spoken discourse

Anna-Brita Stenström

5.1 Is there a special spoken lexis?

Some lexical items are much more common in speech than in writing. A list comparing the most frequent words in the London-Lund Corpus (LLC) with the most frequent words in the Lancaster-Oslo/Bergen Corpus (LOB) (p 17) shows for instance that the verbs *know*, *think*, and *mean* with rank 15, 25, and 44 in LLC, do not appear at all in the LOB list; nor does the adverb *really*, ranked 59 in LLC, while *well* ranked 14 in LLC appears only at rank 95 in LOB. Not surprisingly, items like *yes*, *no*, and *oh* do not figure among the most frequent words in the written corpus. Such lexical items are typical of interactive speech and closely bound to the communicative situation; others like *really* and *well* abound in spoken discourse for other reasons.

Many lexical items which are typically used in spoken discourse (henceforth referred to as 'D-items') are awkward or even impossible to analyse in syntactic terms, and they generally contribute little, if anything, to the propositional content of the utterance. However, the mere fact that a lexical item is extremely common in spoken discourse does not immediately qualify it as a D-item. The decisive factor is whether its interactive and pragmatic

functions prevail over its 'ordinary' grammatical function. This is illustrated in (1):

- (1) but I ||don't 'really KNOW that 'I'm ■ ||going to 'be a 'vast a 'mount of HELP to 'you ■ • I was ||INTERESTED in your {AD||VERTISEMENT ■ } ■ and ||and [ə m] -- • [ʔ ə] but [ə] I ||gather you're ΔAFTER ■ «an» ellnormous a 'mount of 'INFORMATION ■ and I ||don't RĚALLY 'know that I've 'got - ||YŲ 'know ■ whether ||WHĀT I've 'got ■ ||is [ʔ] of Δany ▷HELP ■ I mean it's ||really for 'you to DECĪDE ■ ||RĚALLY ■ --- (S.2.2:16-25)

None of the four instances of *really* will be regarded as a D-item since they all retain too much of the adverbial function. What finally determines what the item does in the discourse is its position in the complete contextual situation; it may serve as a syntactic constituent in a sentence or as a move in the interaction.

Really, which will be discussed in detail in Section 5.5, can be used as a prototype to illustrate how the same lexical item can serve more than one function, depending on where it occurs. In syntactic terms, it may serve as an emphasizer, adding to the force of an adjective (cf Quirk et al 1985:447), as in (2) where it modifies the adjective *annoying*:

- (2) [ʔ i] it's ||really ANNŲYING ■ (S.2.13:82)

or as a content disjunct (Quirk et al 1985:620 ff), reflecting the speaker's attitude to what he is saying and modifying the whole utterance:

- (3) ||didn't make any ΔDIFFERENCE ■ ||RĚALLY ■ (S.1.1:1050-1051)

In interactional terms, *really* may serve as a 'react' showing the speaker's attitude to the previous speaker's utterance; as a 'go-on', passing on the turn at a transition relevance point (Sacks et al 1974) and encouraging the current speaker to continue (cf 'continuer' in Schegloff 1982); as a 'follow-up' in a question-response exchange, constituting the questioner's confirmation of the response; as a 're-opener' querying the response; or as a 'planner', with concurring syntactic and interactive functions (see further pp 152ff).

The term 'D-item' will be used to designate lexical items that occur almost exclusively in spoken interaction, for example *yes*, *please*, *sure*, *shut up*, and question tags (Q-tags), as in (4):

- (4) A: ... but I ||thought I ΔWOULDN'T 'have an ĀBSTRACT ■ bellcause I Δthink you Δhave to [ə] • supΔply ▷something YOURΔSELF to the ▷picture ■ ||HĀVEN'T you ■
B: ||SŲRE ■ (S.1.8:479-482)

The term also designates lexical items that occur in both written and spoken discourse but with a particular function in speech, for example *sort of*, *you know*, and *well*:

- (5) whereas ||HĀRT ■ I ||mean as you KNOW ■ sort of -- (S.1.5:622-624)

as well as lexical items that are particularly frequent in spoken discourse but would have a similar discourse function in speech and writing, eg *anyway* and *now* (as a transitional device):

- (6) *but* ||that didn't ΔHĀPPEN ■ until ||LŲNG 'after [ði:] ■ - • [ə:] -- ||British and 'French and AΔmerican - ĀRMIES ■ had ||really sort of --- ||anyway I'm ΔSŲRRY ■ I was D||GRĚSSING ■ • but ||what I 'mean İS ■ -- (S.2.3:362-367)

Summing up, D-items may be realized by single words like *well*, *oh*, *all right*, and *anyway* or by longer strings like *as you know* and *I'm sure that's right*, and they are used for taking, keeping, and yielding the turn by performing a speech action, for empathizing with the listener, or for organizing the message.

5.2 The structure of spoken discourse

Spoken interaction will be viewed in terms of four hierarchical levels: exchange, turn, move, and act.

The **exchange** is the minimal interactive unit which consists of at least two consecutive turns (and at least two moves) produced by different speakers.

The **turn** is what each speaker says before the next speaker takes over; it consists of one or more moves. Turns can be opening, holding-up, releasing, continuing, and terminating.

The **move** is what the speaker does in order to start, carry on, and finish an exchange, eg Initiate-Respond. It consists of one or more acts. A simple move consists of one act, eg a response proper; a compound move consists of more than one act, eg a response proper followed by an 'emphasizer'.

The **act** involves the illocutionary and pragmatic content, eg request-accept.

This model is slightly different from that of Sinclair & Coulthard (1975) in that I have introduced the level of 'turn' to handle utterances containing more than one 'move'. I distinguish the following moves and acts, most of which will be illustrated in the following discussion (see further Stenström 1984a, 1984b):

MOVES

Call-off is the first part of a pre-closing or closing exchange.

Close is the second part of a pre-closing or closing exchange.

Follow-up terminates an exchange and involves speaker-shift.

Frame introduces new topics (aspects) and new exchanges.

Go-on indicates that the listener is paying attention to what is being said and encourages the current speaker to go on.

Initiate initiates an exchange by inquiring, informing, suggesting, etc.

Question elicits a response.

Re-open queries what was stated in a response or an inform.

Response answers a question or supports or challenges the previous speaker's initiating or re-opening move.

ACTS

Accept accepts a request, a suggestion or an opinion.

Apology serves to apologize.

Clarify disambiguates a previous utterance by the same speaker.

Comment adds information not expressed in a previous act in the same move.

Conclude draws a conclusion from a previous utterance.

Confirm responds to a request for confirmation.

Direct orders the addressee to do something.

Elicit is used as an umbrella term for any type of question.

Emphasizer highlights a preceding act in the same response, go-on, or follow-up move.

Endorse supports the point made by the preceding speaker.

Evaluate expresses the speaker's attitude.

Exemplifier introduces more detailed information.

Expletive expresses annoyance, excitement, pain, etc.

Filler serves as a verbal pause.

Frame marks a boundary in the discourse, indicates that the speaker introduces a new topic/aspect or sums up what has already been said.

Greet is what you do when you meet or leave somebody.

Hedge reflects uncertainty and vagueness, avoids abruptness.

Inform supplies 'neutral' information which does not explicitly reflect the speaker's attitude.

Object objects to the previous speaker's utterance.

Planner serves as a temporary substitute for a clause element.

Please emphasizes the speaker's wish and marks politeness.

Prompter appeals for feedback.

React shows the speaker's attitude to a previous request, asks the listener to do something.

Smooth-over responds to an apology.

Softener empathizes with the listener.

Staller is used to gain time.

Suggest comes up with a proposal.

Thanks expresses gratitude.

Uptake connects the previous speaker's last move with the succeeding move uttered by the speaker who produced the uptake.

The most convenient starting-point for identifying what speech signals do in a dialogue is the conversational exchange and the speaker turns. D-items can occur in more than one position in the exchange structure and the turn. The items generally perform different functions in different positions but can also perform different functions in the same position. Naturally, the function of an item does not depend only on its position but also on its own inherent meaning and the larger context. Conversational exchanges vary in size and complexity. In this corpus, two-turn exchanges were somewhat more common than three-turn exchanges, but exchanges consisting of up to five and six turns were not unusual.

If the discourse signal makes up a turn of its own, it is also a move consisting of one act. Otherwise it realizes either a move within the turn or an act in a move. Its pragmatic function varies with its vertical (turn-by-turn) position in the exchange as well as with its horizontal (within-the-turn) position (see pp 164ff). Turns have the following functions:

| | |
|----------|-----------------------|
| Turn [1] | A: OPEN |
| Turn [2] | B: CONTINUE/TERMINATE |
| Turn [3] | A: HOLD-UP/TERMINATE |
| Turn [4] | B: TERMINATE |

Right in (7) terminates the two-turn exchange by responding to an informing initiating move which opens the exchange. In the following three-turn-exchange (8), *right* is part of another response move, one that continues an exchange terminated by a follow-up move. The next two examples illustrate four-turn exchanges; *right* in (9) holds up the exchange by a re-opening move, and *right* in (10) terminates the exchange by a confirming follow-up move.

| Example | TURN | Move | act |
|--|-----------|-----------|----------|
| (7) Two-turn exchange (S.8.2:1009-1010) | | | |
| [1] A: it's [↑] UNDER ■ - H for [↑] HARRY ■ | OPEN | Initiate | inform |
| [2] B: [↑] RIGHT ■ | TERMINATE | Respond | accept |
| (8) Three-turn exchange (S.8.1:822-827) | | | |
| [1] A: so he knows 'what it's [↑] ABOUT ■ | OPEN | Initiate | conclude |
| [2] B: [↑] RIGHT ■ [↑] OK ■ *• [↑] MHM ■ * | CONTINUE | Respond | confirm |
| [3] A: * [↑] GOOD ■ [↑] THANK you ■ * | TERMINATE | Follow-up | endorse |
| (9) Four-turn exchange (S.9.1:312-315) | | | |
| [1] A: [ə:m] shall we say - would twelve o'Δ'clock be [↑] OKAY ■ | OPEN | Initiate | suggest |
| [2] B: [↑] LOVELY ■ | CONTINUE | Respond | accept |
| [3] A: [↑] RIGHT ■ | HOLD-UP | Re-open | elicit |
| [4] B: [↑] YES ■ | TERMINATE | Respond | clarify |
| (10) Four-turn exchange (S.7.2:114-118) | | | |
| [1] A: so what 'time are you [↑] CÔMING this 'afternoon ■ | OPEN | Initiate | elicit |
| [2] B: [əm - əmə] as we Δsaid about Δfour O'CLÔCK ■ | CONTINUE | Respond | inform |
| [3] A: [↑] OK ■ [↑] YĒAH ■ | TERMINATE | Follow-up | confirm |
| [4] B: [↑] RIGHT ■ | TERMINATE | Follow-up | confirm |

The fact that the function of a discourse item is related not only to its position in the exchange, as we saw in the previous examples, but also to its position in the turn will be discussed in Section 5.6.

5.3 The classification of D-items

The discourse level was introduced in our tagging-system for the analysis of words and expressions that were found to serve interactive and pragmatic rather than grammatical functions. We felt that these D-items could not be adequately accounted for at the word, phrase and clause levels of analysis in a three-level tagging-system. At the discourse level, items were analysed in terms of speech-organizing, interactional, and communicative devices. Both tagging-systems are illustrated in the analysis of (11):

- (11) >A: • Δmid [↑]APRIL ■ • ||we had Δreached the [↑]PÔINT ■ of ||thinking that we Δweren't
'going to be 'able to Δ[↑]RĒACH ■ • a ||[↑]PÔLICY deΔcision- *•* and «so» ||we
B: *||that's [↑]RĪHT ■ *
>A: must • [?] Δtell these [↑]GŪYS ■ *«that we'll» carry ÔN ■ - * (S.1.2:165-172)

That's right can be analysed in strict syntactic terms (cf pp 96ff for the tag labels):

| | | | |
|--------|---------|----------|-------|
| TEXT | that's | | right |
| WORD | RD*VB+3 | | JA |
| PHRASE | NPH:dem | VPH:pres | JPH |
| CLAUSE | S | V | C |

The following is an alternative analysis in discourse terms:

| | | |
|-----------|--------|---------------------|
| TEXT | that's | [↑] RĪHT ■ |
| WORD | DR2 | |
| PHRASE | 0 | 0 |
| CLAUSE | 0 | 0 |
| DISCOURSE | RESP | |

In the second analysis, the clause *that's right* is considered to be one D-item, hence at word class level labelled DR2 denoting a D-item serving as a response signal (R) and consisting of two words (2). It is left untagged at the phrase and clause levels; at the discourse level it is tagged RESP for its interactive function of response in the discourse.

Yet, this second analysis is not entirely satisfactory. Unlike single words like *yes* and *OK*, the string *that's right* can also be analysed syntactically (as in our first analysis), and if we refrain from this option altogether, useful generalizations will be lost.

The classification of D-items was based on the study of ten LLC texts, most of them face-to-face, two-party, unplanned dialogues. The following exemplified discourse categories were identified (DA, DB, etc are the tag codes) in the sample:

| | | |
|-------------------------|-----|--|
| Apologies (DA) | DA | <i>pardon, sorry</i> |
| | DA2 | <i>excuse me, I'm sorry</i> |
| | DA4 | <i>I beg your pardon</i> |
| Smooth-overs (DB) | DB2 | <i>don't worry, never mind</i> |
| Hedges (DC) | DC2 | <i>kind of, sort of</i> |
| | DC3 | <i>sort of thing</i> |
| Expletives (DE) | DE | <i>damn, gosh, hell</i> |
| | DE2 | <i>fuck off, good heavens, the hell</i> |
| | DE3 | <i>for goodness sake, good heavens above, oh bloody hell</i> |
| Greetings (DG) | DG | <i>hi, hello</i> |
| | DG2 | <i>good evening, good morning</i> |
| | DG3 | <i>Happy New Year, how are you</i> |
| | DG4 | <i>how do you do</i> |
| Initiators (DI) | DI | <i>anyway, however, now</i> |
| Negative (DN) | DN | <i>no</i> |
| Orders (DO) | DO2 | <i>give over, go on, shut up</i> |
| Politeness markers (DP) | DP | <i>please</i> |
| | | |
| Q-tags (DQ) | DQ2 | <i>is it</i> |
| | DQ3 | <i>isn't it</i> |
| Responses (DR) | DR | <i>ah, fine, good, uhuh, oh, OK, quite, really, right, sure</i> |
| | DR2 | <i>all right, fair enough, I'm sure, I see, that's good, that's it, that's right, that's true, very good</i> |
| Softeners (DS) | DS2 | <i>I mean, mind you, you know, you see</i> |
| | DS3 | <i>as you know, do you see</i> |
| Thanks (DT) | DT | <i>thanks</i> |
| | DT2 | <i>thank you</i> |
| Well (DW) | DW | <i>well</i> |
| Exemplifiers (DX) | DX | <i>say</i> |
| Positive (DY) | DY | <i>mhm, yeah, yes, yup</i> |

The D-categories presented in the list fall into three groups depending on their tendency to constitute a separate move.

- Group (a): categories which do not constitute a separate move;
- Group (b): categories which may or may not constitute a separate move;
- Group (c): categories which generally constitute a separate move.

Group (a)

Categories which do not constitute a separate move include hedges, initiators, softeners, exemplifiers and *well*. The items in this group share certain general features. They realize acts in various types of move:

- (12) *well* I don't know
- (13) she *sort of* said to me that ...

They are not meaningful or informative in isolation but may add some dimension to the propositional content of the move, without altering its function (with the exception of exemplifiers and initiators):

- (14) *now* all this happened last night
- (15) *well* yes

They are all turnholding, indicating that there is more to come (with the exception of turn-final softeners):

- (16) last night *you know* (something extraordinary happened)

Whether an item is turntaking, turnholding or turnyielding is of course related to its position. Only softeners fulfil all three functions:

- (17) *you know* he said to me ...
he said to me *you know* that ...
that's what he said to me *you know*

Softeners act differently depending on whether they occur in initial, medial, or final position (cf Crystal & Davy 1975:92-97). Softeners in final position are unique in that they serve as explicit appeals for feedback, especially if they carry a rising tone. They are therefore typically turnyielding and interpersonally oriented. By adding a softener or a Q-tag, the speaker shows that he is not completely certain of what he is stating or, alternatively, he pretends not to be but leaves the final decision to the listener (cf Östman 1981). In other words, he adopts a face-saving strategy involving politeness. Q-tags in final position have a stronger elicitive force than softeners and are generally followed by a confirming reaction regardless of pitch contour (cf Stenström 1984a:224).

Initiators and exemplifiers are purely organizational devices providing very little information. Initiators indicate that something new is to come, eg a new

(31) A: he did it

B: *really*

Re-opener

A: yes indeed

Four categories - comment Qs, *please*, responses, and greetings - belong to different groups but yet have an important feature in common: they occur both as eliciting/inviting devices and as elicited/invited elements.

The interpersonal relationship, the most characteristic feature of conversation, can be observed in all the categories. In group (a) only softeners are explicitly interpersonal (A/B-oriented). The other *a*-categories are chiefly message-oriented discourse organizers. All the categories in groups (b) and (c) are interactive and therefore interpersonal.

5.4 A monologue and a dialogue compared

Assuming that the use of discourse items would differ in dialogue and monologue, I selected two LLC texts for a comparative study: the dialogue S.4.1, in which a married couple are chatting over lunch, and the monologue S.12.6, in which a former master builder talks about memories from his childhood. Both texts were non-surptitiously recorded. This probably did not affect the former master builder who gave a lecture to an audience, but it obviously had an effect on the young couple. First, they refer in their conversation to the fact that it was being recorded and that their speech was somewhat strained; second, they also bring up a large number of topics for discussion, which obviously indicates their awareness that they were supposed to go on speaking for a certain period of time and hence felt forced to start on a new topic as soon as the previous one was exhausted.

All categories of D-items were much less frequent in the monologue than in the dialogue, which was to be expected. In the monologue, most of the categories belonging to groups (b) and (c) were not expected to occur at all, possibly with the exception of expletives and apologies. On the other hand, items from group (a), which reflect the planning process, might occur in either type of spoken discourse.

Four important factors play a crucial role for the difference in use between the two types of talk. First, the monologue was preplanned - the speaker had worked out beforehand what he was going to say - whereas the dialogue was spontaneous. Second, the speaking situations were different. The speaker in the monologue could go on speaking without risking interruption, while the parties in the dialogue had to take turns. This required cooperation. Third, the speaker's strategy in a the dialogue was affected by the hearer's reactions in the

Table 5:1. D-categories in the dialogue and the monologue.

| ITEM | DIA | MONO | TOTAL |
|-------------------------|-----|------|-------|
| ORGANIZING | | | |
| Well (DW) | 37 | 10 | 47 |
| Softeners (DS) | 33 | 4 | 37 |
| Expletives (DE) | 13 | 1 | 14 |
| Initiators (DI) | 3 | 7 | 10 |
| Hedges (DC) | 7 | - | 7 |
| Exemplifiers (DX) | 1 | - | 1 |
| INTERPERSONAL | | | |
| Positive (DY) | 97 | - | 97 |
| Negative (DN) | 28 | - | 28 |
| Responses (DR) | 20 | - | 20 |
| Q-tags (DQ) | 16 | - | 16 |
| Apologies (DA) | 4 | - | 4 |
| Orders (DO) | 4 | - | 4 |
| Politeness markers (DP) | 2 | - | 2 |
| Thanks (DT) | 1 | - | 1 |
| Total | 266 | 22 | 288 |

form of oral and/or visual feedback signals, which means that he might, for example, have to start replanning in the middle of his performance in order to be understood. Fourth, the monologue was public, and the dialogue was private.

A speech-situation in which the parties are unprepared, but aware that they are being recorded and should not stop speaking, certainly invites hesitation phenomena, such as pauses (filled and unfilled), verbal fillers, and restarts. Such hesitation phenomena usually occur at the beginning of utterances when the speaker has not yet made up his mind how to continue (cf Brown 1977:120-24). As will be seen in Chapter 8, clusterings of such items were common.

Table 5:1 shows the frequency and distribution of D-categories in the dialogue and the monologue with the items arranged in frequency order. The different speech-situations are very clearly reflected in the use of D-items. Practically all of the 16 categories (p 144) were found in the dialogue but only

four in the monologue. As can be expected, interpersonal D-items occurred only in the dialogue. Note especially the large number of response-items (DY, DN and DR). The D-categories found in the monologue belong to the area of planning and organizing.

Softeners were realized somewhat differently in the two text types: by *you know* in the dialogue and by *as you know* in the monologue with a slight shift of meaning with consequences for the A/B orientation. *As you know* signals that the speaker presupposes that the listeners know what he is referring to, and therefore acts as a politeness device without appealing for verbal feedback. *You know* in final position (and with a rising tone) does appeal for feedback, but without necessarily presupposing previous knowledge.

Hedges, here represented by *sort of*, did not occur at all in the monologue, probably a consequence of the pre-planning. It seems, however, that hedging is not only situation-bound but also highly idiosyncratic. Similarly, the use of Q-tags and softeners is largely speaker-specific.

According to Table 5:1, initiators were more common in the monologue than the dialogue. This is not the whole truth, however, since *well* - in a category of its own - served as an initiator in eight out of the ten cases in the monologue. This makes initiators the typical D-category. Note that an initiator is not just an item that occurs frequently in initial position, a definition that would have included the majority of all instances of *well*, *yes* and *no* in the dialogue. Initiators do very specific things besides occurring initially. This is illustrated in (32)-(34):

(32) HOW[↑]EVER ■ • my [↑]mother 'played the PI[↑]ANO ■ (S.12.6:233-234)

(33) [↑]NOW ■ - [↑]after the ALLUYSONS ■ • [ə:] Sir [↑]Philip W[↑]LD ■ a dillrector of the [↑]Port of 'London AUTH[↑]ORITIE«S» ■ • [↑]stopped ... (S.12.6:733-737)

(34) [↑]WELL ■ AN[↑]OTHER 'great 'family ■ [↑]lived H[↑]ERE - {[↑]during my L[↑]IFE ■ } ■ (S.12.6:715-717)

However in (32) resumes the narrative after a short digression; *now* in (33) points forward and introduces new information ('let's proceed'); *well* in (34) links one part of the narrative to what follows ('let's leave this and go on'). Svartvik (1980a) uses the term 'qualifier' for *well* serving as a link between previous and following discourses. Sinclair & Coulthard (1975) call it a 'marker' which realizes a 'Framing' move. In later sections I shall use the term 'frame' instead of 'initiator'.

Well in the dialogue acted differently depending on whether it introduced an elicit, a response or an inform (taken in a broad sense and including various types of comments and retorts). Compare (35)-(37):

(35) a: well [↑]I can you can you 'not get CLO[↑]SER ■

b: [↑]I yes I [↑]COULD have D[↑]ONE ■ (S.4.1:81-82)

(36) a: well [↑]what are we 'doing 'this WEEK[↑]END ■ ...

b: well I've [↑]nothing D[↑]OWN [↑]anyway • {at [↑]ALL ■ } ■ (S.4.1:14-17)

(37) b: when I [↑]READ it ■ I [↑]meant to 'point it [↑]OUT to you ■

a: [↑]WELL ■ it [↑]wasn't a bad SU[↑]AGG[↑]ESTION ■ [↑]REALLY ■ (S.4.1:801-805)

In (35) *well* links a question to a previous utterance in the dialogue, at the same time introducing a new aspect. In (36) a new topic is brought up but there is no link with what preceded - *well* is equivalent to *now* in the same position. The second *well* in (36) serves as a response-prefix, typically introducing a response which is insufficient in some respect; B cannot come up with a good suggestion and therefore does not produce a direct answer but a response which lets A understand, implicitly, that he has no plans for the weekend instead of saying so straight out. In (37), finally, *well* introduces a move expressing evaluation and acts very much as a softener. Broadly speaking, *well* serves as an initiator with questions, as a prefix indicating indirectness and insufficiency with responses, and as a softener with informs.

Yes and *no* have been provided with individual tags because of their high frequency in speech (instead of being included in the general DR category). Although their main function is to serve as polar responses, they are also met with as go-ons and follow-ups. The go-on function was not very prominent in this dialogue, however, probably because the parties knew each other so well that feedback in that form was not necessary.

The go-on function is also met with in comment Qs which otherwise behave similarly to *really* and also serve as follow-ups and re-openers:

(38) A: the weather isn't going to be better

B: isn't it

> A: until next week

Go-on

(39) A: the weather isn't going to be better

B: isn't it

Follow-up

(40) A: the weather isn't going to be better

B: isn't it

Re-opener

A: no I heard the weather forecast

Summing up, the discourse (D) level was adopted as part of our analysis to handle speech-specific items that cannot be appropriately taken care of at the syntactic level. In this study based on a small sample, it appeared that D-items of the types recognized here were generally much less common in the monologue than the dialogue and, furthermore, that fewer D-types were used in the monologue. This is basically a consequence of the disparate speech-situations, but it probably also reflects individual differences in speech-behaviour. As can be expected, genuine interpersonal items were altogether absent in the monologue. But D-items classified as 'organizing' were also less frequent, one obvious reason being that the monologue had been prepared in advance. To what extent the use of D-items is related to the monologue/dialogue situation as such, or is speaker-specific, cannot be stated on the basis of only two text samples, but I presume that an unplanned monologue in a less formal situation would contain a much greater number of D-items from a larger variety of categories.

Since dialogue is inherently interactive, the devices of turntaking, turnkeeping, and turnyielding are crucial for a smooth conversation. Communicative cues such as softeners do not only reflect the speaker's personal involvement but also add liveliness to the conversation. If such signals were altogether lacking, the speakers might sound not only uninterested but also plain boring. The same applies to monologues: a narrator or a lecturer who drops all communicative cues runs a considerable risk of losing the attention of his audience.

5.5 Really

Among the various D-items I made a special study of *really* and the 'right set' (see pp 161ff). One of the reasons for studying *really* was its frequency in the spoken material, another its obvious functional variety which seemed to be somewhat different in speech and writing. My observations are based on a sample of LLC (from the LLC:o version) consisting of approximately 170,000 words for the spoken material and on the entire LOB corpus of approximately one million words for the written data. I found that *really* occurred with a density of 3.17 per 1,000 words in LLC and 0.31 per 1,000 words in LOB, a considerable difference which marks *really* as a characteristic feature of conversation. To facilitate the comparison I picked a random sample consisting of

Figure 5:1. Functions of *really*.

| | |
|--------------|--|
| Intensifier: | she's really nice |
| Evaluator: | REALLY ■ I do ■ |
| Re-opener: | A: this is what I HEARD ■ B: REALLY ■ A: YES ■ |
| Go-on: | A: this is what I HEARD ■ B: REALLY ■ > A: right NOW ■ |
| Planner: | he's a really he's a THOROUGHbred |

100 instances of *really* from each concordance. I identified five functions of *really* (see Figure 5:1):

As an **intensifier**, integrated in the clause structure and placed next to a head, *really* is part of a syntactic unit.

As an **evaluator** it is peripheral to the clause structure and reflects the speaker's attitude to the entire predication.

As a **re-opener** expressing the speaker's reaction to what the previous speaker said and eliciting a response, it is a purely interactional device.

As a **go-on** signalling that the hearer is an active listener and expecting the current speaker to go on talking, it is also purely interactional.

As a **planner** making it easier for the speaker to formulate his message by providing an opportunity for reconsideration, it is partly integrated in the clause structure.

There is a clear relationship between the function and the position of D-items. Quirk et al (1985:583-584) remark that 'emphasizers', placed next to a particular element and not separated by intonation or punctuation, often emphasize that element alone, but that there may be ambivalence as to whether the emphasis is on the part (a single constituent) or on the whole (the proposition). The problem may be highlighted in the following way:

- (41a) this question is *really* surprising
- (41b) this is a *really* surprising question
- (41c) this is *really* a surprising question
- (41d) this *really* is a surprising question

(41e) *really* this is a surprising question

(41f) this is a surprising question *really*

Disregarding the possible effect of prosody or punctuation, it may safely be stated that *really* placed next to the adjective *surprising* is clearly an intensifier. But the further it is moved towards the left, the less emphasis there is on the part (*surprising*), and the more there is on the whole (*this is a surprising question*). In (41e), where *really* is placed initially, it no longer intensifies a single clause element but comments on the entire proposition. But how are we to describe the use of *really* in clause-final position (41f)? Greenbaum (1969:144) states that *really* is unambiguously a disjunct in initial position and also usually when it occurs in a separate tone unit; it 'makes explicit the speaker's view that the statement being made is true'.

Really in initial and medial position (41a-e) has already been dealt with in detail by eg Greenbaum (1969), Bolinger (1972a), Jacobson (1978), and Quirk et al (1985); but, to my knowledge, very little has been said about *really* in final position (41f), where its function seems to be particularly doubtful and where it was highly frequent in the present data.

There was a clear tendency for *really* to collocate with negation, usually realized by *not*; one third of all instances of *really* appeared in a negative surrounding in the conversations and one fourth in the written texts. The most frequent position of *really* in negative declaratives is illustrated in (42) and (43) with *really* within the scope of clause negation (Quirk et al 1985:587):

(42) and I ||haven't really ΔCŌNCENTRATED■ (S.3.1:172)

(43) This place isn't really a Political Centre (M02 55)

The syntactic configurations in which *really* occurred in positive declaratives were much more complex and varied. But the dominating position was immediately after the operator or BE, ie the same as in negative declaratives:

(44) I have really got a bug about it (W.1)

(45) Some of the hill-climbs, too, were really devastating (G24 157)

As mentioned above, clause-final position of *really* was particularly common in the spoken data (17% in speech vs. 4% in writing):

(46) and ||Eileen has FORΔGŌTTEN■ that ||RĒALLY «you ▷know»■ (S.1.13:462-463)

(47) it's ||all ΔMĀD RĒALLY■ -- (S.1.10:1266)

Note, however, that *really* very seldom occurred in clause-final position in negative utterances but was usually placed immediately after the negation. In interrogatives, the position of *really* was not directly comparable in the two media due to the different realizations of the interrogative form, with inverted word-order in writing (48-49) and tag-questions in speech (50-51):

(48) Don't you really know?

(49) Are you really happy with him?

(50) goes 'on ▷really RĒGULARLY 'does it■ (S.3.3:810)

(51) it ||was Δreally CONVINCING■ ||WĀSN'T it■ (S.2.10:839-840)

End of clause correlated with end of tone unit in the spoken data where *really* was preceded by a tone unit boundary in 34% of all clause-final occurrences. In LOB it was occasionally separated from the rest of the clause by a comma:

(52) (...) put the Δweakest candidate FIRST■ ||RĒALLY■ (S.1.3:490-491)

(53) She lost her way, really (P06 143)

The comma in writing often corresponded to a pause in the spoken data:

(54) bel|cause we Δdon't know 'what it MEANS■ - ||RĒALLY■ (S.3.5:280-281)

A specific pitch contour, with *really* in a separate tone unit, might provide greater emphasis, as in (55):

(55) it's ||ĀL 'MOST■ - ||THRĒE 'weeks■ ||RĒALLY■ (S.2.7:860-862)

One position which occurred only in speech was *really* in clause-final position followed by a comment clause. Such clauses were characteristically uttered within the same tone unit as *really*:

(56) which is ||QUĪTE re'vealing RĒALLY I 'think■ (S.2.9:333)

This contradicts the statement in Quirk et al (1985:1112) that comment clauses, ie disjuncts which express the speaker's attitude to the main clause or his manner of asserting it, generally occur in a separate tone unit.

The clause-constituent separated from the preceding part of the clause by *really* in post-position may be obligatory as in (57) or optional as in (58):

(57) So I'd only need, *really*, to begin: "Isn't... (K10 175)

(58) *it ||doesn't* ▷BÖTHER 'me RÉALLY■ at +||ÄLL■ + (S.1.12:506-507)

Post-position was particularly common in cleft sentences and extraposition, where the two parts separated by *really* were connected by copular BE, eg:

(59) it ||is a PRÖBLEM ▷really■ ||how to ΔTEACH this STÜFF■ (S.1.9:1128-1129)

It was also frequently found between a head and its post-modifier:

(60) (...) I've ||no in 'tention* NÖW of■ - ||now of • of Δpublishing ΔÄRTICLES RÉALLY■
||from • ||from the BÖÖK■ (S.3.6:434-437)

The dominating intonation contours of *really* in clause final and post-position were rising and falling-rising. Placed in post-position, *really* typically constituted the second part of a pitch sequence consisting of a fall on the immediately preceding clause element and a rise or a fall-rise on *really*. Except in the cases where *really* was followed by a comment clause (eg example 56), it always occurred at the end of a tone unit (47) or in a separate tone unit (52). In case a comment clause constituted the last part of the utterance, this clause did not carry a nucleus but continued the main pitch contour.

It may be tempting to regard *really* separated from the rest of the clause by a tone unit boundary and/or a pause as an evaluator, reflecting the speaker's attitude to what he is saying, and to regard *really* placed before the head, but with no separating prosodic features, as an intensifier. It is also tempting to take mobility as a criterion of evaluator function. However, this is being much too categorical. Not only must the combined effect of position and prosody be considered but also the wider context (cf Greenbaum 1969:127, 183).

Really in clause-final and post-position varied from prosodically unmarked to marked, not only in terms of tone but also other prosodic features, as shown in (61a-d):

(61a) ||I've been 'working 'pretty ΔHÄRD 'really■ - (S.2.7:856)

(61b) (...) it's ||not so 'easy as • you ΔTHINK *RÉALLY■ * (S.1.5:1180)

(61c) (...) it's ||really for 'you to DECIDE■ ||RÉALLY■ --- (S.2.2:24-25)

(61d) I ||don't know if 'anything's TÖRRIBLY 'new at ΔÄLL■ • ||RÉALLY■ • (S.2.7:436-437)

In none of these examples does it seem natural to move *really* to initial position as an indication of intensifier function. *Really* here reflects the speaker's view on the entire proposition, only with varying intensity from prosodically unmarked in (a) to a separate tone unit in (d). In (a) the effect resembles that of a communicative cue, eg *you know*; in (d) the effect is that of an after-thought, paraphrasable by 'as a matter of fact'.

The main difference between *really* in clause-final position, as in (61), and in post-position, as in (62), seems to be that it acts more like an evaluator in the first case, with the entire preceding proposition as its scope, and more like an intensifier in the second case, where the nuclear element immediately preceding *really* is placed in focus and gets special emphasis.

(62a) and it's IM||PÖRTANT 'really■ for ||somebody that has "Δmore experience than ONE" ΔSELF■ • (S.2.9:1233-1234)

(62b) but it's ||very imΔportant RÉALLY■ • in ||many {WÄYS} to 'write down Δwhat the 'patient COMΔPLÄINS of■ • (S.2.9:1216-1217)

(62c) (...) I'm ||just not "ΔINTERESTED e'nough■ • ||RÉALLY■ ** to ||do THÄT■ *
(S.3.1:134-136)

(62d) I mean it's ||BËEN 'bad ENÖUGH for me as it ΔIS I 'think■ ||RÉALLY■ • in ||LÖTS of WÄYS■ (S.1.9:788-790)

It is still an open question why *really* occurs finally at all instead of inside the clause. The most likely answer is that this is a reflection of the speaker's ongoing planning strategy. He may realize, at that very point, that he wants to modify what he just said, either by softening an assertion, as in (62a), or by giving more emphasis, as in (62c), or by adding an after-thought, as in (62d). There is also the possibility that *really* in post-position can become entirely void of meaning and reflects mannerism rather than a meaningful speaker strategy.

Three functions of *really* were not met with in the written corpus: as re-opener, go-on, and planner. They are all linked to the interactive situation. Re-opener and go-on moves constitute the hearer's response to the current speaker's talk, but with opposite effects on the turntaking system: the re-opener causes speaker-shift while the go-on encourages the speaker to hold his turn. Planners are overt manifestations of the speaker's planning procedure and have a turnholding effect. Re-openers are moves in the interaction which re-open an

otherwise completed exchange by eliciting confirmation (cf Stubbs 1983:110 and Stenström 1984a:240-241). They are often realized by comment-Qs, such as *did he* or *aren't you*, or by phrases involving *really*, eg *did he really go there*. But *really* on its own, indicating surprise, incredulity, etc, may have the same response-eliciting effect. A re-opener is either the hearer's reaction to an inform (Stenström 1984a:86) as in (63), or the questioner's reaction to the response as in (64):

(63) B: (...) and ||THAT was■ - you ||KNOW■ in ||times that ΔI can re'member■ .

A: *||REALLY■*

a: *good* Lord

B: ||oh YĒS■

A: ||YĒS■ (S.2.3:34-42)

(64) A: ||Oscar is ΔGÖING to the ▷States■

B: «||WĒLL■» this is what I "||HĒARD■ just bellfore I came ΔΔWĀY■ ---

A: ||REALLY■

B: «||YĒS■» -- (S.1.2:349-354)

Informs, as in (63), are generally followed by a feedback item (cf Coulthard 1981:25), ie a minimal answer like *mhm* or *I see*, indicating that the hearer has received the information, but in this case the hearer queries the truth of the message, and *really* serves as a request for confirmation.

The normal pitch contour for *really* as a re-opener is falling-rising or rising. The fact that *really* in (64) with a rising-falling tone still functions as a re-opener is probably an effect of the long pause after the response. A contributory factor may be that *really* retains some of its original meaning and automatically serves to check the truth/falsehood of the preceding utterance when occurring in this particular position.

Really as a go-on is less expressive than *really* as a re-opener and does not invite a confirming response. The current speaker is encouraged to continue, and there is no speaker-shift. Compare (65) with (64):

(65) B: I ||don't know if he ▷DRÖPPED 'that■ --

A: ||oh RĒALLY■

B: cos • well ||I ||I don't ΔKNÖW■ *||when he was 'trying to FĪND* (S.1.5:257-260)

It is highly probable that the present speaker registers the listener's feedback but, contrary to what was the case in (64), he does not show it by a confirming response.

The term 'go-on' is equivalent to 'continuer' used by Schegloff (1982) for items like *uh huh*, by which the hearer passes up the opportunity of taking over the turn. By inserting the continuer *uh huh* the hearer shows that he understands and is paying attention to what is being said and, above all, that he is aware of the current speaker's intention to keep on talking. However, Schegloff does not include *really*, which he refers to as a sort of 'reaction' invited by the immediately preceding talk, 'aside from, instead of, or in addition to the continuer'. But the present data shows that *really* often has the same effect as *uh huh*.

Really as a go-on typically carries a falling or falling-rising tone. Whether *really* should be interpreted as a go-on or as a re-opener depends on the way B's utterance is understood:

(66) B: (...) and prellsumably he's 'got ▷something Δequally ΔFĀTAL■ ||or perΔhaps it ΔIS 'lung 'cancer■ .

A: ||REALLY■

B: ||this is 'all 'very ΔSĀD■ I ||feel • BĀD about «that»■ (S.1.4:1042-1046)

This is all very sad can either serve as a confirmation invited by *really* or as a comment that speaker A would have added anyway. In the first case, *really* would be a re-opener, in the second a go-on.

Really as a planner is used as a strategic device in the planning of speech, sometimes characterized as an empty 'filler' (cf Brown 1977:107 ff) and equivalent to a pause, sometimes as a 'projecter', ie a temporary substitute for a not yet specified intensifier or an intensifier waiting for a head, and sometimes as an emotionally expressive 'react' signal, equivalent to an 'evaluator'. In each of these functions, *really* tends to occur in a hesitation area, either at the beginning of an utterance where the speaker has not yet made up his mind how to continue, or within the utterance when he suddenly loses the thread or otherwise stops to reconsider (see also Chapter 8).

The functions are manifested somewhat differently: *really* as a filler does not generally carry a nucleus, but as a react it is always prosodically marked with some prosodic feature reflecting its degree of intensity. In its filler function *really* is neither oriented towards the preceding speaker's utterance nor towards an element that follows in the current speaker's utterance; as a react it

is either oriented towards the preceding speaker's utterance or towards an element in his own utterance; as a projector it points forward, looking for something to modify.

That *really* can be used as a planner is obvious both in the filler and in the projector functions. *Really* in (67) is pointing forward to a head later on in the utterance:

- (67) and #I • #I ▷get Δreally ▷[ə:m] -- «you #know» when Δ[?]when I'm 'trying to CŌÖK ■
• and #people come and CHÄT ■ I #I get Δterribly put ŌFF ■ - (S.2.7:69-71)

It is therefore different from the filler in (68) where *really* can hardly be described in syntactic terms at all but is outside the syntactic structure of the utterance (cf Brown 1977:109):

- (68) but [ə] #really I've got about • ΔTHREĖ WĖĖKS ■ "less than THÄT ■ of #hardish
ΔWÖRK ■ (S.1.1:155-157)

My suggestion is that *really* in (67) is part of the planning process in that it anticipates a head, here realized by *put off*; that this is so seems to be confirmed by the fact that it is replaced by the intensifier *terribly*. In anticipating a head *really* acts as a 'dangling' intensifier. At the same time it attracts the hearer's attention to the fact that the real message is still to come and also acts as a turnholder. *Really* as a filler in (68) fits Brown's description of fillers, which says that their principal duty is 'to fill the silence and maintain the speaker's right to speak, while he organizes what he wants to say' (1977:109).

Really frequently cooccurs with various kinds of hesitation phenomena: unfilled and filled pauses, softeners, repetitions, reformulations, new starts, hedges (*kind of*, *sort of*) and other fillers (*well*) (see (69) and further Svartvik & Stenström 1985):

- (69) and #ÄLL this was DŌNE [ə:] ■ -- #by --▷kind of ▷letting - [ə:] -- • # {WĖLL}
RĖÄLLY by 'just [ə:] -- 'sort of [ə] ■ - #starting from ΔNŌTHING ■ (S.2.3:115-117)

The speaker probably knows right from the start what he wants to say but not how to put it in words. In (70) *really* is met with in its react function. It occurs in a separate tone unit and is similar to an evaluator at the syntactic level:

- (70) d: you're you're an awkward customer aren't you
A: (--- laughs) - [ə:m] --- # {WĖLL} 'ŌÄK ■ #RĖÄLLY ■ - I #mean ---
(S.2.4:813-816)

Why, then, is *really* so much more common in speech than in writing? One reason is its versatility: not only can it be used to emphasize different parts of an utterance as well as the entire utterance, but it can also be used for various interactional purposes. Another reason is that the functions of *really* may be neutralized to the extent that it can be used to fill empty gaps in speech, sometimes for the sake of stalling, sometimes even for rhythmical reasons. There are other adverbs that can serve some, but not all, of these functions. *Actually* is perhaps the nearest candidate but it cannot be used as an intensifier, nor can it serve any of the interactional functions.

5.6 The *right* set

The D-items *right*, *all right* (sometimes spelled *alright* in the transcription), and *OK* (or *okay*) have the following general characteristics (cf Schiffrin's conditions for 'discourse markers' 1986:328):

- They do not serve as elements of clause structure.
- They serve several functions in the discourse.
- They operate at more than one discourse level.
- They occur frequently at the beginning and end of turns.
- They generally appear in a separate tone unit.

When examining the use of these items (which for convenience will henceforth be referred to as the '*right* set') in LLC, I looked for such features as text frequency, position and function in the discourse. When comparing their frequency in relation to other discourse items I restricted myself to items with a potential response function, including feedback (see Table 5:2). Since most of them can also serve functions analysable in syntactic terms, I have indicated D-function ratio, ie discourse function in relation to grammatical function (expressed in per cent).

Yes/yeah outnumbered the rest, and the high frequency of positive signals is not difficult to explain. First of all, a smooth conversation requires cooperative partners, which means that *no* was a rare response compared to *yes*. Second, conversation being a mutual undertaking, the listening party is aware

Table 5.2. Typical D-items in the London-Lund Corpus.

| ITEM | D-ITEM RATIO | D-ITEM FUNCTION | TOTAL ITEM |
|-------------------------|-----------------|--------------------|---------------|
| | (%) | Frequency | Frequency |
| <i>yes/yeah</i> | 100 | 4263 | 4263 |
| <i>mhm</i> | 100 | 1621 | 1621 |
| <i>oh</i> | 100 | 1519 | 1519 |
| <i>that's right</i> | 100 | 79 | 79 |
| <i>that's OK</i> | 100 | 13 | 13 |
| <i>that's all right</i> | 100 | 9 | 9 |
| <i>OK</i> | 92 | 249 | 270 |
| <i>well</i> | 86 | 2675 | 3103 |
| <i>right</i> | 55 | 411 | 740 |
| <i>all right</i> | 48 | 116 | 242 |
| <i>indeed</i> | 30 | 56 | 184 |
| <i>really</i> | 15 | 115 | 780 |
| <i>quite</i> | 13 | 106 | 830 |
| <i>of course</i> | 11 | 66 | 616 |
| <i>certainly</i> | 5 | 13 | 211 |
| <i>probably</i> | 2 | 7 | 316 |

that he is required to show (or at least pretend) that he is an attentive and interested listener by inserting 'backchannel items' at more or less regular intervals. Such backchannel items were frequent and mostly realized by *yes* (*yeah*) or simply *mhm*, the third most frequent item in the list. Other frequent items were *well* and *oh*, which were both used mainly as response initiators, *well* typically introducing an 'insufficient' response (Lakoff 1973, Stenström 1984b) and *oh* typically used as an 'information receipt' (Heritage 1984) or as a 'reinforcer' (Stenström 1984a:147). *Well* as a 'staller' (p 141) is discussed in Svartvik (1980a), Carlson (1984), Schourup (1985), and Schiffrin (1986). Functions of *oh* have been described by, among others, James (1972) and Aijmer (1987).

Also *quite* and *really* were found more often than the *right* set (but notice the difference in D-function percentage). *Quite* and *really* as responses are illustrated in Quirk et al (1985:612, 628). (For *OK*, see Merritt 1984:139-47.) *Indeed*, with a lower D-frequency than *quite*, *really*, and *of course*, was still used more often as a response signal (30 %). Like *quite* and *of course*, *indeed*

served as an 'emphasizer' in most of the cases, adding to the force of the response proper (as in *yes indeed*). (Note that 'emphasizer' is used as a discourse term and not as a grammatical term as in Quirk et al 1985:485.) In the few cases where *probably* and *certainly* served as response signals they were also generally used as *emphasizers*. The typical realization of *emphasizers* was *that's right*, which was added to the list of response (feedback) items for comparison, like *that's all right*, *that's OK*, and *it's all right*. Due to their restricted use, as smooth-overs after apologies, the latter three were extremely rare.

What is of particular interest, when it comes to the *right* set, is that each one of the D-items served a wider range of discourse functions than any of the other items mentioned, despite a much lower frequency than some of them (cf Stenström 1987:94). Another noticeable feature is that they were all used very often in telephone conversations, especially *OK*, which turned out to be the typical telephone device (see Table 5.3). Only *oh*, *yes/yeah*, and *mhm* were used exclusively as interactional devices. One example is (71) where *oh* is used as a follow-up move in a questioning exchange by which speaker D indicates that he has received the information:

(71) D: and ||what did you 'do your •

A: ||SÖRRY ■

>D: DEΔGRÉE • in ■

A: in ||music and ÆNGLISH ■

D: ||ÖH ■ (S.1.5:1293-1296)

The other items in the list were used also in various grammatical functions; *right* as a noun:

(72) exercised his right as Chief of STÄFF

Table 5.3. The *right* set in face-to-face and telephone conversation.

| ITEM | FACE-TO-FACE | % | TELEPHONE | % | TOTAL |
|------------------|--------------|----|-----------|----|-------|
| <i>right</i> | 93 | 34 | 177 | 66 | 270 |
| <i>OK</i> | 27 | 11 | 222 | 89 | 249 |
| <i>all right</i> | 53 | 46 | 63 | 54 | 116 |
| TOTAL | 173 | 27 | 462 | 73 | 635 |

as an adjective:

(73) on my right H^{AND}

as an adverb:

(74) right up to the A^{rch}

all right and *OK* as adjectives:

(75) you know it's all R^{ight}

(76) it may not be O^K to E^{verybody}

and as adverbs, ie as emphasizer subjunct (cf Quirk et al 1985:587):

(77) she can go shopping all right

(78) make sure that he's T^{here} O^K

and process adjunct:

(79) I hope that drive goes O^K

In Section 5.2, I demonstrated how the function of turns varies with their position in the exchange, and I pointed out that the function of discourse items also varies with their position in the turn. The different positions in the turn will be referred to as follows:

Slot 1: First item in the turn

(80) ||AL^{right}|| L^{ook} • ||[ə:]ΔI'm Robin B^{uss}|| (S.8.2:894-896)

Slot 2: Second item, following another D-item in slot 1

(81) ||O^K|| *||R^{ight}|| * (S.2.11:1369-1370)

Slot 4: Last item in the turn

(82) and ||I'll T^{alk} to Y^{ou}|| - ||like at that 'time for a 'bout F^{inance} A^{lright}||
(S.8.2:839-840)

Slot 3: An item between slots 1 or 2 and 4

(83) ||nearer the two T^{hirty}|| ||AL^{right}|| ||well we|| (S.8.2:1228-1230)

Table 5:4. Distribution of the *right* set in the turn.

| ITEM | SLOT 1 | SLOT 2 | SLOT 3 | SLOT 4 | SEPARATE TURN | TOTAL |
|------------------|--------|--------|--------|--------|------------------|-------|
| <i>right</i> | 114 | 42 | 24 | 20 | 70 | 270 |
| <i>OK</i> | 77 | 50 | 18 | 40 | 64 | 247 |
| <i>all right</i> | 39 | 18 | 18 | 24 | 17 | 116 |

The distribution of the *right* set in the turn is shown in Table 5:4. It is notable that both *right* and *OK* occurred more than twice as often as *all right*. Moreover, all three items were more common within the turn than in a separate turn, and they were most often found at the very beginning of the turn. The figures also indicate that we can expect *right* more often than *all right* and *OK* in a separate turn and in slots 1 and 3, and *OK* more often than *right* and *all right* in slots 2 and 4.

Position in the turn was found to correlate with specific discourse functions (see Figure 5:2; for exact figures see Stenström 1987:95). We notice that go-on moves, re-openers, and follow-ups generally appeared in a separate turn, while uptakes, responses, call-offs and closes were turn-initial, and emphasers were found in the second slot. Frames usually appeared in turn-medial position, whereas prompters and questions came at the end of the turn. As for the realization of these functions, see Table 5:5.

We find that *right* was more often used as a follow-up and a close than *all right* and *OK*; that *all right*, despite its low frequency, was the typical prompter and re-opener; and that *OK* served as a call-off, as a question, and as a frame more often than *right* and *all right*. Examples (84) - (91) illustrate what was typically done in each of the four positions and which item typically occurred in that position.

Figure 5:2. Typical functions in relation to position in the turn.

| SLOT 1 | SLOT 2 | SLOT 3 | SLOT 4 | SEPARATE TURN |
|----------|------------|--------|----------|---------------|
| Uptake | Emphasizer | Frame | Prompter | Follow-up |
| Response | | | Question | Go-on |
| Call-off | | | | Re-open |
| Close | | | | |

Table 5:5. Item and function.

| FUNCTION | RIGHT | OK | ALL RIGHT | TOTAL |
|------------|-------|-----|-----------|-------|
| Response | 45 | 68 | 22 | 135 |
| Frame | 27 | 36 | 26 | 89 |
| Follow-up | 53 | 28 | 3 | 84 |
| Emphasizer | 38 | 31 | 13 | 82 |
| Call-off | 19 | 55 | 7 | 81 |
| Close | 33 | 12 | 10 | 55 |
| Prompter | 9 | 2 | 16 | 27 |
| Uptake | 23 | 2 | 8 | 33 |
| Go-on | 19 | 1 | 4 | 24 |
| Question | 1 | 11 | 2 | 14 |
| Re-open | 3 | 3 | 5 | 11 |
| TOTAL | 270 | 249 | 116 | 635 |

The separate turn proved to be the characteristic position of various types of feedback in a broad sense, namely follow-ups, go-ons, and re-openers. It contained a follow-up move more often than any other move:

(84) A: ||shall we 'keep those Δbrackets as they ARE■ -

B: ||YÈS■

A: ||RÌGHT■ (S.9.1:515-517)

The follow-up is generally the questioner's evaluation of the response in a questioning exchange as in (84), but may sometimes serve as the addressee's evaluation of the inform in a non-questioning exchange. It terminates the exchange unless the termination is temporarily postponed by a re-opener.

The go-on move is an even more typical feedback device:

(85) C: ||and the ΔOTHER■ • ||[ði: əm] • her ΔSĀLARY■ ||{WĀSN'T} ΔQUÌTE ENOUGH■ to
||meet ['ði 'ði ði] reΔquirements of the "ΔBŪILDING SOCIETY■ ||so *Δshe*

B: *||NŌ■ *

C: fell 'down on ΔFINANCE■ •

B: *||RÌGHT■ *

C: *so I've* ▷got just Δtwo LÈFT■ (S.8.1:1169-1176)

The go-on is the listener's minimal feedback by which he assures the current speaker that he is listening. Since this move is inserted while the other party is talking, it often causes a temporary break in the syntactic continuity of his talk, but always without causing a speaker-shift.

That's right, sometimes alternating with *right* for emphatic reasons, was characteristically used as a go-on when the current speaker's statement referred to an event known to both A and B, while *all right* was used when the utterance referred to an event known only to B. The main difference between the follow-up and the go-on is that the latter does not involve speaker-shift while the former terminates the exchange.

The re-opener reflects a higher degree of involvement than the go-on move does:

(86) B: ||oh I ΔSÈE■ - oh well 'we can [ə:] - we can ||give 'that 'to her a 'mong ΔOTHER
things 'then■

A: ||YÈS■ •

B: ΔLL right■

A: ||YÈS■ and I'll ||come via HĀRRODS to YŌU you see■ and ||see if I can 'get those
ΔSŌCKS {for ||IAN■ }■

B: ||OK■

A: ||RÌGHT■

B: ||RÌGHT■ and ||keep an 'eye out for 'something 'for ▷for • ÈMMELINE■

(S.7.2:137-147)

The re-opener is used to query unexpected information or ask for confirmation. In (86) *all right* re-opens the first exchange which would otherwise be terminated by *yes*. *Right* re-opens the second exchange which would otherwise have been terminated by *OK*. The tone of the follow-up and go-on moves was generally falling, that of the re-opener almost always rising (cf *really*, p 156).

D-items occurring in turn-initial position (slot 1) generally either responded to the previous move or served as a link between the previous and the immediately succeeding move. This is where we find first response acts and

uptakes. The term 'response' denotes answers to questions as well as retorts to non-questions, both of which often consist of a first response act followed by a second, optional act:

(87) B: I'll get her to 'ring you 'when she comes IN

A: OK RIGHT (S.9.1:220-221)

The response move consists of *OK* which accepts the offer expressed by B and the emphazier *right*. The tone of the response could be either rising or falling. Although the choice is a matter of finality, it seems reasonable to assume that a rising tone reflects a more favourable attitude than a falling tone.

'Uptakes' look back and create a link with the previous speaker's move (cf Edmondson 1981:84):

(88) B: YES - I mean if Δpeople 'take it SERIOUSLY .

c: *[m]*

A: RIGHT * well "I've been 'shown up to be a complete PHILISTINE

(S.2.10:579-583)

Speaker A uses *right* to validate what speaker B just said before continuing. Uptakes and follow-up moves in turn-initial position provide a very similar type of feedback. The main difference between them is that the speaker who produced the uptake goes on and initiates a new exchange in the same turn; the speaker who produced the follow-up usually terminates the exchange while the next speaker initiates the new exchange.

Call-offs and closes, which were also characteristically found in slot 1, will be dealt with below in connection with telephone conversation.

Slot 2 was typically occupied by the 'emphasizer', as illustrated in (87) where *right* in slot 2 emphasizes *OK* in slot 1. In this example the emphazier accompanies a response act. In other cases it emphasizes a follow-up or a go-on. Although emphaziers are optional they were more often than not added to first acts realized by the *right* set in response moves (see also Stenström 1984a:233 for *yes/no* responses). Emphaziers usually occupied a separate tone unit and carried a rising more often than a falling tone (especially when realized by *that's right*).

Slot 3 was the position of frames:

(89) THAT'S it the FOLKLORE {SOCIETY 'library} YES that's that's RIGHT
that's «FINE» • YEÄH - "RIGHT • [ə:m] • well NOW [jə] you you SAY in
OTHER words (S.3.3:217-225)

Frames mark a boundary in the discourse and signal the transition between two stages (Sinclair & Coulthard 1975:44, Stenström 1984a:125). In cases where the frame occurred turn-initially, it either marked the beginning of a new transaction (as in mid-position) or introduced the very first thing a speaker said, or marked the return to, and reconfirmation of, an arrangement agreed upon earlier (*all right*), or marked the resumption of an interrupted narrative. *Right*, generally with a falling tone, proved to be the characteristic 'switch-off' signal (signalling end of topic), whereas *all right* (usually with a rising tone) was the characteristic 'switch-on' signal (signalling new topic).

Slot 4, finally, was the typical position of the prompter:

(90) B: try to READ it as if you're not • YOURSELF • that's

A: as if it Δwasn't MINE • all RIGHT *

>B: RIGHT • YES -- read from 'there to the **END** (S.3.1:265-271)

The prompter transforms the statement to which it is attached into a request for confirmation or acknowledgement. In this function, the D-item generally constituted a separate tone unit, usually followed by a pause. Occasionally, *right* and *all right* in slot 4 acted rather like questions. One example is (91):

(91) CLIVE RIGHT --- (S.9.2:621-622)

This example, which occurred at the beginning of a telephone call, can be paraphrased as 'Is that Clive speaking?'. In such cases the tone was always rising.

Notice that *all right*, the overall least frequent item, occurred as often as *OK* in turn-medial position (slot 3) and more often than *right* in turn-final position (slot 4). The most common functions of *all right* were frame, response, and prompter, in that order.

The different positional distributions in face-to-face and telephone conversation can be seen in Table 5:6. The difference is particularly obvious in the separate turn and in slot 1, where the high figures in telephone calls result from the use of, especially, *right* and *OK* in closing sections (Schegloff &

Table 5:6. Distribution of the *right* set in face-to-face and telephone conversation.

| | SLOT 1 face tele | | SLOT 2 face tele | | SLOT 3 face tele | | SLOT 4 face tele | | SEPARATE TURN face tele | |
|------------------|---------------------|----|---------------------|----|---------------------|---|---------------------|----|----------------------------|----|
| <i>right</i> | 38 | 76 | 14 | 28 | 16 | 8 | 10 | 10 | 14 | 56 |
| <i>OK</i> | 3 | 71 | 5 | 45 | 12 | 6 | 0 | 41 | 3 | 61 |
| <i>all right</i> | 12 | 27 | 8 | 10 | 12 | 6 | 9 | 15 | 5 | 12 |

Sacks 1973) where *OK* was the typical first pair part (call-off) and *right* the typical second pair part (close).

There are two types of closing exchange: the potential 'pre-closing', which occurs at the end of a phase in the dialogue and provides an opportunity for a new topic to be introduced instead of the closing, and the 'closing proper' which terminates the conversation (Schegloff & Sacks 1973). In this data the two types of closing were usually merged into one:

(92) A: «we'll» ||want at ▷least 'half an ΔHOUR■

B: ||UHÜH■

.....

A: O||K■ Call-off

B: ||RIGHT■ ||{ÖH} GRÉAT■ Close

A: ||OK THEN■

B: ||see you THEN■

A: ||GRÉAT■

B: bye ||BYE■ (S.7.3:227-236)

OK, the first closing move, is repeated by *OK then*, before *bye* terminates the closing section.

The *right* set can occur in any of the turns in the exchange and in any of the slots in the turn. Does this also mean that one item can substitute for another in the set without a change of meaning and function? Could, for example, any one of the three D-items *right*, *all right*, *OK* occur in the following exchanges?

Request / accept:

(93) could you hold on

Thanks / response:

(94) thanks very much

Suggest / agree:

(95) shall we turn to the applicants now

Direct / accept:

(96) make sure there's not a question about that

Inform / follow-up:

(97) it's under H for Harry

All right and *OK* were used more frequently than *right* after requests, suggests, and directs, whereas *right* and *OK*, but not *all right*, were used after *thanks* in the data. *Right* was the typical follow-up in informing exchanges. All three items were used as a follow-up move in questioning exchanges:

(98) A: ||shall we 'keep those Δbrackets as they ÄRE■

B: "||YÄS■

A: ||RIGHT■ (S.9.1:515-517)

(99) A: [ə:] ||shall I come ÉARLIER■ or at ||four o'CLÖCK■

B: ||no I should ΔCÖME {at ||four o'*CLÖCK■}■ «if you»*

A: *||all RIGHT■* (S.7.2:167-169)

(100) A: and I'll ||post ΔÖFF 'Rita's 'parcel SHÄLL I■ •

B: [ə] ||YÈS■ ||CÖULD you■

A: ||ÖK■ • (S.7.2:100-103)

Are *right*, *all right*, and *OK* interchangeable here, or does the type of questioning exchange determine which item realizes the follow-up move? The first question can be paraphrased by 'do you think we should?', the second and third questions by 'would you like me to?'. *Right* in (98) is equivalent to 'I see', *all right* in (99) and *OK* in (100) are equivalent to 'I accept'. The question of interchangeability is extremely complex. Not least does it involve the particular way things are said that cannot be marked graphically in the transcript. Therefore, I am not ready to draw any conclusions on this point.

Summing up, the members of the *right* set were not the most frequent discourse items in the corpus but they were found to serve the widest range of

functions. All three occurred more frequently in the telephone calls than in the face-to-face conversations. *OK*, the typical telephone device, was particularly common as the call-off move in the closing section of the call, while *right* realized the close move.

When identifying the functions of the set in the dialogues, I took their position in the exchange structure as a starting-point. All three were found to occupy the same positions in the exchange, to fill the same slots in the turn, and to serve the same functions, but with different frequency.

Items providing feedback of various kinds were found to make up entire speaker-turns. Items serving as a response to what was said in the previous utterance or linking two successive utterances were found in utterance-initial position. Next came emphasizees which gave more force to utterance-initial items. Items marking topic boundaries and signalling transitions were found in the middle of an utterance, and items appealing for feedback or eliciting a response at the end.

Right was the typical realization of the follow-up move, *all right* that of the prompter, and *OK* that of the response. Although all three items were found to occupy the same positions, they were not fully interchangeable. The choice of D-item was related to type of mode (face-to-face or telephone), type of exchange (eg informing or requesting), and type of preceding move.

5.7 Towards a model of analysis

A model of analysis may not be indispensable for the interpretation and description of discourse items, but it is certainly helpful. Exactly what aspects the model should be able to handle and how detailed it should be is a different matter. I have aimed at a model (described in Stenström 1989) that can handle not only the various levels of a conversational exchange but also bridge the gap between grammar and discourse by indicating when items that are traditionally referred to in grammatical terms have a predominantly interactive function.

It is possible to identify three different types of D-items:

- [1] PURELY INTERACTIONAL, including lexical items which cannot be described in terms of clause elements;
- [2] MAINLY INTERACTIONAL, including lexical items that are primarily used as interactional devices but may be used, in some environments, as clause elements;
- [3] ALSO INTERACTIONAL, including adverbials of various classes used as interactional or discourse organizing devices.

The three categories can be seen along a 'clause-integration' scale, which implies that the more interactional an item is, the less integrated it is - and vice versa. The most common D-items in the data are listed in Figure 5:3.

All the items, except those in the first group, are provided with at least two word-class tags which indicate their potential interactive and/or grammatical function. The word-class labels differ from those used earlier in this chapter but follow the TESS tagging dictionary (see pp 101ff), which was based on Quirk et al (1985) and introduced for the automatic word-class tagging. However, the three groups suggested here do not agree entirely with their categorization. They regard *ah*, *aha*, *mhm*, and *oh* (group 1) together with eg *ouch* and *pooh* as 'purely emotive' interjections which 'do not enter into syntactic relations'; *yes* and *yeah* (group 1) and *all right* (group 2) are referred to as formulae, most of which, are 'used for stereotyped communication situations' and can be analysed into clause elements in a very limited way (1985:852-53). *Ah*, *mhm*, and *oh* do not enter into syntactic relations, but I do not see them as purely emotive, and I find it difficult to look upon *yes*, *yeah*, and *all right* as formulae. Nor do I think that any of them are used specifically in stereotyped communication situations.

The word-class membership of D-items (including single words as well as strings of words used as D-items) is shown in Figure 5:3. Although they are all classed as adverbials (indicated by A in the labels), the 'purely interactional' items (group [1]) do not really belong to any traditional word-class category, unless we regard all items that do not fit the definition of other word-classes as adverbs (cf Quirk et al 1985:438). By contrast, the items referred to as 'mainly interactional' (group [2]) and 'also interactional' (group [3]) are provided with at least two word-class labels indicating their potential functions at the discourse and/or grammatical level.

Purely interactional items do not normally serve as clause constituents. Items that are not purely interactional are more often found in a context where they serve as elements of clause structure. D-items realized by sentence fragments and simple sentences are the only ones that can always be analyzed as clause elements.

The question is now: what kind of discourse model can handle not only the interactional aspect manifested in the exchange but also the grammatical aspect manifested in the sentence? In Stenström (1989) I discuss a combined, two-level model which can handle both the interactional function of D-items in a speaker's turn and their potential syntactic functions (as indicated in Figure 5:3) as well as their syntactic structure in appropriate cases (eg *that's right*, *I*

Figure 5:3. Categories of interactional D-items (see pp 101ff for labels).

| [1] PURELY INTERACTIONAL | | | | | | |
|--------------------------|-------|--|--|--|--|--|
| <i>ah</i> | AQres | | | | | |
| <i>aha</i> | AQres | | | | | |
| <i>mhm</i> | AQres | | | | | |
| <i>oh</i> | AQres | | | | | |
| <i>yeah</i> | AQpos | | | | | |
| <i>yes</i> | AQpos | | | | | |

| [2] MAINLY INTERACTIONAL | | | | | | |
|--------------------------|-------------------|-----------|-----------|----|-------|----|
| <i>no</i> | AQneg | B3neg | | | | |
| <i>please</i> | AQpol | VA | | | | |
| <i>I see</i> | AQres | BHsub+VA | | | | |
| <i>I mean</i> | AQsof | BMsub+VA | | | | |
| <i>you know</i> | AQsof | BHper+VA | | | | |
| <i>you see</i> | AQsof | BHper+VA | | | | |
| <i>OK</i> | AQres | AQfra | | | | |
| <i>all right</i> | AQres | AQfra | JA | | | |
| <i>thank you</i> | AQtha | VA+BHper | | | | |
| <i>that's right</i> | AQres | RC+VB3+JA | | | | |
| <i>that's all right</i> | AQres | RC+VB3+JA | | | | |
| <i>tag Qs</i> | AQtag op(+not)+JA | | | | | |
| <i>well</i> | AQwel | ASint | JA | NC | AC | |
| <i>sure</i> | AQres | ADcnt | ASint | JA | ASemp | |
| <i>right</i> | AQres | AQfra | AApro/spa | JA | NC | VA |

| [3] ALSO INTERACTIONAL | | | | |
|------------------------|-------|-------|-------|-------|
| <i>anyway</i> | ACcon | AQfra | | |
| <i>in fact</i> | ACcon | AQfra | | |
| <i>maybe</i> | ADcnt | AQres | | |
| <i>perhaps</i> | ADcnt | AQres | | |
| <i>probably</i> | ADcnt | AQres | | |
| <i>absolutely</i> | ASint | AQres | | |
| <i>however</i> | ACcon | AQfra | | |
| <i>of course</i> | ACcon | ASemp | AQres | |
| <i>certainly</i> | ADcnt | ASemp | AQres | |
| <i>obviously</i> | ADcnt | ASint | AQres | |
| <i>indeed</i> | ADcnt | ASint | ADcon | AQres |
| <i>really</i> | ADcnt | ASint | ASemp | AQres |
| <i>honestly</i> | ADsty | AApro | ASemp | AQres |
| <i>now</i> | AAtim | ACres | CCtim | AQfra |

see what you mean). As I try to demonstrate, a model of this kind has many advantages. The most obvious disadvantage is that it tends to become rather bulky, especially if we want to make an extensive analysis, not only of individual D-items but of entire turns.

Note

Section 5.5 on *really* is based on Stenström (1986) and Section 5.6 on the *right* set is based on Stenström (1987).

Spoken English and the dictionary

Bengt Altenberg

6.1 Introduction

On the whole, dictionaries tend to reflect the written language rather than the spoken.¹ We only have to take a cursory glance in a dictionary to notice this. The written idiom dominates, and many words and expressions that are characteristic of speech are either missing or inadequately described. Even recent and ambitious dictionaries which put special emphasis on 'real' language as it is used in 'natural communication', reveal a lingering written bias that is sometimes irritating to a user interested in the spoken word.

Perhaps this written bias is only what we can expect: speech has only recently come of age as a variety worthy of scholarly attention, and our knowledge of the spoken language still lags behind that of the written. Perhaps it also reflects the difficulty of describing speech in traditional terms - especially the 'ungrammatical' variety we hear in everyday conversation, with its unplanned 'messiness', its interactive and emotive character, and its reliance on intonation and gesture to convey meanings.

Yet, our knowledge of natural spoken discourse has made substantial advances in the last decades, and we are now beginning to see more clearly the inadequacies of our dictionaries in their treatment of the spoken medium. I will here touch on two areas where I think contemporary dictionaries fail to give an adequate representation of speech: the use of intonation to differentiate

adverbial functions and the treatment of certain speech-specific 'discourse items'.

I will use two learners' dictionaries to illustrate my points: the new edition of the *Longman dictionary of contemporary English (LDOCE)* and the *Collins COBUILD English language dictionary (COBUILD)*, both published in 1987. The choice of these was natural. They provide the most up-to-date and authoritative accounts of contemporary English vocabulary and are probably the most influential and useful monolingual dictionaries currently available to learners and teachers of English. Moreover, both focus on 'ordinary everyday English' drawn from extensive corpora of citations or text samples, a fact which should guarantee an exhaustive and reliable treatment of the spoken word.²

Although both *LDOCE* and *COBUILD* are learners' dictionaries, I will not examine them from the user's point of view or evaluate them as tools for language learning. Rather, my chief concern has been a more general linguistic phenomenon: the difficulty of describing speech in terms primarily developed for writing. This difficulty is familiar to anyone who has tried to make a grammatical analysis of genuine conversational data. My reflections here spring from this kind of experience, and in particular from the descriptive problems we have encountered within the TESS project in our efforts to write formalized rules for automatic grammatical analysis and intonation assignment on the basis of the London-Lund Corpus.

6.2 Adverbs and intonation

The fact that speakers make use of intonation (as distinct from the pronunciation of individual words) to express their intentions means that they can make functional distinctions that are difficult or impossible to express in writing. Adverbs illustrate this point particularly well. Many adverbs have multiple functions as manner adverbial (adjunct or subjunct in the terminology of Quirk et al 1985) or sentence adverbial (conjunct or disjunct). *Briefly*, for instance, may be used both as a manner adjunct and as a style disjunct (the latter expressing the speaker's comment on the form of his utterance), as illustrated in the following examples:

- (1) we discussed the matter BRIEFLY ■
- (2) BRIEFLY ■ there is nothing more I can DO about it ■

As a manner adjunct (1), *briefly* normally occurs clause-finally with nuclear prominence, but as a style disjunct (2) it is typically placed clause-initially in a

separate tone unit, usually with a falling-rising tone (cf Allerton & Cruttenden 1974:21 and Bing 1984:16ff). *LDOCE* describes *briefly* (under the adjective *brief*) as follows:

~ly adv: The President stopped briefly in London on his way to Geneva.
Briefly, I think we should accept their offer.

This description is not particularly illuminating. A functional distinction is implied (by word order and punctuation), but there is no attempt to make the distinction explicit. The treatment of *frankly*, which has the same functional possibilities as *briefly*, is hardly more adequate; the adverb is given a separate entry and described as follows:

adv 1 in an open and honest manner 2 speaking honestly and plainly:
Frankly, I don't think your chances of getting the job are very good.

Here, a functional difference is suggested (by the two definitions), but only one function is illustrated. Moreover, the important role played by word order and intonation remains unclear.

COBUILD's treatment of these adverbs is more helpful. Both are presented in separate entries and their different functions are carefully explained in numbered paragraphs and illustrated with several examples. *Briefly*, for example, is described as follows:

- 1 Something that happens or is done **briefly** happens or is done for a very short period of time. EG He smiled briefly... 'Good morning, Tommy,' he said, looking up briefly.
- 2 If you say something **briefly**, you use very few words or give very few details. EG She told them briefly what had happened... Robertson answered briefly and without interest... Put briefly, his argument was this.
- 3 You can say **briefly** to indicate that you are about to say something in as few words as possible, rather than giving a full description or explanation or to indicate that you are about to summarize what you have just been talking about. EG The facts, briefly, are these... For reasons beyond my control (briefly, money) I once moved five times in eighteen months.

In addition, semantic and grammatical information is supplied in an extra marginal column in the form of synonyms, antonyms and/or superordinate terms and a grammatical code system based on a mixture of structural and positional criteria. Thus, the first two senses of *briefly* are classified as 'ADV AFTER VB' (adverb only used after a verb or a verb + object) and the third as 'ADV SEN' (sentence adverb with various specified positions).

Frankly is divided into two senses, the first classified as 'ADV SEN', the second as 'ADV WITH VB' (adverb modifying a verb and occurring either before or after the verb (plus object, if any)):

- 1 You use **frankly** when you are stating an opinion to emphasize that you mean what you are saying, even though the person you are speaking to may not like it. EG *Frankly, this has all come as a bit of a shock... It is frankly absurd... Quite frankly, I am too miserable to care.*
- 2 If you say or do something **frankly**, you say or do it in an open, honest, and straightforward way. EG *He asked me to tell him frankly what I wished to do.*

As these examples show, *COBUILD*'s description is more detailed and explicit than *LDOCE*'s. This is partly achieved by greater elaboration of the entries, but also - and more interestingly - by its adverbial coding system. This system, which distinguishes altogether five adverbial functions, is a useful innovation in the lexicographic treatment of adverbs. (Apart from the categories mentioned, two other functions are recognized: 'ADV + ADJ/ADV' = modifiers of adjectives and adverbs, and 'ADV BRD NEG' = 'broad' negatives like *hardly*, *scarcely*, *seldom*, etc.) Yet, despite its usefulness, some functional differences are still broadly suggested rather than sharply defined. The distinction between 'ADV AFTER VB' and 'ADV WITH VB' is blurred by functional and positional overlap (mainly due to the heterogeneity of the latter class), and the category 'ADV SEN' comprises a wide range of sentence adverbs (conjuncts and disjuncts) whose positional characteristics can only be captured in rather general terms: 'usually placed at the beginning of a clause followed by a comma or in the clause separated by commas. A few come at the end of the clause.' Hence, the distinctive position(s) of these adverbs must be inferred from the illustrations (sometimes with difficulty: the typical clause-initial position of *briefly* as a disjunct, for example, is not given). Moreover, as in *LDOCE*, the prosodic differences are entirely ignored.

The functional differentiation illustrated by *briefly* and *frankly* is not an isolated phenomenon, but characteristic of a whole range of adverbs such as *simply*, *literally*, *personally*, *clearly*, *naturally*, *superficially*, *technically*, *ironically*, *happily*, *hopefully* (for a detailed description and classification of adverbs, see Greenbaum 1969, Allerton & Cruttenden 1974, 1976, 1978, and Quirk et al 1985: Chapter 8). What is important to realize about these adverbs is that, although their function is generally signalled both positionally and prosodically, the prosodic distinction is often the more important one. Disjuncts, for example, which may occur initially, medially and finally in a clause, never take the sole intonation focus in clause-final position (as adjuncts

tend to do), ie they must either be prosodically separated or entirely deaccented. Hence, although adjuncts and disjuncts may occur in the same syntactic position, they are always prosodically distinct, as shown in the following examples (from Allerton & Cruttenden 1976:48):

- (3) (a) Richard played ^ˈNATURALLY■ (adjunct)
- (b) Richard ^ˈPLAYED■ ^ˈNATURALLY■ (disjunct)

In other words, *naturally*, *briefly*, *frankly*, and similar adverbs can be regarded as 'homomorphs' (cf Quirk et al 1985:71), whose function can only be fully clarified by means of intonation.

However, prosody does not only serve to distinguish disjuncts and adjuncts, nor is its role confined to signalling a contrast in intonational grouping. With conjuncts and disjuncts the choice of nuclear tone may be equally important. Conjuncts, for example, often have distinctive tones of their own:

- (4) (a) Richard has ^ˈRESIGNED■ ^ˈTHOUGH■
- (b) *Richard has ^ˈRESIGNED■ ^ˈTHOUGH■
- (5) (a) ^ˈBESIDES■ he didn't want to ^ˈDO it■
- (b) ?^ˈBESIDES■ he didn't want to ^ˈDO it■

The choice of tone may also distinguish a whole functional class, as in the case of content disjuncts expressing value judgment (*curiously*, *fortunately*, *ironically*, *surprisingly*, etc), which generally occur with a fall-rise tone:

- (6) ^ˈFORTUNATELY■ he didn't come ^ˈEARLY■

It may also distinguish functional subclasses, as in the case of content disjuncts expressing likelihood, which have different prosodic tendencies depending on the degree of conviction they convey. Thus, likelihood disjuncts expressing certainty (*clearly*, *definitely*, *certainly*, *obviously*, *naturally*, *of course*, etc) generally have an 'assertive' falling tone, while those expressing some doubt (*presumably*, *apparently*, *conceivably*, *possibly*, *probably*, etc) are more common with a fall-rise (for finer distinctions, see Allerton & Cruttenden 1974:15f; see also Chapter 9):

- (7) ^ˈCLEARLY■ he can ^ˈWIN the match■
- (8) ^ˈPRESUMABLY■ he can ^ˈWIN the match■

There are many other adverb classes with similar distinctive prosodic tendencies, but the examples given will suffice to show the strong connection between function and intonation within the adverb category.

The grammatical and prosodic properties of adverbs demonstrate two lexicographically relevant points. First, the adverbs form an important but very heterogeneous category that deserves a much more detailed and systematic treatment than is currently provided in dictionaries. Second, the prosodic behaviour of many adverbs is related to their semantic or pragmatic function. In other words, their prosodic potential is an essential part of their 'meaning', just as the complementation or selectional restrictions of a verb is part of the meaning of the verb. Indeed, a comparison with the treatment of verbs in dictionaries like *LDOCE* and *COBUILD* is illuminating. Whereas both dictionaries make a detailed and useful classification of verbs, only *COBUILD* has attempted something comparable for adverbs. In this respect, recent grammars like Quirk et al (1985) are far ahead of contemporary dictionaries.

A reasonable demand on future dictionaries is thus a treatment of adverbs that approaches the delicate description that is generally provided for verbs. Improvements should be possible in three respects:

(a) a classification of adverbs according to their functional use as modifier or adverbial adjunct, subjunct, conjunct or disjunct (with further subdivisions where relevant), (b) a rough indication of their positional tendencies, and (c) a representation of the typical prosodic behaviour of adverbial homomorphs. The prosodic notation could be simple, but should include an indication of intonational grouping (tone-unit boundaries) and predominant nuclear tone(s).³ For lack of an international standard, a simplified version of the prosodic system developed by Crystal & Quirk (1964) and Crystal (1969, 1975) might be a suitable model. This system has gained increased currency in recent years, both in descriptive works like Quirk et al (1985) and in linguistic research (especially that based on the London-Lund Corpus; see pp 47ff and Altenberg 1986 and forthcoming a). It is also widely used in advanced language teaching materials (eg Crystal & Davy 1969, 1975, Leech & Svartvik 1975).

6.3 Discourse items

Another aspect of speech that is inadequately treated in dictionaries is the use of various types of 'discourse items' that are either rare outside speech or used in a speech-specific way (for a discussion of these, see Chapter 5). I am not here thinking of stylistically marked words that are typical of speech as a

Table 6:1. Distribution of discourse items in a sample (ten conversations) from the London-Lund Corpus.

| TYPES | FREQUENCY |
|---|-----------|
| RESPONSES | 2237 |
| <i>yes</i> | 727 |
| <i>m(hm)</i> | 658 |
| <i>no</i> | 259 |
| <i>yea(h)</i> | 217 |
| <i>oh</i> | 170 |
| <i>quite</i> | 35 |
| <i>I see</i> | 29 |
| <i>that's right</i> | 22 |
| <i>ah</i> | 17 |
| <i>right</i> | 15 |
| others | 88 |
| HESITATORS | 1226 |
| <i>ə(:)h</i> | 767 |
| <i>ə(:)m</i> | 430 |
| <i>m</i> | 29 |
| SOFTENERS | 438 |
| <i>you know</i> | 212 |
| <i>you see</i> | 119 |
| <i>I mean</i> | 102 |
| others | 5 |
| INITIATORS | 401 |
| <i>well</i> | 365 |
| <i>now</i> | 35 |
| others | 11 |
| HEDGES | 95 |
| <i>sort of</i> | 82 |
| <i>sort of thing</i> | 10 |
| others | 3 |
| EXPLETIVES (<i>God, heavens, etc</i>) | 52 |
| THANKS | 21 |
| <i>thank you</i> | 17 |
| <i>thanks</i> | 4 |
| APOLOGIES | 19 |
| <i>sorry</i> | 12 |
| others | 7 |
| ATTENTION SIGNALS (<i>hey, look</i>) | 6 |
| RESPONSE ELICITORS (<i>eh, right</i>) | 6 |
| POLITENESS MARKERS (<i>please</i>) | 5 |
| ORDERS (eg <i>give over</i>) | 5 |
| OTHERS (GREETINGS, etc) | 5 |
| TOTAL | 4516 |

predominantly informal medium (like *bloke, telly, fag*, etc), but of items that have a basically interactive and pragmatic function and therefore mainly occur in conversation, such as responses (*yes, no, quite, I see*, etc), 'softeners' (*you know, you see*, etc), hedges (*sort of (thing)*, etc), initiators (*well, now*), apologies (*sorry, pardon*), thanks (*thanks, thank you*), attention signals (*hey, look*), politeness markers (*please*), and greetings (*good morning*). A list of such items in a 50,000-word sample (ten conversations) from the London-Lund Corpus is given in Table 6:1 (derived from Stenström's inventory of categories in Chapter 5). The list is not exhaustive (only items occurring ten times or more have been listed separately), and the classification and labels are tentative, but the table gives a rough idea of the relative frequency of the most important types occurring in the conversation of educated British speakers.

As Stenström has pointed out (pp 137ff), several characteristics set these discourse items apart from other word classes. They are difficult, and often impossible, to analyse in traditional grammatical terms (as belonging to a certain part of speech or realizing a certain syntactic function); they generally contribute little to the propositional content of an utterance but rather fulfill various pragmatic functions in discourse; many of them take the form of (more or less) invariable multi-word units that are pointless to analyse internally.

The mere frequency of these items in everyday conversation is a sufficient reason why they should be given special attention by lexicographers. In the grammatically analysed sample of the London-Lund Corpus on which Table 6:1 is based, they account for 9.4% of all word-class tokens (see Table 6:2). What is more, discourse items constitute the fourth largest word-class category, outranked only by verbs, pronouns and nouns, but outranking such basic grammatical categories as prepositions, adverbs, determiners, conjunctions and adjectives. This means that, if frequency of occurrence is anything to go by in the compilation and organization of dictionaries, discourse items deserve to be treated with the same care and attention as the traditional word classes.

However, the decisive argument for treating discourse items as a category (or categories) of their own is not their frequency but their special discourse functions. Existing dictionaries, in so far as they include these items at all, run into obvious difficulties when they try to describe them under traditional word-class labels. Again, *LDOCE* and *COBUILD*, which probably give more attention to these speech-specific expressions than other dictionaries, may serve as examples.

Table 6:2. Relative frequency of major word classes in a sample (c 50 000 words) from the London-Lund Corpus.

| Word class | % |
|-----------------|------|
| Verbs | 20.1 |
| Pronouns | 17.3 |
| Nouns | 14.3 |
| Discourse items | 9.4 |
| Prepositions | 9.2 |
| Adverbs | 9.0 |
| Determiners | 7.9 |
| Conjunctions | 6.3 |
| Adjectives | 6.0 |
| Predeterminers | 0.3 |
| Miscellaneous | 0.2 |

Let us start with *LDOCE*. Broadly speaking, *LDOCE* approaches these items in two ways: they are either (a) given a traditional word-class label and assigned a separate main entry or (b) presented in a subentry under a related but functionally different word. As a result, we find functionally similar or identical items treated under a number of different word-class labels and, conversely, functionally distinct items assigned to the same word class. I will give a few examples of what this traditional 'straitjacket' may lead to.

Symptomatically, a favourite word-class label for many discourse items in *LDOCE* is 'interjection', which is used for such functionally distinct words as *please* (politeness marker), *sorry* (apologizer), *well* (initiator), *hey* (attention signal), *good afternoon* (greeting), *thank you* (thanks), *damn* (expletive), and *oh* (which functions variously as response, initiator and exclamation in the corpus, in contrast to *eh* and *ah*, which are predominantly elicitor and response, respectively; cf Aijmer 1987). Another frequent word-class label is 'adverb', which is resorted to for a number of functionally disparate items such as *really* (elicitor, response), *now* (initiator) and *yes* (agreement).

An illustration of the reverse inconsistency - different word-class labels for the same discourse function - is equally illuminating. Thus we find, for example, response items variously classified as 'interjection' (*oh, ah*) or 'adverb' (in separate entries: *yes, yeah, OK, certainly, sure*, etc; in subentries

under a related adverb: *no, quite, really, right, exactly, fine*, etc), or presented in a subentry under a pronoun (*that's it*), adjective (*that's right, right oh*) or verb (*I see*). Similarly, among expletives we find *gosh, (oh) dear* and *damn* as separate entries labelled 'interjection', but *dammit* (or rather *damn it*) under the verb *damn*, *God* under the noun *God*, *my* under the determiner *my*, and *for God's sake* under the noun *sake*; among hedges, *as it were* is treated in a subentry under the conjunction *as*, and *sort of* under the noun *sort*; among apologies, we find *sorry* in a separate entry labelled 'interjection', but *pardon* (with variants) in subentries under both the noun and the verb *pardon*; and among initiators, *well* is treated as an 'interjection' in a separate entry, but *now* in a subentry under the adverb *now*.

As these examples show, a traditional categorization of discourse items does not only result in functional inconsistency, but in functional inappropriateness. For example, in what way is *yes* or *OK* an 'adverb', and *sort of* (as in *sort of odd*) a 'noun'? Or *my* a 'determiner' and *good afternoon* an 'interjection'?

An additional complication is the fact that many discourse items are multiword combinations. Such combinations are sometimes given a separate main entry, but more often presented (or merely illustrated) in a subentry under a related look-up word, which gives rise to further inconsistencies. Hence, we find *thank you* and *good afternoon* treated as interjections in separate entries, whereas the softeners *I mean, you see* and *you know* are treated under the verbs *mean, see* and *know* respectively, the smooth-over *never mind* under the verb *mind* (with a cross reference at *never*), the hedges *as it were* and *sort of* under the conjunction *as* and the noun *sort* respectively, and the responses *that's it* and *that's right* under the pronoun *it* and the adjective *right*. I am aware of the practical problems involved (lexical items must be easy to find in a dictionary), but practical convenience should not be allowed to, and indeed need not, affect the functional classification of dictionary items. Many types of multiword items are already systematically presented as separate entries in *LDOCE* (eg compounds and certain idioms) or listed separately at the end of a main entry (phrasal verbs); a similar recognition of multiword discourse items as independent units or parts of speech would therefore reduce also this type of inconsistency.

By contrast, *COBUILD* has managed to avoid most of these problems by two types of innovation. First, the dictionary entries are not primarily organized in terms of grammatical word class but on the basis of other criteria, such as frequency of use, independence of meaning and concreteness. Word-class information is instead given in abbreviated form in the extra

marginal column provided in *COBUILD* (eg 'N COUNT' or 'ADV SEN'). This arrangement has the advantage that the grammatical status of an item does not determine the organization of an entry and, hence, has less serious consequences when the grammatical classification is inadequate.

The second innovation is of greater theoretical interest. The compilers of *COBUILD* have recognized the deviant, 'asyntactic' nature of many discourse items and introduced two new functional labels, 'CONVENTION' and 'PHR', to capture this. The first is applied to standard expressions with 'established form and meaning' that can occur as single independent utterances (s v CONVENTION, p 310) and is typically used for interactive expressions of various kinds, such as responses, greetings, attention signals, apologies and thanks. The second label, 'PHR', is applied to multiword expressions that are more or less invariable and display some degree of integration in clause structure; when such a phrase has a typical clause function (as adverbial, object, etc), or occurs in a particular syntactic pattern, this is indicated after the category label. Discourse categories covered by this label are hedges (eg *as it were* = 'PHR: USED AS ADV SEN'; *sort of* = 'PHR: USU + ADJ/PAST PART' or 'PHR: USU + VB/ADV/PREP'), softeners (eg *you see* and *I mean* = 'PHR: USED AS ADV SEN') and the smooth-over *never mind* (= 'PHR: ONLY IMPER, IF + PREP THEN about').

In addition to these two labels, *COBUILD* uses two more conventional word-class symbols, 'EXCLAM' (corresponding to the traditional term 'interjection') and 'ADV SEN' ('sentence adverb(ial)') to describe various discourse items.

Thus, while *LDOCE* scatters discourse items over nine traditional categories, most of which are functionally inappropriate or misleading, *COBUILD* has reduced these to four: 'CONVENTION', 'PHR', 'EXCLAM' and 'ADV SEN'. Of these, 'CONVENTION' is typically used for interactive expressions (Responses, Greetings, Attention signals, Apologies and Thanks), 'EXCLAM' for Expletives, 'PHR' for Hedges, Softeners and Smooth-overs, and 'ADV SEN' for Initiators and the Politeness marker *please*. The result is a broad classification that makes no attempt at distinguishing any of the finer discourse categories recognized in Table 6:1 (such distinctions are generally, as in *LDOCE*, made informally inside each entry). In other words, the classification is not primarily discourse-oriented but grammatical: it recognizes such features as syntactic independence ('CONVENTION', 'EXCLAM'), syntactic complexity and degree of 'frozenness' ('PHR'), and syntactic function ('ADV SEN').⁴ Yet, because it is systematic and avoids forcing speech-specific items into a traditional straitjacket, it is more satisfactory than *LDOCE*'s approach.

This does not mean that the *COBUILD* system is without inconsistencies. Responses, for example, are generally classified as 'CONVENTION', but *oh* and *good* are labelled 'EXCLAM' and *certainly* 'ADV SEN' in entries illustrating clear response functions. For *ah* no label is given. Expletives are normally classified as 'EXCLAM', but *for God's sake* is coded 'CONVENTION'. Softeners are labelled 'PHR:AD SEN', but *you know*, the most frequent type, has no label. Initiators are described as 'ADV SEN', but *well* is presented without a label. *Never mind* is classified as 'PHR', but since it is frequently used as an independent utterance, 'CONVENTION' would be an equally valid alternative.

Other interesting features to examine are the coverage, descriptive delicacy, and relative prominence that the two dictionaries give to discourse items. Since both dictionaries claim to describe natural English as reflected in extensive language corpora, we might expect them to be fairly exhaustive in their treatment of discourse items. Superficially at least, this also seems to be the case. Both include most of the discourse expressions listed in Table 6:1 in one way or another, and direct omissions are rare. Both fail to include the support *m(hm)*, which might be dismissed as a marginal lexical item but is in fact the second most frequent affirmative response in the London-Lund Corpus and an indispensable ingredient in any natural conversation (cf Tottie 1989). The common hedge *sort of thing* (see Aijmer 1984 and 1986) is also absent in both dictionaries (although there is a misleading cross-reference from *sort* to *thing* in *COBUILD*). *LDOCE* ignores *look* as an attention signal and merely mentions *I mean* in a usage note. *COBUILD* has omitted *my* in its exclamatory use and fails to give attention to *that's right* and *right*, which are both frequent responses in the corpus (*right* is also common as a response elicitor; cf Stenström 1987).

If the coverage of discourse items is about the same in the two dictionaries, the treatment of the included items differs considerably. This is partly due to the space available (*COBUILD* is the larger dictionary), but also to a difference in editorial policy. In accordance with its 'single look-up' principle, *COBUILD* presents all relevant information about an item in a single (sub)entry, whereas *LDOCE* may counterbalance a brief entry with more extensive stylistic or pragmatic information in separate usage notes or full-page language notes (eg on 'Addressing people', 'Apologies', 'Invitation and offers', 'Politeness', 'Thanks', etc). *LDOCE* also has a greater tendency to present discourse items as separate entries, while *COBUILD* describes them in numbered subsections or paragraphs of a main headword (a consequence of *LDOCE*'s policy to organize entries according to word class but *COBUILD* according to word form). However, if we disregard these differences (and the pedagogical

merits they may have), *COBUILD*'s treatment is generally more systematic, detailed and exhaustive than *LDOCE*'s. This is revealed in several ways. *COBUILD* is more consistent in recognizing the multifunctional character of many discourse items, and consequently takes greater care to describe and illustrate each function. For example, while *COBUILD* identifies about a dozen different uses of *yes*, *no* and *well*, and half a dozen uses of *ah*, *now* and *please*, *LDOCE* merely gives two or three. Moreover, in *COBUILD* each function is clearly set off in numbered subsections and highlighted in bold face, while *LDOCE* often lumps together several uses in a single (sub)entry or confines itself to a casual illustration in passing (as in the case of *I see* and *that's right*), a tendency that is not always redeemed by its usage and language notes.

Since frequency of use is one of the organizing principles in *COBUILD*, one might expect discourse items to occupy an early position in its entries. This is also generally the case: discourse items like *well*, *you know*, *you see*, *I mean* and *sort of* generally crop up earlier in *COBUILD* than in *LDOCE*. But there are exceptions: the initiator *now* is presented as the third sense of *now* in *LDOCE* but only as the tenth in *COBUILD*, and the frequent response *I see* is illustrated (though casually) much earlier in *LDOCE* (sense 5) than in *COBUILD* (sense 10). Indeed, sometimes one wonders what impact the frequency principle has been allowed to have on the ordering of subentries in *COBUILD*. To take just two examples, *you know* and *you see*, which are probably the two most common discourse expressions in English (cf Sinclair & Renouf 1988:151f), only appear as senses 15 and 18 of *know* and *see* respectively (in *LDOCE*, it should be added, they are given even more insignificant positions).

To sum up, both dictionaries include most of the items listed in Table 6:1, but their treatment of them differs. While *LDOCE* pays special attention to the pragmatic use of discourse items in separate 'Usage and Language Notes', *COBUILD* tends to give greater prominence to the items in the dictionary entries themselves (a feature that is partly determined by its 'single look-up' policy, partly by its greater attention to corpus frequency). But what is more important, *COBUILD* is more felicitous in its grammatical classification of discourse items. Although the classification is crude in some respects, it avoids the inadequacy that is inevitable with a traditional system.

6.4 Conclusion

Speech differs from writing in many fundamental ways. I have here touched on two speech-specific phenomena, the use of intonation to differentiate adverbial functions, and the use of lexical items with pragmatic functions that

are difficult to describe in traditional grammatical terms. If we wish dictionaries to reflect the spoken language (which they surely should do), they must also recognize these phenomena and find methods of representing them in an adequate way. As this scrutiny has shown, even recent 'speech-oriented' dictionaries often fail to do this, although improvements are noticeable in some respects. The suggestions I have made here include

- (a) a functionally relevant classification of adverbs,
- (b) a systematic treatment of discourse items as linguistic categories of their own, and
- (c) the introduction of a simple prosodic notation (indicating tone-unit boundaries and major nuclear tones) to clarify functional differences in illustrations of speech.

In all these areas, natural speech corpora (such as the London-Lund Corpus) provide a rich source of information that is likely to be of great benefit to lexicographers and dictionary users in the future.

Notes

- 1 This chapter is a revised version of a paper (Altenberg 1988) presented at the conference on 'Standardization in Computerized Lexicography', Saarbrücken, 15-17 October 1986.
- 2 There are important differences in the way the two dictionaries have made use of their source corpora. While *LDOCE*'s corpus (the Longman Citation Corpus) mainly seems to have served 'as a *basis* for creating natural examples' (Summers 1988:13), the *COBUILD* database (the Birmingham Collection of English Text) was used systematically as textual evidence for the compilation of the dictionary, not only in the selection of examples (phrases, collocations, etc) but in determining word meanings and estimating their relative importance (see Sinclair 1985 and 1987a). Moreover, it is unclear how much natural speech was included in the Longman Corpus. For an account of the *COBUILD* Corpus, see Renouf (1987).
- 3 The only dictionary I know of where an attempt has been made to use intonation to elucidate functional differences is the *Oxford dictionary of current idiomatic English*. An illustration of this is its treatment of *you know*, which is given four different entries (Vol 2, p 603f), each with its functional and intonational specification (eg *you know* 1: 'you know or understand very well [...] often preceded by short pause; fall-rise tone on *know*.'). One may disagree with details in these explanations, but the approach is laudable and worthy of imitation.

- 4 A more accurate way of describing *COBUILD*'s classification is to say that grammatical criteria have been used as far as they have been applicable ('ADV SEN', 'PHR'). Expressions that have not been possible to define grammatically in a simple way have been divided into two main classes, 'EXCLAM' and 'CONVENTION'. Of these, the latter can be regarded as a broad residual category consisting of a range of predominantly interactive but functionally distinct subclasses. Thus, although an 'interactive' category is well worth recognizing, what is less satisfactory about it is its discourse-functional diversity. To conflate so many distinct subtypes under one label is comparable to recognizing only one category of verbs or one category of pronouns. In addition, the name 'CONVENTION' is unfortunate, since conventionality of expression is not unique to this category.

Some functions of the booster

Bengt Altenberg

7.1 Introduction

In the prosodic system used for the transcription of the London-Lund Corpus, a step-up in pitch in the intonation contour of a tone unit is called a 'booster'.¹ The booster system comprises three variants illustrated by *all* in the following examples (from Crystal 1969:146):

(a) I ||think it's Δ all going to be alRIGHT■



(b) I ||think it's Δ all going to be alRIGHT■



(c) I ||think it's Δ all going to be alRIGHT■



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(b) I ||think it's Δ all going to be alRIGHT■



(c) I ||think it's Δ all going to be alRIGHT■



In (a), *all* has a slightly higher pitch than the preceding (stressed or unstressed) syllable; in (b) it has a higher pitch than the next previous pitch-prominent step-up syllable (in this case the onset, but alternatively any preceding syllable marked by continuance, booster or high booster); in (c) it has a pitch that is very much higher than the next previous pitch-prominent syllable. These three degrees are referred to as 'ordinary', 'high' and 'extra-high' booster, and are here marked by a small (Δ), medium-sized (Δ), and big (Δ) triangle, respectively.

Although the booster system is merely part of a larger system of pitch-range contrasts in the intonation contour (see Crystal 1969:144ff), it contributes in an essential way to our impression of melody and variation in speech. Without it, continuous speech would tend to sound monotonous and lifeless, consisting primarily of a succession of falling contours (which are sometimes said to represent the 'unmarked norm' in English, although this norm may in fact be restricted to mechanical forms of reading; see Crystal 1969:232, Cruttenden 1986:127) and varying mainly in terms of onset selection and nuclear tone movement.

Generally speaking, any pitch obtrusion (whether up or down) gives prominence to a word, but a step-up from a predominantly falling contour seems to have a special foregrounding or heightening effect. However, little has been done to explore the functional aspects of the booster. Crystal, for example, who has provided the most detailed account of the booster and its role in the prosodic organization of the 'head' of the tone unit, only touches on its function in very general terms (1969:225-233): it is said 'to spread relative prominence over the words in the head, and to add prosodic variety to connected speech' (p 233). It is also shown to have a strong correlation with various types of emotional excitement (pp 301-305). Cruttenden (1986:88) notes that a 'pre-nuclear pitch accent' may be used to indicate the beginning of the focus in a tone unit (the end being marked by the nucleus).

The most ambitious attempt to specify the function of pitch obtrusions in the intonation contour is probably Bolinger's discussion of the 'hat pattern' (1986:46ff) and what he calls Profiles A and B (both of which begin with a step-up in pitch; see pp 142ff). Although Bolinger's prosodic system differs in many respects from that of the London-Lund Corpus (it lacks, for example, the structural organization of tone units into prehead, head, nucleus and tail, and there is consequently no one-to-one relationship between his upward-jumping pitch accents and the booster), it is interesting to note that Bolinger associates the initial step-up of the A and B Profiles (or any hat-like contour that begins with these profiles) with an 'annunciatory' or 'thematic' function,

which contrasts with the 'terminatory' or 'rhematic' function of a final (nuclear) accent. In particular, while the A Profile (a step-up followed by a drop) is said to be the assertive profile par excellence (p 164) which 'singles things out' (sometimes contrastively), the B Profile (a step-up not followed by a drop) is said to be 'connective' and associated with compounds and other close-knit expressions. Moreover, the B Profile is used not so much to inform as to 'enhance' and is consequently frequent with quantifiers and affective modifiers (pp 169ff):

Δ all of them Δ every Δ one
 I've got finished.
 You're a rotten liar.

Thus, although there have been some attempts to specify the functions of the booster (or booster-like phenomena), these have generally been vague and impressionistic and partly in conflict with each other. The purpose of the present study is to make a preliminary survey of the functions of the booster in a small sample from the London-Lund Corpus. The sample consists of five texts: four surreptitiously recorded conversations (texts S.1.4, S.1.5, S.1.6 and S.1.9) and one prepared monologue (text S.12.6, a public but rather informal lecture), each text totalling some 5000 words. The sample was originally chosen to reveal possible differences between speakers and speech varieties, but I will not emphasize this aspect here.

Two important restrictions on the study should be mentioned. In the functional analysis, no distinction has been made between different degrees of booster (ordinary, high and extra-high), although such a distinction is no doubt both relevant and interesting. Moreover, I have concentrated entirely on boosters in the 'head' of the tone unit (ie between the onset and the nucleus), thus excluding boosters affecting a nuclear syllable. The reason for this is that one, rather trivial, function of the booster seems to be to prepare the way for a falling nuclear tone when the speaker has reached the baseline of his pitch range at the end of a tone unit (see Altenberg 1987a:33). A concentration on independent (non-nuclear) boosters thus increases our chances of isolating 'pure' booster functions unaffected by the requirements of nuclear tone direction.

My approach has been determined by the necessity to start 'from scratch' and to discover patterns of cooccurrence at different levels of linguistic

description. Thus the booster will be examined for possible correlations with the following categories: (a) word forms, (b) word classes, (c) semantic categories, and (d) the information structure of the tone unit. The grammatical framework will be that of Quirk et al (1985).

7.2 General booster distribution

On average, every second tone unit in the material contains a booster of some kind, but only one in eight has a booster in the head of the intonation contour - the position that is our concern here. The use of a booster between the onset and the nucleus obviously requires tone units of some length. It is significant that while the average tone unit length in the texts is 4.1 words, tone units with a booster have an average length of 7.1 words. Moreover, boosters seldom occur in tone units shorter than four words.

Normally, there is only room for one booster (86%), but longer tone units may have two (12%) and exceptionally three (1%) or even four (0.4%) as in the following examples (where the relevant booster-marked words are italicized):

- (1) and "I^{THAT} was ■ an EX^{II} {TR^{EMELY}} ABS^ΔTR^{USE} 'talk ■ [...] and • llon a ^Δtopic that ^Δmost people knew ^Δnothing what^Δever A^ΔB^{OUT} ■ (S.1.6:1003-1008)
- (2) but llon the ^Δother ^Δhand you ^Δdo ^Δmeet • ΔS^{EC}RETARIES ■ (S.1.5:1192)

For the same reason, when a booster occurs in the head of a tone unit, it tends to appear fairly soon after the onset, the average distance being 2-3 words.

High boosters are more common than ordinary boosters (57% and 42% respectively), while the extra-high variant is rare (1%) and mainly reserved for strong emphasis:

- (3) and I llaid it would be ^Δfar "B^{ETTER} ■ llif the "Δmansion was ΔK^{ÉPT} ■ (S.12.6:760-761)
- (4) llthis is the ^Δonly thing I've 'brought A^ΔW^{AY} from that L^{ÉCTURE} ■ (S.1.6:944)

Depending on the type of booster occurring in the head of the tone unit (ie disregarding nuclear boosters), we can make a broad distinction between falling and rising heads (for a more detailed classification, see Crystal 1969:229ff). A head is falling if it contains no step-up higher than an ordinary booster, and rising if it contains at least one high booster. As shown in Table

Table 7.1. Booster distribution and types of head

| NUMBER OF BOOSTERS IN HEAD | FALLING HEAD | RISING HEAD | TOTAL | % |
|----------------------------|--------------|-------------|----------|----|
| 0 | 5167 | - | 5167 | 87 |
| 1 | 254 | 401 | 655 | 11 |
| 2 | 24 | 70 | 94 | 1 |
| 3 | 3 | 6 | 9 | 0 |
| 4 | 0 | 3 | 3 | 0 |
| TOTAL % | 5448 92 | 480 8 | 5928 100 | |

7.1, the great majority of the tone units in the texts have a falling head (92%), which is a natural consequence of the fact that most heads have no booster at all. Heads with a booster, on the other hand, are generally rising (63%), owing to the predominance of high boosters mentioned above.

7.3 The booster potential of words and word classes

After these preliminaries, let us now examine the functions of the booster. As a first step, it may be instructive to look briefly at its tendency to cooccur with different word forms in the two texts. Out of a total of 365 booster-marked words, those most frequently carrying a booster are the following:

| | | | | | |
|--------------|----|---------------|---|---------------|---|
| <i>very</i> | 24 | <i>is</i> | 7 | <i>can't</i> | 5 |
| <i>don't</i> | 12 | <i>quite</i> | 7 | <i>get</i> | 5 |
| <i>I</i> | 12 | <i>rather</i> | 7 | <i>going</i> | 5 |
| <i>just</i> | 11 | <i>think</i> | 7 | <i>only</i> | 5 |
| <i>one</i> | 9 | <i>read</i> | 6 | <i>other</i> | 5 |
| <i>this</i> | 9 | <i>that</i> | 6 | <i>really</i> | 5 |
| <i>what</i> | 9 | <i>three</i> | 6 | <i>same</i> | 5 |
| <i>all</i> | 8 | <i>always</i> | 5 | <i>some</i> | 5 |
| <i>he</i> | 8 | <i>any</i> | 5 | <i>Stoke</i> | 5 |

The list is headed by the intensifier *very*, which suggests that one function of the booster is to emphasize expressions of degree (the adverbs *just*, *quite* and *rather* further down the list are other intensifying words). The booster also seems to be associated with expressions of quantity (*one*, *all*, *three*) and

reference (*I, this, what, he, that, other, same*), or a combination of these (*any, some*), as well as with denying, affirming or qualifying truth value (*don't, can't, is, really, think*).

However, apart from such vague indications little can be concluded from this list. Indeed, the most striking feature of the booster seems to be its wide lexical distribution. With the possible exception of *very* (which has a booster in nearly half of its occurrences), no words can be said to have a distinctive 'booster potential'. It is significant that the twenty-seven listed words merely represent 5% of all the booster-marked word types in the material (though 23% of the tokens); an additional 131 words (26%) attract a booster 2-4 times, but the great majority (80%) have a booster only once. In other words, the lexical patterning of the booster is too varied to be functionally revealing.

A more profitable approach may be to look at the booster potential of different classes of words (rather than individual word forms). If all word classes (however defined) had the same booster potential, the boosters in the material would be proportionately distributed over the classes. This is not the case, however: some classes tend to attract a booster more readily than others. Table 7:2 ranks twenty different word categories according to their booster potential, expressed in terms of a difference coefficient. The coefficient indicates the deviation of the recorded booster frequency for each category from its 'expected' (word-class proportional) frequency.² The coefficient may vary from +1 to -1; a plus value indicates overrepresentation of boosters in the category (high booster potential), a minus value underrepresentation (low booster potential).

As shown in the table, the word categories are differentiated along a gradient, with those having a high booster potential at the top and those having a low booster potential at the bottom; categories near the middle of the scale (roughly within ± 0.1) can be described as 'neutral'. Outstanding at the top of the scale we recognize the intensifier *very* and the class of predeterminers, chiefly represented by the quantifier *all* and the intensifier *quite*. Other quantifying classes also appear high up in the scale, such as postdeterminers (which include the cardinals), quantifying central determiners (*some, any, no, every, another*), and compound pronouns (which include the universal pronouns *anybody* and *anything*). We also find the archetypical 'open' word classes (*ly-adverbs, adjectives, full verbs and nouns*) in the top half of the scale, a fact which seems to link the booster with lexical salience. Moreover, the position of the modal verbs and *do* above the middle of the scale supports our previous observation that the booster seems to be associated with expressions of truth value.

Table 7:2. Booster potential of major word categories

| WORD CLASS | BOOSTER FREQUENCY | | DIFF. COEFF. |
|--|-------------------|----------|--------------|
| | RECORDED | EXPECTED | |
| <i>very</i> | 24 | 3.9 | 0.72 |
| Predeterminers (<i>all, quite, etc</i>) | 13 | 2.7 | 0.66 |
| Postdeterminers (<i>one, first, next, etc</i>) | 66 | 19.1 | 0.55 |
| Quantifying determiners (<i>some, etc</i>) | 11 | 3.5 | 0.52 |
| <i>ly-adverbs</i> | 32 | 10.4 | 0.51 |
| Adjectives | 96 | 34.0 | 0.48 |
| Indefinite compound pronouns | 11 | 4.1 | 0.46 |
| Relative pronouns | 7 | 3.0 | 0.40 |
| Full verbs | 182 | 97.3 | 0.30 |
| Modal verbs | 31 | 16.8 | 0.30 |
| <i>do</i> (all functions) | 10 | 12.0 | 0.18 |
| Nouns | 175 | 126.5 | 0.16 |
| Other adverbs | 88 | 64.8 | 0.15 |
| Demonstrative determiners | 9 | 7.8 | 0.07 |
| Demonstrative pronouns | 9 | 9.9 | - 0.05 |
| Subordinators | 11 | 13.8 | - 0.11 |
| <i>be</i> and <i>have</i> (all functions) | 23 | 47.0 | - 0.34 |
| Prepositions | 23 | 66.6 | - 0.49 |
| Other pronouns | 8 | 39.4 | - 0.53 |
| Other determiners | 6 | 58.1 | - 0.81 |
| Infinitive marker <i>to</i> | 1 | 14.5 | - 0.87 |

Thus, certain booster functions suggested in our original word list seem to be confirmed in Table 7:2. In other respects, however, the scale displayed in Table 7:2 is rather disappointing. Most of the word classes are functionally opaque, and the scale as such does not permit any conclusions beyond the fact (though interesting enough) that the booster is unevenly distributed across the word classes. The most we can say is that classes containing lexical (or content) words tend to have a higher booster potential than those containing grammatical (or function) words, but even this generalization is weakened by the existence of many grammatical classes at the top of the booster scale.

There are several reasons why the word categorization in Table 7:2 fails to reveal anything interesting about the booster (cf Altenberg 1987a:133ff). Many classes are functionally heterogeneous, eg the adverbs and postdeterminers which include subcategories with diverse functions. Conversely, many functions cut across the word classification, as is illustrated by the 'quantifying' function which may be realized by several grammatical categories (predeterminers, determiners, pronouns, nouns, adverbs). Hence, if we wish to determine the uses of the booster, we must go beyond the word classes and examine their functions from other perspectives.

7.4 Some functions of the booster

The booster functions that emerge from the material can be classified in various ways and at different levels of delicacy. In the following survey, I have used a rather broad semantic-pragmatic classification, but I am aware that finer distinctions are possible. Needless to say, there is a great deal of overlap between the different functions, and it often happens that several functions cooccur in the same example. However, I shall disregard these classificational problems here and describe each function as if it were a clear-cut and unproblematic category. For each category I will indicate some typical lexical and grammatical correlates of the booster.

7.4.1 Intensifying quality and quantity

If we want to express a high or low degree of something we use an intensifying word, an amplifier (scaling upwards) or downtoner (scaling downwards). A typical use of the booster is to give prosodic prominence to such degree words, especially amplifying adverbs like *absolutely*, *completely*, *extremely*, *jolly*, *perfectly*, *quite*, *right*, *so*, *terribly*, *too*, *utterly* and *very*:

- (5) you ||just SĀT■ and ||had a Δjolly 'good "Δ{GĪGGLE} at the Δthings he was ΔSĀYING■
(S.1.6:773-774)
- (6) ||and it's Δvery ĨTERESTING■ (S.12.6:702)
- (7) you ||go • Δright 'down • the 'main RŌAD■ (S.12.6:831)

Booster-marked downtoners (*a bit*, *about*, *a little*, *rather*, *quite*, *somewhat*, *virtually*, etc) are less common:

- (8) I [m m] pre||sented • «a» Δrather ABSŪRD re 'port in a 'way■ (S.1.4:889)

- (9) ||that's aΔbout WHĀT■ ||forty [f] • ||over 'fifty per ΔCĒNT■ (S.1.4:734-735)
- (10) ||[?]Ī 'think 'Malcolm's 'TWENTY-SĒVEN■ ||TWENTY-ĒIGHT■ - per||haps a Δbit MŌRE■
(S.1.6:46-48)

Boosters are also frequent with amplifying adjectives, especially those denoting extreme degree, such as superlatives and what might be called 'inherent superlatives':

- (11) ||he's an Δabsolute Δpoppet HIMΔSĒLF■ (S.1.6:1065)
- (12) ||and Δhe MĀRRIED■ ||one of the Δleading ΔĀCTRESSES of the TĪME■ (S.12.6:512-513)
- (13) he ||gave a Δhuge ΔFĒAST■ (S.12.6:523)
- (14) ||he 'gave a ter"Δrific 'lot of WŌRK■ (S.12.6:614)

Intensifiers typically modify gradable qualities and quantities. A booster cooccurring with an intensifier can consequently be said to function as a prosodic intensifier. Often, however, we wish to emphasize not the degree of a phenomenon but a special aspect of it or its scope of reference. Restricted reference is typically expressed by focusing subjuncts (eg *at least*, *only*, *just*, *wholly*) or adjectives (*exact*, *main*, *peculiar*, *special*, *unique*), and is often prosodically emphasized by a booster:

- (15) «it» ||being a [l] Δwholly Δladies' PĀRTY■ (S.12.6:1001)
- (16) ||«even» Δ{RĒADING} "Δjust 'those BĪTS■ (S.1.4:283)
- (17) ||it's a Δspecial ΔMĒETING 'he's ΔDRĒSSING■ (S.1.4:1105)
- (18) ||now Δthis was a Δu'niQUE THĪNG■ (S.12.6:929)

The opposite extreme - wide scope of reference - is mainly expressed by adjectives denoting totality (*complete*, *universal*, *whole*, etc). These also tend to attract a booster:

- (19) I sup||pose 'this is the [kəmpl] - comΔplete ΔCHŌICE■ (S.1.4:79)
- (20) but ||this was de'feating [ði:] Δwhole ŌBJECT of it■ (S.1.4:1166)
- (21) (...) as ||though it's a kind of Δcommunal "ΔLĪNE on 'this■ (S.1.4:667)

The boosters illustrated so far have accompanied words expressing degree (high/low) or scope (wide/narrow). In these cases prosody can be said to

support lexis: an idea already expressed in lexical terms is reinforced by a booster. However, words do not have to indicate an extreme quality to be emphasized by a booster. It is often sufficient that they convey something that the speaker thinks is worth drawing attention to, generally something attractive or peculiar (*beautiful, lovely, famous, good, great, interesting, new, old, rough, short*, etc):

- (22) (...) to "||SHÖW■ that ||this •||would be an Δ*interesting* COMPÄRISON■ (S.1.4:348-350)
 (23) so you'll ||never 'be in that Δ*happy* POÄSITION■ (S.1.5:334)
 (24) [it] ||had CONÄNËCTION■ ||with our Δ*famous* Thomas ΔGRÄY■ (S.12.6:700-701)
 (25) ||one of the RÉÄSONS■ ||why our Δ*lovely* "CHÜRCH■ (...) ||is in such a Δ*good* 'state of preser'vation TO "DÄY■ • ||is (...) (S.12.6:1058-1061)

Qualities of this kind are generally gradable and therefore, as we have seen, often intensified by a degree adverb. When they are not, as in (22-25), a booster may achieve much the same effect - compare for instance examples (6) and (22). Consequently, in its intensifying function the booster can either reinforce an existing intensifier, or replace it. In this respect speech has a significant advantage over writing: speakers may not only reinforce a lexical expression intonationally, they can also use intonation to emphasize something that is not, or cannot, be expressed verbally. This advantage is highlighted in cases where a booster accompanies a nongradable adjective, as in (11-14) above. Such adjectives can only be intensified by prosodic means.

This independent intensifying function of the booster is especially useful with expressions of quantity. Although some quantifying expressions can of course be intensified lexically (eg *very many, many more, too much*; cf also *about fifty per cent* and *a terrific lot of work* above), many cannot, especially if they already denote extreme degree (as the 'totality' adjectives above: *communal, whole, complete*). In such cases a booster (or, sometimes, a maximizer like *absolutely* or minimizers like *at all, whatever*) may be the only means of emphasizing the size of the quantity. This is no doubt the reason why so many expressions of absolute (maximal or minimal) quantity or reference appear with a booster in the material (eg *all, every, no, any, most, anything, anybody*):

- (26) we ||met Δ*all* the ÄÄMËRICAN■ ||CHÄIRMEN■ (S.12.6:793-794)
 (27) they ||had Δ*no* DISTRÄCTION■ (S.12.6:329)

- (28) ||and Δ*every* DÄY■ ||we it was ||my 'job to Δpump the water 'up (...) (S.12.6:162-163)
 (29) ||cos [?] Δ*any*'body with Δ*any* SËNSE■ would ||read the PLÄY in the 'trans-LÄTION■ (S.1.4:305-306)

However, the booster is not only a useful means of emphasizing extreme quantities. Any nongradable quantity (whether great or small) that the speaker judges to be in some sense extreme or special in the context may be highlighted by a booster:

- (30) ||but in 'this Δ*there* are Δ*two* PÖINTS■ (S.1.4:671)
 (31) well ||this CÖLLEGE■ has ||been re'sponsible for the 'loss of Δ*three* • LICENCES■ (S.1.9:497-498)
 (32) we ||USED to■ • ||fetch the ΔMILK■ • ||from 'Grange FÄRM■ ||which was a 'bout a Δ*quarter* of a MILE■ ||down the ÄRÖAD■ (S.12.6:123-126)
 (33) ||and per*ä*haps Δ*some* of 'you • could REÄMËMBER■ what ||hot 'numbers they 'really WËRE■ (S.12.6:230-231)

7.4.2 Emphasizing truth and modality

In the cases illustrated so far the booster has chiefly served to intensify or emphasize an element within the noun phrase - the typical domain of notions like quality, quantity and reference. States and events can also be intensified (if they are gradable), but it is more common that they are evaluated with regard to their truth value or likelihood. Thus, a speaker may assert or deny the truth value of an utterance, or he may take a middle ground and express some doubt or value judgement about its content. Such 'modal' meanings are typically expressed by verbs and attitudinal adverbs interacting with the negative particle *not*. In all these cases the booster is common as a prosodic emphasize.

The truth value of an utterance may be reinforced by content disjuncts and emphasizing subjuncts like *certainly, really, indeed* and *of course*. These are often supported by a booster:

- (34) ||and [ə] • he Δ*certainly* Δstirred the Δ{PLÄCE} ÄÜP■ (S.1.6:706)
 (35) ||well they "Δ*really* 'haven't "ÄÄNY {||RÉÄSON to■}■ (S.1.4:839)
 (36) ||it was inΔ*deed* a Δ*day* ÖUT for 'us■ (S.12.6:113)

But just as we have seen that a booster can replace an intensifying adverb, it can also function as an independent emphasizer of truth value, whether this is affirmed or denied. Indeed, this is one of the most frequent uses of the booster in the material:

(37) He said Δ is the 'Six BÉLLS (S.12.6:687-690) still TĒRE (S.12.6:687-690)

(38) «but Δ would» you Δ get Δ that Δ ŪP 'any' where (S.1.4:531)

(39) well I Δ don't Δ KNŌW (S.1.4:1051)

Modality often involves various expressions of possibility, likelihood and doubt. These notions may be realized in various ways, eg by content disjuncts (*probably, perhaps*, etc), by verbs of 'hedging' (*presume, suppose, think*, etc), and by modal auxiliaries (*can, may, must*, etc), all of which are frequently emphasized by a booster:

(40) For *perhaps* it Δ IS 'lung 'cancer (S.1.4:1043)

(41) So I *presume* it 'is for Δ any'body in the Δ faculty of Δ ARTS (S.1.4:1141)

(42) I «said» she Δ might FĀIL (S.1.4:891)

7.4.3 Emphasizing contrasts

Another frequent use of the booster is to highlight contrastive elements, as shown in the following examples:

(43) B Are you Δ doing \triangleright two or ŌNE $\cdot \triangleright$ paper this \triangleright year \cdot

A Only Δ ŌNE \cdot

B YĒS \cdot but that's a 'main "ALĪNE 'paper ISN'T 'it so Δ probably [j] Δ you will 'have "more SCRĪPTS than I shall 'have in Δ two Δ special Δ SŪBJECTS (S.1.4:860-866)

(44) I had a 'seminar TŌDĀY «in which» \cdot people Δ hadn't 'read the «ASTŪFF» (...) I I Δ SĀID Δ shall we [?] 'do 'something ĒLSE or shall I Δ tell you a 'bout the 'plans for the Δ new SYLLABUS but "IHĀLF of them had RĒAD it and the others 'said they 'wanted Δ me to Δ TĀLK a 'bout it so I { Δ DĪD} for a BĪT (...) but we're Δ going to go 'on with it Δ next [ə]- TĪME (S.1.4:1081-1099)

As these examples demonstrate, the role of contrastive highlighting is partly shared by the onset and the nucleus. This possibility is available when the contrastive element occurs within the normal domain of these two features, ie at the beginning and end of the tone unit, as illustrated by for example *else, half* and *others* in (44). (The nucleus may of course also have a booster of its own and be fronted for extra emphasis.) There is thus an interplay between the booster and the other markers of pitch prominence in the tone unit: words requiring special highlighting can be seen as competing for prosodic attention, and what type of prominence they get is partly determined by the degree of importance the speaker attaches to them and partly by their position in the tone unit.

In the contrastive category we may also include cases of deictic emphasis, which often involve a contrast, implicitly or explicitly. These are typically realized by demonstrative pronouns and determiners, and often emphasized by a booster, as illustrated in

Are Δ these SĪMLAR

(pointing at two pictures in a collection), or

that was Δ this TĒRM

(implying a contrast with 'last term').

7.4.4 Grouping function

In the cases presented so far, the booster has generally served to highlight a single word for various purposes (intensifying, emphatic or contrastive). But frequently the booster also has what might be called a 'grouping' function, signalling the beginning of a group of words that belong together semantically and syntactically. Since the end of such groups is normally in focus, the booster and the nucleus can be said to delimit the group prosodically and give it a 'unifying contour' within the tone unit. The types of construction most commonly highlighted in this way are compounds stressed on the last element, verb-particle combinations with a stressed particle, postmodified and coordinated noun phrases, and various name combinations:

(45) it was Δ turned 'into a Δ country CLŪB (S.12.6:739)

(46) So we 'had to " Δ spin it ŌUT (S.1.4:1085)

(47) I brought Δ cups and SĀUCERS (S.1.4:924)

This grouping function is very frequent in the material (see also *a* Δ day $\dot{O}UT$ and Δ faculty of $\Delta\dot{A}RTS$ in (36) and (41) above), and it is possible that it can be given a more general explanation. I will return to this possibility below.

7.4.5 Other functions

Apart from the functions mentioned, several other uses of the booster are suggested in the material. I will only mention a few of these here, however.

In some cases the booster seems to have the purely rhythmical function of supplying the expected degree of prominence in a patterned sequence:

(48) [the family] \parallel R $\dot{A}N$ ■ as a com Δ plete 'self-supporting $\dot{U}NIT$ ■ - \parallel butlers 'cooks Δ servants 'gamekeepers Δ gardeners and the $\dot{L}\dot{O}T$ ■ (S.12.6:444-446)

(49) \parallel Rifleman $\dot{H}\dot{A}RTLEY$ ■ \parallel number Δ so and so and $\dot{S}\dot{O}$ and so■ [rərə] re|port to \triangleright Colonel Δ J A $\dot{G}\dot{I}LLIATT$ ■ (S.12.6:1225-1227)

In other cases (reminiscent of the contrastive use) it functions as a 'repair' signal, reinforcing a correction after a hesitation or false start:

(50) so \parallel I «had to» Δ did it Δ $\dot{G}\dot{A}IN$ ■ (S.1.4:292)

(51) we $\dot{D}\dot{E}\dot{I}\dot{C}\dot{I}\dot{D}\dot{E}\dot{D}$ ■ or \parallel rather Δ it was [ə] $\dot{D}\dot{E}\dot{A}\dot{C}\dot{I}\dot{D}\dot{E}\dot{D}$ ■ to \parallel pull it $\dot{D}\dot{O}\dot{W}N$ ■ (S.12.6:754-756)

In (51) the booster signals a change of clausal theme (in the sense of Halliday 1985b: 38ff). Since themes are by definition clause-initial and normally carry given information, they tend to be prosodically unmarked or, if salient enough, marked by the onset. However, if a theme occurs after the onset, as in (51), it may of course be highlighted by a booster like any other element that is felt to be of special importance. Such 'thematic highlighting' is quite common in the material (about 15% of the boosters affect a thematic element), especially when the theme is contrastive (as *you* in (43) and *it* in (51) above), but also when it introduces a new referent (52) or point of departure (53), or when an old referent needs to be reinforced (54):

(52) \parallel Miles $\dot{L}\dot{A}\dot{B}\dot{O}\dot{R}\dot{A}\dot{T}\dot{O}\dot{R}\dot{I}\dot{E}\dot{S}$ ■ (...) \parallel bent over " Δ $\dot{B}\dot{A}\dot{C}\dot{K}\dot{W}\dot{A}\dot{R}\dot{D}\dot{S}$ ■ to do " \parallel everything $\dot{P}\dot{O}\dot{S}\dot{S}\dot{I}\dot{B}\dot{L}\dot{E}$ ■ • \parallel their *librarian* 'spent " Δ $\dot{Y}\dot{E}\dot{A}\dot{R}\dot{S}$ ■ \parallel looking up Δ all the $\dot{D}\dot{O}\dot{C}\dot{U}\dot{M}\dot{E}\dot{N}\dot{T}\dot{S}$ of $\dot{G}\dot{R}\dot{A}\dot{Y}$ ■ (S.12.6:818-823)

(53) \parallel but the Δ trouble $\dot{I}\dot{S}$ ■ it was \parallel so " $\dot{I}\dot{N}\dot{T}\dot{E}\dot{R}\dot{E}\dot{S}\dot{T}\dot{I}\dot{N}\dot{G}$ ■ • to " \parallel $\dot{D}\dot{O}$ ■ (S.1.4:1162-1164)

(54) \parallel nice $\dot{B}\dot{O}\dot{Y}$ ■ - \parallel sure Δ he'd $\dot{H}\dot{E}\dot{L}\dot{P}$ you■ if you \parallel got $\dot{S}\dot{T}\dot{U}\dot{C}\dot{K}$ ■ (S.1.6:27-29)

Often a booster serves to mark a secondary (subordinate) theme in the tone unit:

(55) I \parallel don't know Δ what I'm 'going to 'do a 'bout this Δ $\dot{S}\dot{E}\dot{M}\dot{I}\dot{N}\dot{A}\dot{R}$ $\dot{T}\dot{O}\dot{M}\dot{O}\dot{R}\dot{R}\dot{O}\dot{W}$ ■ (S.1.4:952)

(56) «and» \parallel you Δ came a 'way Δ $\dot{A}\dot{F}\dot{T}\dot{E}\dot{R}$ 'WARDS■ and \parallel thought now Δ what have I \triangleright brought Δ $\dot{A}\dot{W}\dot{A}\dot{Y}$ ■ (S.1.6:776-777)

(57) and \parallel then he says Δ course «if» you Δ don't $\dot{U}\dot{N}\dot{D}\dot{E}\dot{R}\dot{S}\dot{T}\dot{A}\dot{N}\dot{D}$ this■ - this \parallel subject's Δ not for $\dot{Y}\dot{O}\dot{U}$ ■ (S.1.6:920-921)

In cases like these the booster acts much like a secondary onset, serving to announce the beginning of a new clause (55) or of direct speech (56-57).

7.5 Conclusion

This brief sketch of some recurrent booster functions in a sample of the London-Lund Corpus does not of course exhaust the uses of the booster in speech. Indeed, one striking feature of the booster is its functional versatility. Although certain (frequently overlapping) uses predominate in the examined material (see the rough estimation in Table 7:3), it is difficult to identify a

Table 7:3. Relative frequency of major booster functions

| FUNCTION | % |
|---------------------------------|----|
| Truth and modality | 28 |
| Grouping | 19 |
| Contrast and deixis | 17 |
| Thematic highlighting | 15 |
| Quantity and scope of reference | 14 |
| Degree | 11 |
| Quality and special 'salience' | 9 |
| Disfluency and repair | 3 |
| Other | 6 |

single underlying force that may cover all its functions. Not even a sweeping reference to 'emotive highlighting' is fully adequate: this may be applicable to the intensifying and emphatic uses, but does not fit the grouping and rhythmic functions equally well and is, in any case, too general to be really helpful (which does not exclude it as a major motivating factor).

The interplay between the booster and the other pitch-prominent features, the onset and the nucleus, has only been touched on here, but it is obvious that these features may take over some of the roles played by the booster (eg in contrastive cases) and that, conversely, the booster can be said to act as a 'secondary' onset (eg in a subordinate clause following the onset) or nucleus when these features are already 'engaged' for other tasks in the tone unit. In other words, there is an interesting trade-off relationship between the pitch-prominent features in such a way that, in tone units of some length, the booster tends to be used for various 'subsidiary' functions, whether it be to express the speaker's attitude to some aspect of the utterance or to draw attention to elements carrying important information.

The latter use of the booster is most clearly revealed in its 'grouping' function, ie when it serves to indicate the beginning of a complex constituent. This function can in fact be generalized a bit further. Complex constituents almost invariably coincide with the focal element of the tone unit, and the booster can consequently be said to signal the beginning of the focus (as suggested by Cruttenden 1986:88). If we simplify a little and regard normal end-focus as beginning roughly with the first open-class word in the tone unit (provided it does not convey given information), it appears that about 75% of the examples can in fact be explained in this way. The remaining examples, which have a booster outside or inside the focus (chiefly on a contrastive thematic element or on an emphatic (asserted) transitional verb), can then be regarded as having 'marked' prominence.

However, this explanation leaves several other problems unexplained, for example why most tone units do not have a booster at all in the head of the intonation contour, while some may have as many as three, or why the booster tends to be more attracted to certain words or word classes than to others. Moreover, although textual differences have not been discussed here, the booster varies greatly in frequency from one text to another (from 127 instances in text S.1.9 to 256 instances in text S.1.6), a fact which suggests considerable situational and individual variation. (There is nothing in the material to suggest any sex-related differences, but this possibility cannot be ruled out entirely.) The booster is, it must be emphasized, a speaker-selected

feature and, despite the patterns revealed here, the least predictable of the prosodic features (cf Altenberg 1987a:142). It is obvious that a great deal of further research is needed to clarify its functions in speech and its interaction with the other pitch-prominent features. What I hope to have shown here are some possible lines of inquiry and, above all, the possibilities that a collection of recorded and transcribed speech like the London-Lund Corpus offers for such research.

Notes

- 1 This chapter is a revised version of a paper (Altenberg 1987c) read at the Third Nordic Conference for English Studies, Hässelby Slott, 25-27 September 1986.
- 2 The difference coefficient was calculated by means of the following formula (adapted from Hofland & Johansson 1982:14):

$$\frac{\text{recorded frequency} - \text{expected frequency}}{\text{recorded frequency} + \text{expected frequency}}$$

The distribution of the word categories was derived from a word-class tagged sample (ten texts totalling c 50 000 words) from the London-Lund Corpus.

Pauses in monologue and dialogue

Anna-Brita Stenström

8.1 Introduction

When a written paragraph is read aloud, the occurrence of silent pauses is mainly influenced by graphic arrangements and the syntactic structure of the text so that, in the 'ideal delivery' of the paragraph, pauses tend to fall at natural constituent breaks (cf eg Brown 1977:91 and Clark & Clark 1977:261). In writing, the constituent structure is regularly indicated by punctuation, so that a written paragraph consists of sentences which are separated by a major punctuation mark (a period, exclamation mark, or question mark); within sentences, clauses are often separated by a comma.

Spontaneous speech is different from reading aloud. We do not always speak in full sentences, and pauses in spontaneous speech are related to features of the speech process, to the searching for words and the planning of utterances. But even though pauses in spontaneous speech signal hesitation and reflect the speaker's emotions and attitudes to a much greater extent than pauses in reading, they are bound to be affected by the syntactic structure of the utterance. Moreover, pauses in reading and pauses in speech have different realizations: in reading pauses are mainly silent, but in spontaneous speech they are silent or 'filled' (also called 'voiced'), eg *ə:m*. In spontaneous speech we also find other items that cooccur with, or substitute for, silent pauses, so-called 'verbal fillers' like *well*.

The aim of this study is threefold: first, to examine the distribution and functions of different pause types, including not only pauses 'proper', ie silent pauses (SPs), but also filled (voiced) pauses (FPs), and verbal fillers (VFs); second, to examine the relation of pause types to prosodic, linguistic and pragmatic factors; third, to investigate the extent to which pauses can be predicted.

8.2 Background of this study

A survey of the rich literature on pauses shows that most research has concentrated on the distribution and functions of SPs in non-spontaneous speech and, especially in the early works, on SPs in relation to sentence structure. A distinction has been made between 'juncture pauses' (ie linguistic or conventional) and 'hesitation pauses'. Lounsbury (1954), for instance, defined juncture pauses as brief (100 msec or less), falling between major constituents, and listener-oriented; and hesitation pauses as longer (up to 3 sec), occurring at 'points of lowest transition probability', and marking the beginning or end of speaker units. Boomer (1965:157), who noticed that half of the junctures in his material were followed by pauses that were 'significantly longer than hesitation pauses', questioned whether pause duration can be taken as a criterion of function. Barik (1968) observed that pauses between major constituents may be quite long and suggested that they constitute a combination of juncture and hesitation pauses.

FPs have consistently been regarded as hesitations, and even signs of stress and anxiety (cf Lallgee & Cook 1969). An additional function attributed to FPs is that of turnholder (eg Stenström 1984a). With regard to location, Maclay & Osgood (1959) observed that, in their data, FPs occurred more often before content words than before function words, whereas Cook (1971) presents data showing that FPs may occur just as often before function words. The results of Blankenship & Kay, on the other hand, indicated that hesitation pauses realized by /ah/ tended to occur before 'structural units' rather than before lexical choices (1964:369).

Except for distributional differences between silent and filled hesitation pauses, it has been suggested that there are large individual differences in FP rate, for instance due to the pressure of an audience (cf eg Cook 1971) or in a situation where the speakers cannot see each other (Kasl & Mahl 1965).

The question of encoding units seen as the effect of the relationship between the location and the function of pauses is a crucial issue in pause research. In his critical review of studies in pausology in the 50s and 60s, Rochester states

that it has not been made clear 'whether pauses function in terms of words, phrases, intonation units, major grammatical constituents in the surface or deep structure, or some other aspects of utterances not described by linguistic categories' (1973:54). He speaks in favour of a multilevelled model 'in which content and theme decisions are made initially while later structural and lexical decisions proceed symmetrically' (1973:77). Similar approaches, although not as straightforwardly expressed, are found for instance in Boomer (1970) in terms of proximal and distal relationships and in Clark & Clark (1977:262ff), who suggest that speakers plan the skeleton of a sentence before its constituents. Beattie (1983:54) maintains that the main encoding units are suprasentential in scope and that speech is planned in higher-order units.

Henderson (1974) raises the question whether encoding units in speech are identified by time patterns, dismissing the thought that they should be the result of random processes. And Butterworth (1975), referring to Henderson et al (1966) and Goldman-Eisler (1968), brings up the cyclical aspect manifested in a hesitant phase directly related to the amount of phonation in the succeeding fluent phase (Butterworth 1975:76). The most detailed description of temporal patterns is provided by Beattie, who found that the mean duration of a temporal cycle consisting of a hesitant phase followed by a fluent phase was 21.88 seconds (1983:51). In the more recent literature, the emphasis is on the importance of silent (and filled) pauses for the identification of 'information units' larger than the clause (cf eg Brotherton 1979, Beattie 1983, and Chafe 1987).

Since the aim of the TESS project was to contribute to the production of more natural-sounding synthetic speech, where pauses are bound to play a crucial role, our aim was to work out a set of rules that automatically and adequately assign pauses to the synthetic-speech output of a written text. The importance of pauses for speech synthesis is stressed in Gårding (1967) who compared a sequence of recorded spontaneous speech with the same text read aloud by the original speaker and noticed that the main differences were found in variations in tempo and pausing. Predictive rules have in fact been proposed for written language read aloud. Grosjean (1980) suggests the possibility of predicting the occurrence and duration of linguistic pauses on the basis of a model that assigns to each word boundary a predicted share of the total pause duration of a sentence based on its structural complexity. A similar predictor model intended for the automatic synthesis from ordinary English text was proposed by Coker, Umeda & Browman (1973:403), who used a grammatical-category transition matrix for assigning a numerical pause potential to every word-pair boundary.

The predictability of pauses in impromptu speech is of course limited. Sigurd (1984) reports on preliminary experiments of this type for Swedish. His computer model of spontaneous speech production divides an utterance into chunks of 2-3 seconds' length, which is not governed by syntactic structure, but avoids chunking between close constituents. A pause is introduced (and a chunk finished) at the end of a sentence and may also be introduced when the system is looking for a word or planning a new sentence. The model allows simulation of spontaneous speech with different chunk lengths, filled pauses as turnholders, and speech errors.

O'Connell & Kowal (1983) conclude their extensive review of research in pausology, which covers studies as far back as the first half of the century, by asking for research focusing on 'naturalistic situations, specifically in dialogue and multilogue' instead of 'studies limited almost entirely to oral reading and speech production in contrived, artificial situations' (1983:274). Moreover, they emphasize that the majority of previous studies have concentrated on SPs without considering FPs. And their review indicates that pauses realized by VFs have scarcely even been touched upon.

Access to a large corpus of spontaneous speech should provide an excellent opportunity to describe not only the distributions and functions of SPs and FPs but also VFs, ie the mixed group of lexical items which serve as fillers of information gaps in a way similar to SPs and FPs.

8.3 Material and method

The material used for this study consists of ten texts from LLC (version LLC:o, see pp 19ff): one monologue (with one speaker: S.12.6) and nine dialogues (including two or more speakers: S.1.1, S.1.2, S.1.4, S.1.5, S.1.8, S.1.10, S.1.11, S.2.6, S.4.1), totalling approximately 50 000 words. A large variety of topics are discussed in the texts, ranging from academic subjects to everyday matters.

Pauses and verbal fillers are defined as follows.

Silent pauses (SPs)

UNIT, indicated by a dash (-) in the transcription, is the interval of an individual's rhythm cycle from one prominent syllable to the next.

BRIEF, indicated by a dot (.), is a silence perceivably shorter than unit.

LONG, indicated by two or three dashes (--, ---) or by two dashes followed by a dot (--.) are from two to three times as long as a unit pause.

Filled pauses (FPs)

UNIT, indicated by [ə:(m)], is equivalent to a unit silent pause.

BRIEF, indicated by [ə(m)], is equivalent to a brief silent pause.

The definitions of silent and filled pauses correspond to those of Crystal (1969:166ff). Pauses in his system are of 'relative' length and depend for their definition on the overall speed of utterance for an individual. This means that the absolute duration will vary from speaker to speaker. Measurements by means of a pausemeter (described in Jönsson et al 1982 and Sigurd 1983) confirmed that, although there was some overlap, there was still a clear difference in duration not only between various pause types within a particular text but also between the same type of pause in different texts. To simplify, pauses indicated by two dashes and a dot (---.) have been included in the category of long pauses. Combinations of filled and silent pauses will be referred to as 'complex'.

Verbal fillers (VFs)

This category includes a number of speech-specific items which are not easily accounted for as syntactic elements. In an earlier version of our tagging system they were given a code beginning with 'D' (for 'discourse') but were later referred to by AQ-tags (see p 101):

HEDGES *kind of, sort of*: he's kind of sweet

SOFTENERS *I mean, you know, you see*: we can't - you know - just go away

STALLERS *well*: [ə:m] well - that's what I mean

INITIATORS *anyway, now* (cf 'frames' p 140), have been included here when they cooccur with pauses, although they are not fillers proper.

The study falls into four main parts, ranging from a general survey of pauses and fillers in ten conversations to a detailed analysis of silent pauses in relation to syntactic constituents in one monologue. The last section deals with pauses and fillers as discourse phenomena.

Part 1 (Sections 8.4-8) examines the overall distribution of pauses and of pauses in combination with VFs in ten texts.

Part 2 (Section 8.9) accounts for the location of pauses and VFs at turn shifts and between and within tone units in ten texts.

Part 3 (Section 8.10) focuses on the distribution of SPs and FPs in the syntactic structure of one text (the monologue).

Part 4 (Section 8.11) discusses pauses and verbal fillers as discourse items in one-, two-, and multi-party talk.

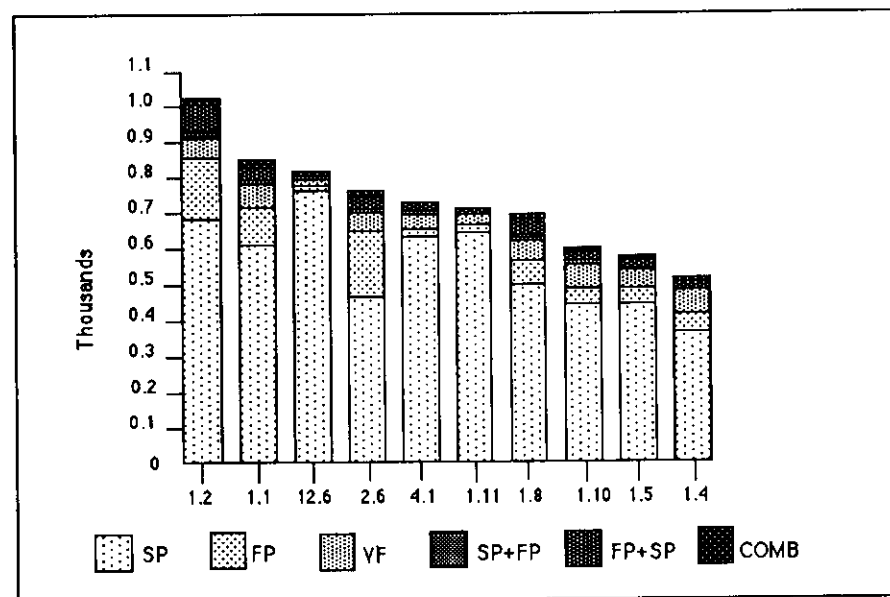
Since the study abounds in statistics, each section will be terminated by a summary of the main tendencies.

8.4 Frequency of pauses and verbal fillers

The density of SPs, FPs and VFs varied a great deal between the texts, both as regards the total number of pauses and fillers and the relative frequency of the different pause categories. Figure 8:1 shows that SPs dominated, that VFs and combinations of SPs and FPs were relatively rare, but that VFs + P were more frequent than SP + FP combinations. The differences in frequency are particularly obvious in text S.12.6, a prepared monologue as opposed to the rest of the texts which are all spontaneous dialogues (the texts are described in Chapter 1, Appendix 1). But the difference in distribution between some of the dialogues is also notable. Why, for instance, does text S.1.2 contain so many SPs and text S.1.4 so few? And why is the difference in occurrence between SPs and FPs so small in text 2.6? One reason is of course individual speaker habits: some speakers pause more than others; and some use FPs while others do not. Another reason is the speech situation: the speakers may be on more or less intimate terms and the conversations may range from serious discussions to informal chats. In each of the three subtexts making up text S.1.2, for instance, two male academics discuss strictly academic matters; in text S.1.4 a couple of colleagues chat about less serious matters while choosing pictures for the department; in text S.2.6, with more FPs than in the other dialogues, the four speakers seem to insert an FP in strategic places in their attempts to get the turn. The overall distribution is shown in Table 8:1. The total number of pauses and verbal fillers per text varied from 1036 in text S.1.2 to 525 in text S.1.4. Note that text S.12.6 contained the third largest number of pauses (and verbal fillers).

The proportion of SPs was very high (76%) compared to that of FPs (10% including glottal FPs) and cooccurrences of SP and FP (5%), but there were considerable variations within the texts. The largest proportion of SPs occurred in text S.12.6 (96%) the smallest in text 2.6 (60%). The distribution in texts S.1.4 and S.12.6 is of special interest, since much of the remaining discussion concentrates on pauses in these two texts.

Figure 8:1. Distribution of SPs, FPs and VFs from 10 texts.



The fact that FPs were far less frequent than SPs (cf Crystal 1969:167), may be an indication of their basically different functions: SPs serve typically as juncture pauses, while FPs primarily indicate hesitation.

8.5 The ratio of pauses to number of words and tone units

The proportion of SPs, FPs, and VFs in relation to the number of words and tone units is shown in Table 8:2 (where no distinction has been made between types of pause and between categories of filler). The large variation in words/pause ratio and tone units/pause ratio is striking: words per SP range from 13.5 to 6.3 and tone units per SP from 3.3 to 1.6; words per FP range from 416.7 to 27.3 and tone units per FP from 102.3 to 7.1; words per VF range from 238.1 to 44.6 and tone units per VF from 81.8 to 13.7.

How do we account for this variation? Let us consider text S.12.6 with its extreme figures. As shown in Figure 8:1, this text contains more SPs than the dialogues. Consequently the words/SP and tone units/SP ratios are low. By contrast, it has fewer FPs and VFs than the dialogues, and therefore the ratios for FP and VF are high. This means that there is a large proportion of silence in text S.12.6, which in turn results in comparatively slow speech.

Table 8:1. SPs, FPs, and VFs in ten texts.

| P-TYPE | 1.2 | 1.1 | 12.6 | 2.6 | 4.1 | 1.11 | 1.8 | 1.10 | 1.5 | 1.4 | TOTAL |
|--------------|------|-----|------|-----|-----|------|-----|------|-----|-----|-------|
| SP | 692 | 614 | 789 | 466 | 643 | 649 | 500 | 447 | 444 | 370 | 5 614 |
| % | 67 | 71 | 96 | 60 | 87 | 89 | 69 | 73 | 76 | 70 | 76 |
| FP | 162 | 106 | 12 | 174 | 11 | 23 | 68 | 35 | 36 | 56 | 683 |
| % | 16 | 12 | 1 | 22 | 1 | 3 | 9 | 6 | 6 | 11 | 9 |
| GLOTT FP | 16 | 3 | 0 | 9 | 2 | 2 | 3 | 10 | 3 | 4 | 52 |
| % | 2 | 0.3 | | 1 | 0.3 | 0.3 | 0.4 | 2 | 0.4 | 1 | 1 |
| VF alone | 56 | 74 | 13 | 59 | 56 | 44 | 73 | 70 | 70 | 71 | 586 |
| % | 5 | 9 | 2 | 8 | 8 | 6 | 10 | 11 | 12 | 13 | 8 |
| SP+FP | 25 | 12 | 3 | 10 | 4 | 2 | 14 | 5 | 2 | 0 | 77 |
| % | 2 | 1 | 0.4 | 1 | 1 | 0.3 | 2 | 1 | 0.3 | | 1 |
| FP+SP | 71 | 38 | 4 | 55 | 17 | 10 | 57 | 40 | 21 | 20 | 333 |
| % | 7 | 4 | 0.5 | 7 | 2 | 1 | 8 | 7 | 4 | 4 | 4 |
| COMBINATIONS | 14 | 13 | 0 | 9 | 2 | 2 | 6 | 3 | 6 | 4 | 59 |
| % | 1 | 1 | | 1 | 0.3 | 0.3 | 1 | 0.5 | 1 | 1 | 1 |
| TOTAL | 1036 | 860 | 821 | 782 | 735 | 732 | 721 | 610 | 582 | 525 | 7404 |
| % | 14 | 12 | 11 | 10 | 10 | 10 | 10 | 8 | 8 | 7 | |

If the average number of words and tone units per SP, FP, and VF is calculated, we get the following result:

| | | | |
|---------------|-------|--------------------|------|
| Words per SP: | 9.3 | Tone units per SP: | 2.4 |
| Words per FP: | 149.6 | Tone units per FP: | 36.3 |
| Words per VF: | 71.4 | Tone units per VF: | 24.3 |

However, the average number of words and tone units per pause type tells us nothing about the exact location of the pauses. These figures do not show, for instance, that approximately every second tone unit is preceded by an SP, or that speakers' planning embraces 2.4 tone units. (This in turn presupposes that an interpausal unit is coextensive with a planning unit, which is not necessarily true.) What we might say is that the speaker's 'performance units' (cf Section 8.9.6) have a certain average length. But exactly what is to be found in the units is still unclear.

In this connection, it may be mentioned that Little (1963:50) found that 'vocalized pauses' realized by *well* and *uh* in sophisticated speech occurred at a rate of one per 25 words; a rough estimation of the frequency of *well* + FP in the present data indicates one occurrence per 16 words. However, since we are not trying to produce rules for 'natural' pauses in impromptu speech but for written English read aloud, our main concern is the frequency and location of silent pauses, not filled pauses or verbal fillers, which are typical of spontaneous speech. Notice the low density of FP and VF in text S.12.6, which comes closest to reading in the corpus (Table 8:1).

However, brief SPs (represented by a single dot in the transcription) make a special case in sometimes being so brief as to be difficult to identify unambiguously and will not have a high priority for pause prediction. Therefore, I made a special study of the distribution of SPs that were longer than brief in relation to the number of words and tone units. The average number of words per SP longer than brief was 22.7 and the average number of tone units per SP longer than brief was 5. Note that the comparatively low number of words and tone units per SP in text S.12.6 (Table 8:2) is the effect of the large proportion of brief SPs. We will now look at the distribution of SPs, FPs, and VFs in greater detail.

Table 8:2. Rates of SP, FP, and VF in relation to words and TUs.

| TEXT | WORDS PER SP | TUs PER SP | WORDS PER FP | TUs PER FP | WORDS PER VF | TUs PER VF |
|--------|-----------------|---------------|-----------------|---------------|-----------------|---------------|
| S.1.4 | 13.5 | 3.3 | 83.3 | 20.5 | 48.5 | 14.6 |
| S.1.5 | 11.3 | 2.9 | 128.2 | 33.6 | 45.9 | 15.9 |
| S.1.10 | 11.2 | 2.9 | 111.1 | 29.0 | 44.6 | 16.1 |
| S.2.6 | 10.7 | 2.8 | 27.3 | 7.1 | 59.5 | 19.5 |
| S.1.8 | 10.0 | 2.3 | 70.4 | 16.0 | 45.9 | 13.7 |
| S.1.1 | 8.1 | 1.9 | 45.9 | 11.1 | 48.5 | 14.6 |
| S.1.11 | 7.7 | 1.9 | 200.0 | 50.6 | 75.8 | 25.3 |
| S.1.2 | 7.2 | 2.1 | 28.1 | 8.2 | 50.0 | 23.9 |
| S.4.1 | 7.8 | 1.7 | 384.6 | 84.5 | 57.5 | 17.2 |
| S.12.6 | 6.3 | 1.6 | 416.7 | 102.3 | 238.1 | 81.9 |

8.6 Silent and filled pauses

More than half the total number of SPs were brief. And the longer the pause the less frequent it was, as is reflected in the decreasing numbers in Table 8:3, with the overall frequencies of 58% brief, 27% unit, and 15% long for silent pauses. There are large variations in pause length between individual texts. Compare for instance the monologue (S.12.6) and text S.4.1 (a dialogue), both with 26% unit SPs but with very different numbers of long SPs (9% and 27%, respectively).

Considering that brief SPs were much more frequent than unit SPs, it is interesting to note the reverse tendency for FPs. Table 8:4 shows that 48% were unit and 41% brief FPs. This, however, is a consequence of the large number of unit FPs in two of the texts (S.1.2 and, especially, S.2.6). The fact that, in some texts, brief FPs were more common than unit FPs indicates that the appearance of one or the other pause type is very much a matter of speaker habit and speech situation. In combinations of silent and filled pauses, the general tendency was for FP to precede SP. Cases with SP preceding FP were comparatively few in most of the texts. Both types are illustrated in (1):

- (1) is is [ə] • ||Mallet has produced a [ə:m] a {REΔVISED} CONSTAṬUTION ■ ||FÖR ■ [ði]
||School of YIDDISH ■ • in ||which • [ə:m] the main ΔPÖINT ■ of my (...) (S.1.2:22-23)

FP generally preceded SP at the beginning of the utterance, but not necessarily in initial position as in (1), and SP usually preceded FP within the utterance:

in ||which • [ə:m] the main ΔPÖINT ■

In the first case FP is used as a turntaker, in the second as a turnholder (the location of pauses in relation to turntaking will be discussed in detail in Sections 8.3 and 8.5). The tendency for SP to follow FP is a natural consequence of the composition of my corpus; nine of the ten texts were dialogues with FPs generally appearing in turn-initial position. The monologue contained only four instances of the FP + SP combination.

Although combinations of SP and FP can be quite complex, they were, on the whole, rather infrequent in this material. The most common types of combination were SP+FP+SP and FP+SP+FP. The dialogue was alone in having no such combinations.

Table 8:3. Distribution of SPs.

| SP- LENGTH | TEXTS | | | | | | | | | | TOTAL |
|-------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| | 12.6 | 1.2 | 1.11 | 4.1 | 1.1 | 1.8 | 2.6 | 1.10 | 1.5 | 1.4 | |
| BRIEF % | 516 65 | 464 67 | 312 48 | 301 47 | 390 63 | 280 56 | 290 62 | 227 51 | 237 53 | 235 64 | 3252 58 |
| UNIT % | 203 26 | 169 24 | 187 29 | 169 26 | 139 23 | 143 29 | 136 29 | 130 29 | 141 32 | 105 28 | 1522 27 |
| LONG % | 70 9 | 59 9 | 150 23 | 173 27 | 85 14 | 77 15 | 40 9 | 90 20 | 66 15 | 30 8 | 840 15 |
| TOTAL | 789 | 692 | 649 | 643 | 614 | 500 | 466 | 447 | 444 | 370 | 5614 |
| % OF ALL TEXTS | 14 | 12 | 12 | 11 | 11 | 9 | 8 | 8 | 8 | 7 | 100 |

Table 8:4. Distribution of FPs.

| P-TYPE | TEXTS | | | | | | | | | | TOTAL | % |
|----------------------------------|--------|--------|-----|--------|--------|------|-----|------|-----|------|---------|----|
| | 2.6 | 1.2 | 1.1 | 1.8 | 1.4 | 1.10 | 1.5 | 1.11 | 4.1 | 12.6 | | |
| BRIEF [ə(m)] | 33 | 87 | 54 | 32 | 41 | 17 | 9 | 12 | 10 | 6 | 301 | 41 |
| UNIT [ə:(m)] | 132 | 69 | 50 | 33 | 12 | 17 | 25 | 10 | 1 | 6 | 355 | 48 |
| FP COMB [ə(m)] + [ə:(m)] + | 6 3 | 5 1 | 2 | 2 1 | 1 2 | 1 | 2 | | 1 | | 19 8 | 3 |
| GLOTTAL FP | 9 | 16 | 3 | 3 | 4 | 10 | 3 | 2 | 2 | 0 | 52 | 7 |
| TOTAL | 183 | 178 | 109 | 71 | 60 | 45 | 39 | 25 | 13 | 12 | 735 | |

8.7 Verbal fillers

In spontaneous conversation, VFs often cluster with SPs and FPs as illustrated in (2):

- (2) and ||ALL this was DÖNE [ə:]■ -- ||by -- ▷kind of ▷letting - [ə:] --- ||{WELL}
||REALLY by 'just [ə:] -- 'sort of [ə]■ - ||starting from ΔNÖTHING■ (S.2.3:115-117)

The example may seem exaggerated but is by no means unique. Goldman-Eisler (1968) found that the proportion of silence in relation to the total speaking time ranged between 13% and 67% in her impromptu talk data. This example shows that long silences do not exclude but rather invite other hesitation phenomena. The distribution of VFs and pauses in the ten texts is presented in Table 8:5. Generally speaking, VFs occurred more often alone than accompanied by a pause.

The monologue had a different distribution of VFs than the dialogues with a very low total number of VFs (and a pause). Only the initiator *now* and the staller *well* were fairly well represented, with the latter used in utterance-initial position like the initiators *anyway* and *now*, eg to resume or shift topics:

- (3) -- ||well Stoke 'Court as you ΔKNÖW■ (S.12.6:699)

Table 8:5. VFs with and without a pause (P) in ten texts
(+ P means any order of VF and P).

| VF-TYPE | 1.10 | 1.8 | 1.5 | 1.4 | 1.1 | 1.2 | 4.1 | 2.6 | 1.11 | 12.6 | TOTAL | % |
|--------------------|------|-----|-----|-----|-----|-----|-----|-----|------|------|-------|----|
| SOFTENER ALONE | 44 | 41 | 26 | 25 | 35 | 22 | 18 | 26 | 11 | 1 | 249 | 28 |
| + P | 29 | 30 | 17 | 22 | 15 | 25 | 16 | 10 | 10 | - | 174 | 19 |
| WELL ALONE | 15 | 28 | 26 | 42 | 35 | 29 | 31 | 29 | 26 | 8 | 269 | 30 |
| + P | 8 | 4 | 14 | 10 | 8 | 13 | 10 | 13 | 9 | 3 | 92 | 10 |
| HEDGE ALONE | 10 | 4 | 16 | 4 | 1 | 3 | 5 | 2 | 5 | - | 50 | 6 |
| + P | 5 | 2 | 7 | - | 3 | 2 | 4 | 1 | 2 | - | 26 | 3 |
| INITIATOR ALONE | 1 | - | 2 | - | 3 | 2 | 2 | 2 | 2 | 4 | 18 | 2 |
| + P | - | - | 1 | - | 3 | 4 | 1 | 1 | 1 | 5 | 16 | 2 |
| TOTAL | 112 | 109 | 109 | 103 | 103 | 100 | 87 | 84 | 66 | 21 | 894 | |

It was SPs (rather than FPs and complex pauses) that occurred with VFs, probably because VFs can fill the gaps in the same way as FPs and complex pauses. Softeners, which were more often found turn-medially than in other positions, were accompanied by brief SPs in most cases. This points to their role as emphasizers rather than hesitators. The hedge *sort of* was accompanied by a unit SP as often as a brief SP. Initiators cooccurred with unit SPs more often than brief SPs and also fairly often with unit FPs, maybe a reflection of their frequent position in the hesitation area at the beginning of a turn. Surprisingly, *well* was more often accompanied by a brief SP than a unit SP, which seems to indicate that it was used as a response-initiator signalling 'insufficiency' more often than as a staller signalling hesitation. On the other hand, *well* was found with long and complex pauses more often than other VF categories, which points to its use in hesitation areas.

In most of the cases the pause preceded VF. The exceptions were *sort of*, which usually came immediately before a pause, and *you see* which, unlike *you know*, more often preceded the pause (for the difference in functions, see Svartvik & Stenström 1985 and Erman 1987).

8.8 Summing up

- We can note that the total occurrence of pauses per individual text ranged between 14% and 7% (Table 8:1).
- In the individual texts, SPs ranged between 96% and 60% of the total number; FPs (including glottal FPs) from 23% to 1%; VFs from 13% to 2% (Table 8:1).
- 76% of the pauses in the ten texts consisted of SPs alone; 10% consisted of FPs alone (including glottal FPs); 8% consisted of VFs alone (Table 8:1).
- 58% of all SPs were brief and 42% unit or longer; the figures are almost exactly the opposite for FPs (Table 8:3).
- FPs were less frequent than SPs and generally also than VFs in relation to words and tone units; exceptions were texts S.2.6, S.1.1 and S.1.2 (Table 8:2).
- SPs served typically as juncture pauses; FPs primarily indicated hesitation.
- FP tended to precede SP at the beginning of an utterance; SP preceded FP within the utterance.
- Brief (rather than unit or long) SPs were followed by FP; unit (rather than brief) FPs were followed by SP.
- One in three VFs was accompanied by SP or FP or by a combination of both and more often by SP (generally brief) than FP.

- The pause (generally SP) preceded VF in most cases; exceptions were *sort of* and *you see*.
- *Anyway* and *now* attracted the highest and *well* the lowest proportion of pauses in relation to their total number, 89% and 34% respectively (Table 8:5).

8.9 The location of pauses and verbal fillers

The location of pauses and verbal fillers has been examined from two main points of view:

- Turntaking: To what extent do speakers pause at turn shifts and what types of pause do they use then?
- Turn organization: Once the speaker has taken the turn, how does he organize his speech, judging by the way he pauses?

Since the distribution of pauses involving VFs is markedly different in monologue and dialogue structure, each subsection begins with a general survey of the location in the ten texts before narrowing down to a comparison of occurrences in the monologue (text S.12.6) and one of the dialogues (text S.1.4).

For the comparative study of these two texts it will be useful first to take a look at their general characteristics. Text S.12.6 was selected since it was found to be the monologue in the corpus that came closest to reading, and text S.1.4 was chosen for contrast (as one of many dialogues). The two texts differ especially in the following respects:

- The monologue contains no interruptions from a second party other than in the form of laughter; it is a basic characteristic of the dialogue to contain turntaking.
- The monologue is unscripted but prepared, and maybe partly read; the dialogue is spontaneous.
- Both texts contain a number of one-word tone units; in the monologue such tone units contain words like *and*, *but*, *so*, and *now* which link clauses together and serve to carry the talk forward; in the dialogue the majority of the one-word tone units consist of feedback signals, such as *yes*, *no*, and *m*.

- The speaker in the monologue is exceptionally slow; both parties in the dialogue are fast speakers and fast turntakers, which partly explains the differences in tone unit segmentation and pause distribution.

The amount of speech (reflected in the number of tone units produced in a certain period of time) was more than twice as large in the dialogue, with 1227 tone units in 22 min 20 sec, as in the monologue, with 1211 tone units in 47 min 50 sec (cf Altenberg 1987a:22). It is possible, however, that the low speech rate in the monologue is not the effect of high pause frequency alone but of pause rate in combination with 'short-unit segmentation' involving shorter than brief 'pauses' at tone unit boundaries (cf Crystal 1969:171); fewer words per tone unit were produced in the monologue than in the dialogue (not including feedback signals and instances of simultaneous speech which cause a skewed distribution). This suggests that segmentation into shorter tone units *per se* had a speed-reducing effect, a matter that I have not looked into here.

Examples (4) and (5) illustrate the overall difference in tone unit segmentation in the two texts, with a pause separating each tone unit in (4) but not in (5):

- (4) the ||Hanbury FAMILy■ - ||LIVED THERE■ • with ||five CHILDREN■ - and ||she
ΔACTUALLY■ • ||finished her ΔEDUCATION■ • in ||what is KNOWN■ ||as the servants'
▷HALL■ (S.12.6:412-418)
- (5) **||I was** [ə] ||I was [ə:m] • relduced just to 'putting "Δone of ΔEACH■ but [ði it] it
"||does 'spell it OUT■ if you've got * "||two* PASSAGES■ (S.1.4:357-359)

8.9.1 Pauses and verbal fillers at turn boundaries and within turns

Since pauses and fillers at turn boundaries can only be observed in dialogues, no comparison with text S.12.6 has been made in this section.

VFs accompanied by a pause (before or after) occurred at turn boundaries and within turns in the nine dialogues as shown in Table 8:6. Softeners in combination with a pause were most often found within the turn. This result was expected for *I mean*, which often serves to introduce an afterthought or an explanatory remark, but not for *you see* and *you know*, which usually occur in turn-final position inviting feedback. The turn-medial position of *you see* and *you know* can therefore be taken to indicate either that the listener gave silent instead of oral feedback, or that the feedback consisted of minimal

Table 8:6. Position of VF+P in the turn in nine dialogues
(‘medial’ is anywhere between the first and the last word).

| VF-TYPE | INITIAL | MEDIAL | FINAL | TOTAL |
|-----------------|---------|--------|-------|-------|
| SOFTENER+P | | | | |
| <i>you know</i> | 9 | 66 | 22 | 97 |
| <i>you see</i> | 5 | 22 | 7 | 34 |
| <i>I mean</i> | 6 | 37 | | 43 |
| WELL+P | | | | |
| <i>well</i> | 43 | 44 | 2 | 89 |
| HEDGE+P | | | | |
| <i>sort of</i> | | 26 | | 26 |
| INITIATOR+P | | | | |
| <i>anyway</i> | 2 | 1 | | 3 |
| <i>now</i> | 7 | 1 | | 8 |
| TOTAL | 72 | 197 | 31 | 300 |

responses like *mhm*, *yes*, *right*, which are no proper turns, or that the feedback came at the same time as *you see* and *you know*.

Surprisingly enough, the figures indicate an equal distribution of *well* + P within and at the beginning of a turn. One would have expected *well* to be much more frequent in turn-initial position, considering its typical function as a response-initiator (for a different distribution, see Little 1963:49 and Svartvik 1980a). Moreover, ‘within’ in Table 8:6 includes *well* + P in second position, eg [ə:m] *well*, *yes well*, etc. The hedge *sort of* + P was not found at turn-boundaries in this data. The initiators *anyway* + P and *now* + P occurred as topic/aspect shifters both turn-initially and within the turn.

Table 8:7. SPs and FPs at turn boundaries in Text S.1.4.

| P-TYPE | BRIEF | UNIT | LONG | COMBINATIONS | TOTAL |
|---------|-------|------|------|--------------|-------|
| SILENT | 35 | 18 | 5 | | 58 |
| FILLED | 3 | 2 | | | 5 |
| COMPLEX | | | | 5 | 5 |
| TOTAL | 38 | 20 | 5 | 5 | 68 |

The distribution of SPs and FPs at turn boundaries in text S.1.4 is shown in Table 8:7. The fact that there were such frequent interruptions, with speakers not waiting for their turn, explains to some extent the few pauses in connection with speaker shifts. This results in what Oreström calls ‘unsmooth’ speaker shifts (1983:138-71), as in (6):

(6) B: well it's ||sort of ΔTÖÖ • ||YES■ *it's*

A: *I* ||MEAN■ it ||would >be a 'bit 'out of ΔPLÅCE *SÖMEHOW*■ (S.1.4:479-482)

Here A starts his turn before B has finished (*I* is simultaneous with *it's*). Oreström found that, in his data, consisting of ten face-to-face LLC dialogues, only 14.8% of the turntakings were unsmooth (1983:166).

Whether SPs between turns should be attributed to the current or next speaker is an open question. However, it might be assumed that turn-final SPs generally serve as turnyielders in ordinary conversation as opposed to, for instance, interviews, where the interviewee makes a pause before answering a tricky question. With FPs, on the other hand, it was quite obvious that they served as turn initiators:

(7) A: [ə:m] • the the ||point İS■ that ||this «has got [igz]» [ə] has been Δfilled up with
EXΔMINÄTION >papers■ *- *||you SEE■ *- * (S.1.2:866-868)

8.9.2 Pauses and verbal fillers at tone unit boundaries

Of all instances of VF + P just over one third came immediately after a tone unit boundary. The remaining two thirds were found immediately before a tone unit boundary or in post-onset position. The distribution in the ten texts is presented in Table 8:8, which however does not specify whether the pause came before or after VF. The difference in position between *you see* and *you know* + P on the one hand and *I mean* + P on the other is worth noticing. *You see* and *you know* + P typically preceded a tone unit boundary, either terminating the information contained in the tone unit:

(8) is sort of ||begging for the ΔMÖÖN■ -- «you ||SEE■» (S.1.1:743-744)

or introducing the new information provided in the next tone unit:

(9) [ə:m] -- ||and [ə:m] you KNÖW■ - ||if Δthis is ΔÄLSO CÖME■ ||from [ə] -
NİGHTINGALE • (...) (S.1.1:268-271)

Table 8:8. VF+P/P+VF immediately following a tone unit boundary in ten texts.

| VF-CATEGORY | AFTER TU BOUNDARY | OTHER POSITION | TOTAL |
|-------------------------------|-------------------|----------------|-------|
| SOFTENER+P <i>you know</i> | 25 | 72 | 97 |
| <i>you see</i> | 1 | 33 | 34 |
| <i>I mean</i> | 25 | 18 | 43 |
| WELL+P <i>well</i> | 36 | 56 | 92 |
| HEDGE+P <i>sort of</i> | 20 | 6 | 26 |
| INITIATOR+P <i>anyway</i> | | 4 | 4 |
| <i>now</i> | 5 | 7 | 12 |
| TOTAL | 112 | 196 | 308 |

I mean + P typically occurred after a tone unit boundary (in pre-onset position), also introducing new information in the next tone unit:

(10) it's -- ΔLANGUAGE■ --- I mean ||my iΔdea would (...) (S.1.1:292-293)

but also in post-onset position with the same function:

(11) [ə:m] -- «||well I mean» • the ||way these chaps ΔGÖ■ (S.1.1:595)

One moot point in intonation studies is whether tone units are by definition, or typically, separated by pauses. Or should the presence or absence of pauses between tone units be described as speaker/topic/situation specific? One way of avoiding the problem altogether would be to opt for 'pause-defined units' instead of 'contour-defined' tone units, as suggested by Brown, Currie & Kenworthy 1980:69ff), ie chunks of speech bounded by SPs instead of tone unit boundaries. However, since LLC has been analysed in terms of tone units, this is not the place to go into this general question. Yet the corpus can be used for studying the relation between pauses and tone unit boundaries.

To get a rough idea of the distribution of SPs and FP's at tone unit boundaries I examined the first, middle, and last one hundred tone units in S.12.6 and S.1.4, and found that only slightly more than half of the tone units in the former cooccurred with a pause and no more than one in four in the

Table 8:9. Tone unit boundaries with (+P) and without (-P) a following pause.

| TEXT S.12.6 | | TEXT S.1.4 | |
|----------------|----------------|----------------|----------------|
| TU boundary -P | TU boundary +P | TU boundary -P | TU boundary +P |
| 127 | 173 | 240 | 60 |

latter. The results appear in Table 8:9, in which figures from the first, middle and final one hundred tone units in each text have been conflated. Pauses cooccurred with tone unit boundaries almost three times as often in the monologue as in the dialogue. The most obvious reason for this is that pauses are less likely to be found in a dialogue with generally very short turns, often consisting of just a backchannel item making up a one-word tone unit, than in a monologue where the same speaker goes on speaking for nearly 50 minutes. Brief SPs dominated in both conversations while FP's and complex pauses were extremely rare. On the basis of this sample, then, the answer to the question 'Are tone units typically separated by pauses?' is that it depends on whether the talk occurs in a monologue or a dialogue.

8.9.3 Pauses and verbal fillers within tone units

Verbal fillers may make up separate tone units, with or without pauses. Table 8:10 shows how often VF + P made up a separate tone unit and the location within the tone unit (no distinction has been made between cases where P preceded and followed VF). VF + P constituted a separate tone unit in more than one third of the cases:

(12) *||WELL [ə:]■ when I ||FIRST did* ARISTÓPHANES■ (S.1.4:275-276)

Only *sort of* + P did not appear in that position:

(13) ||sort of • ΔSERVICE FLÁTS■ (S.1.10:1039)

Another third appeared in the middle of a tone unit:

(14) but ||it's [ə:m] - I mean it's ||got SHÁPE■ (S.1.8:658)

Table 8:10. Position of VF and pause within tone units.

| ONSET POSITION: | Indicates that the items occurred immediately before or immediately after onset without constituting a separate tone unit. | | | | | | | | |
|----------------------|--|-----|--------------|-----|---------------------|-----|-------------|------|-------|
| TU MEDIAL: | Denotes position between 'onset position' and 'TU boundary follows'. | | | | | | | | |
| TU BOUNDARY FOLLOWS: | Indicates that the items occurred immediately before a tone unit boundary. | | | | | | | | |
| VF-TYPE | ONSET POSITION | | MEDIAL IN TU | | TU BOUNDARY FOLLOWS | | SEPARATE TU | | TOTAL |
| SOFTENER+P | | | | | | | | | |
| <i>you know</i> | 10 | 10% | 25 | 26% | 4 | 4% | 58 | 60% | 97 |
| <i>you see</i> | 4 | 12% | 1 | 3% | 8 | 24% | 21 | 62% | 34 |
| <i>I mean</i> | 15 | 35% | 25 | 58% | 1 | 2% | 2 | 5% | 43 |
| WELL+P | | | | | | | | | |
| <i>well</i> | 24 | 26% | 36 | 39% | 1 | 1% | 31 | 34% | 92 |
| HEDGE+P | | | | | | | | | |
| <i>sort of</i> | 6 | 23% | 20 | 77% | | | | | 26 |
| INITIATOR+P | | | | | | | | | |
| <i>anyway</i> | | | | | | | 4 | 100% | 4 |
| <i>now</i> | 6 | 50% | 5 | 42% | | | 1 | 8% | 12 |
| TOTAL | 65 | 21% | 112 | 36% | 14 | 5% | 117 | 38% | 308 |

The least favoured position was immediately before a tone unit boundary, which is explained by the fact that the only VF-items that usually appear in that position are *you know* and *you see*:

(15) ||MÖSTLY it 'means that■ the ||kids ÄREN'T • {you ||SÉE ■ ||} ■ (S.1.10:93-96)

Looking at individual VF-items + P we notice that most instances of *you see* + P and *you know* + P constituted a separate tone unit (62% and 60%, respectively). *I mean* + P occurred more frequently in medial position, while *well* was found in onset position almost as often as in a separate tone unit. Finally, *anyway* + P unlike *now* + P occurred only in a separate tone unit:

(16) ||ÄNYWAY ■ • shall we ||TÖRN to (...) (S.2.6:380-381)

(17) - • now ||poor Sir FRÉDERICK ■ - got ||mixed ÖP ■ (S.12.6:623-624)

The total number of pauses within the tone unit was almost the same in the two texts. SPs constituted the most common pause type in both, although SPs were

relatively more frequent in the monologue. Table 8:11 presents the total distribution of SPs and FPs, and complex pauses between and within tone units. Pauses in combination with speaker shifts in text S.1.4 (68 instances, see Table 8:7) are excluded. Pauses between tone units were by far the most frequent in both texts, realized by SPs in the majority of the cases. But there is an interesting difference in proportion within the texts: twice as many pauses occurred between as within tone units in the dialogue compared with four times as many in the monologue. This points to a relatively higher degree of concurring performance and tone units in the monologue than in the dialogue. Although the monologue contained twice as many SPs as the dialogue, the difference in number *within* the tone unit was less significant. This only serves to stress that the difference in SP frequency is due to pauses occurring *between* the tone units.

When it comes to FPs the result was the opposite: the dialogue contained four times as many FPs as the monologue (75% of which occurred within the tone unit in the dialogue, as compared with 67% in the monologue). Since FPs are hesitation signals in the first place, this shows not only that the two parties in the spontaneous dialogue hesitated more often than the speaker in the preplanned monologue but also that hesitation is a very 'local' phenomenon. The fact that the total distribution of silent, filled, and complex pauses was less uneven in the dialogue than in the monologue highlights the different speech situations.

Table 8:11. Distribution of SPs and FPs in a monologue and a dialogue.

| PAUSE | MONO | DIA |
|-------------|------|-----|
| WITHIN TUs | | |
| silent | 144 | 69 |
| filled | 8 | 37 |
| complex | 4 | 12 |
| TOTAL | 156 | 118 |
| BETWEEN TUs | | |
| silent | 645 | 245 |
| filled | 4 | 15 |
| complex | 3 | 8 |
| TOTAL | 652 | 268 |
| TOTAL | 808 | 386 |

8.9.4 Summing up

- *I mean, you know* and *you see*, and *sort of* in combination with a pause, were found more often in medial than in initial and final position, but not *anyway, now*, and *well* (Table 8:6).
- In the dialogue, less than every fourth speaker-shift had a pause, usually brief and silent (Table 8:7).
- FPs occurred in turn-initial position; whether SPs were turn-initial or turn-final could not be determined.
- VFs were less often found immediately after a tone unit boundary than anywhere else (Table 8:8).
- The agreement between tone unit boundaries and occurrence of pauses was unexpectedly low (Table 8:9).
- FPs were more frequent within TUs, SPs between tone units (Table 8:11).
- *You know, you see*, and *anyway* occurred more often in a separate tone unit; *I mean, well*, and *sort of* were more often found in medial position; *now* (as opposed to *anyway*) preferred onset position (Table 8:10).

8.10 Pauses as linguistic demarcators

One of the aims of this study was to suggest rules for automatic pause assignment based on the occurrence of pauses in genuine speech, notably pauses separating syntactic constituents. With this in mind I made a special study of one of the texts. Since it was preferable to use data that was as close as possible to writing, I selected text S.12.6, which is largely free from the hesitations, reformulations, and anacolutha that are typical of impromptu speech. Clearly, a far more extensive material is needed for writing reliable predictive rules for pause assignment. Therefore I shall only point to the main tendencies in this text. (For previous research in this area, see Section 8.1.)

Strings of words delimited by pauses will be referred to as 'performance units' (cf Section 8.10.6). Such strings, which may or may not run across tone unit boundaries, are free from internal pauses and roughly equivalent to what Beattie (1983) refers to as 'fluent units'. Since pauses operate not only at the syntactic level but also at the discourse level, Section 8.10 will be devoted to pauses as 'discourse markers'.

Both SPs and FPs separated syntactic constituents and pauses were classified according to whether they were found **between sentences**, ie where a full stop would be likely in writing; **between clauses**, ie where a full stop would not be likely in writing; **between the clause elements S, V, C, O, and A** (Quirk et al 1985:49); **between phrase elements**, ie words in noun phrases

(NPH), verb phrases (VPH), adjective phrases (JPH), adverb phrases (APH), prepositional phrases (PPH); **with conjunctions**.

The four-level tagging of the text helped to determine which of these levels were affected by the pause (cf Chapter 4). This is demonstrated in Figure 8:2.

- a unit SP separates a conjunction from a preposition that is part of a prepositional phrase functioning as an adverbial;
- a unit SP separates a determiner from its head in the noun phrase;
- a unit SP separates a verb from its object;
- a unit SP separates the initiator *now* from the rest of the discourse.

Note that although (a) and (d) are very similar they are not identical; *that* in (a) is part of a clause containing a fronted adverbial:

(18) the most ||modern 'farm ΔBUILDINGS■ that - ||in that PÉRIOD■ were ||rather UANIQUE■
(S.12.6:594-596)

Figure 8:2. Four-level tagging.

| | |
|------------------|------------------------------|
| (a) | that - in that PÉRIOD■ |
| WORD-CLASS level | CD PA TD NC |
| | S PPH A |
| (b) | leaving all his - CARS■ |
| PHRASE level | VA+G EC TB NC+2 |
| | VPH NPH V O |
| (c) | it would INTEREST - ME |
| CLAUSE level | RC VM+9 VA+O RB |
| | NPH VPH NPH |
| | S V O |
| (d) | NOW - AFTER the ALLUYSONS■ |
| DISCOURSE level | DI PA TA NP+2 |
| | PPH A |
| | INIT |

But *now* could not be incorporated in the following clause:

- (19) $\vec{N}OW$ ■ - $\vec{A}FTER$ • the $\vec{A}LL\vec{U}YSONS$ ■ • [ə:] Sir $\vec{P}hilip$ $\vec{A}W\vec{I}LD$ ■ (...) $\vec{I}stopped$ • and $\vec{A}L\vec{I}VED$ at 'this par'ticular $\vec{M}ANSION$ ■ (S.12.6:733-737)

Now is here a self-contained item which serves to initiate a new stage in the narrative and belongs to a separate level, referred to as the 'discourse level' in our system.

When examining pauses in the syntactic hierarchy it was necessary to go across tone unit boundaries. The fact that the tone unit is regarded as the basic prosodic (and information) unit does not necessarily imply that tone units and syntactic units are related in a one-to-one fashion. 81% of all SPs in text S.12.6 occurred between tone units, but only 19% within tone units (Table 8:12). The majority of all SPs were brief, followed by unit SPs, while longer SPs were comparatively few, especially within tone units. In the FP category, unit FPs occurred more often than brief but both types were rare.

Table 8:12 shows the overall distribution of SPs and FPs in relation to sentence, clause, phrase, and word transitions. The following general tendencies could be observed:

Ps between SENTENCES were unit or longer and occurred between TUs.

Ps between CLAUSES were generally brief and occurred between TUs.

Ps between CLAUSE ELEMENTS were brief and occurred between TUs.

Ps between WORDS in phrases were brief and occurred within TUs.

Ps with REFORMULATIONS were unit or brief and occurred between TUs.

Separation of sentences by means of pauses was mainly achieved with unit SPs; double and treble SPs were rare in any other position. Unit SPs were more often found between clause elements than between clauses, while brief SPs occurred chiefly between elements of clause structure.

FPs were rare in this position. Neither unit nor brief FPs cooccurred with sentence or clause boundaries. But it is possible to detect a slight tendency for unit FPs to occur between clause elements and in reformulations and for brief FPs to occur between lexical words (cf Maclay & Osgood 1959).

Crystal (1969:170) found that over 60% of all pauses occurred between clauses or elements of clause structure, but according to this study, the majority of the pauses occurred between clause elements and not between clauses. Maclay & Osgood (1959) observed that FPs tend to occur at phrase

Table 8:12. Pauses between and within (underlined) TUs in relation to syntactic components in text S.12.6.

| | SILENT --/-- | | | | FILLED | | | |
|--------------------------|-----------------|-----|-----|-------|--------|------|-------|-----|
| | . | - | - | Total | [ə:m] | [əm] | Total | |
| <i>Between sentences</i> | 82 | 111 | 61 | 254 | | | | |
| <i>Between clauses</i> | | | | | | | | |
| coordinate | 23 | 2 | 1 | | | | | |
| subordinate | 9 | 5 | 1 | | | | | |
| relative | 14 | 6 | 4 | | | | | |
| other+conj | 4 | 1 | 1 | 63 | 8 | | | |
| -conj | | | | | | | | |
| ellipsis/non-finite | 10 | 3 | | 13 | | | | |
| <i>Within clause</i> | | | | | | | | |
| A-A | 19 | 1 | 5 | 2 | 1 | | | |
| A-O | 2 | | 1 | | | | | |
| A-S | 23 | 4 | 5 | | | | | |
| A-V | 9 | 3 | 2 | | | | 1 | |
| O-A | 17 | 3 | 1 | | | | | |
| O-O | 6 | 2 | 1 | | | | | |
| O-S/V | 4 | 1 | 1 | 1 | | | | |
| S-A | 6 | 1 | | | | | | |
| S-O | | 1 | | | | | | |
| S-V | 25 | 8 | 9 | | | | | |
| V-A | 14 | 3 | 4 | | | | | |
| V-C | 1 | 4 | 2 | | | | 1 | |
| V-O | 9 | 2 | 1 | 2 | | | | |
| V-S | 1 | | 2 | | | | 1 | |
| V-V | 1 | 1 | 1 | | | | | |
| A-postmod | 6 | | 1 | | | | | |
| C | 4 | | 2 | | | | | |
| O | 8 | | 1 | | | | | |
| S | 7 | | 1 | | | | | |
| A-app | | | 3 | | | | | |
| C | 4 | | 2 | | | | | |
| O | 3 | 1 | | 1 | | | | |
| V-ag | 3 | | | | | | | |
| conj-clause | | 5 | | 1 | | | | |
| conj P | 14 | | 4 | | | | | |
| other | 17 | | 3 | | | | | |
| <i>Within phrase</i> | | | | | | | | |
| APH | 5 | 5 | | 1 | | | | |
| JPH | | 1 | | | | | | |
| NPH | 11 | 24 | 1 | 2 | | | | |
| PPH | 2 | 28 | 1 | | | | | |
| VPH | 5 | 13 | 1 | | | | | |
| <i>Reform</i> | | | | | | | | |
| other | 4 | 4 | 2 | 1 | 2 | | | |
| | 15 | 1 | 7 | 1 | | | | |
| TOTAL | 387 | 129 | 191 | 12 | 67 | 3 | 645 | 144 |
| | | | | | | | 1 | 6 |
| | | | | | | | 3 | 2 |
| | | | | | | | 4 | 8 |

boundaries and not within phrases. These observations were not contradicted by my findings.

8.10.1 Pauses between sentences

Pauses between sentences were all of the SP type, and sentence boundaries with a pause were coterminous with tone unit boundaries:

- (20) and ||he made ΔSefton PÁRK■ • ||his 'English ΔHÖME■ - "||great ALTERATIONS were MADE■ - (S.12.6:587-589)

The majority of the pauses at sentence boundaries were unit or longer:

| | |
|--------|-----|
| Brief | 32% |
| Unit | 44% |
| Double | 14% |
| Treble | 10% |

Note that a number of strings defined as sentences are single-clause sentences. It should also be observed that a large number of the double and treble SPs served not only as sentence demarcators but also as discourse markers. FPs served neither of these functions.

8.10.2 Pauses between clauses

Clause and tone unit boundaries were nearly always coterminous. Consequently, pauses separating clauses were generally found between tone units. 79% were brief SPs and 21% were unit SPs, ie usually shorter between clauses than between sentences. FPs did not occur between clauses (see Table 8:12).

In the eight cases where a clause juncture with a pause occurred within the tone unit, the subordinate clause served as a constituent of the superordinate clause, eg direct object:

- (21) that they ||think • that 'I am 'one as ΔWELL■ - (S.12.6:264)

or it was embedded as a hedge in the superordinate clause:

- (22) ||where 'we were 'had • what you ||might call • Δrunning WATER■ (S.12.6:165)

One characteristic feature of the spoken language is its frequent use of coordinating conjunctions as links between sentences in a narrative. Compare (23) and (24):

- (23) he ||certainly 'didn't come BÄCK■ - ||but the ΔPROPER>TY■ • was ||taken ÖVER■ ||by the CUSTÖDIAN■ of ||Enemy PRÖPERTY■ (...) and "||all the furniture • was SÖLD■ (S.12.6:637-642)

- (24) ||[ði:] Δmiddle TĚNT■ ||was a great ΔDRĪNKING 'tent■ ||ÄND■ - in ||THÖSE DÄYS■ I ||think EVERYBODY■ - ||did more Δheavy DRĪNKING■ (S.12.6:532-537)

And in (23) is used as an ordinary coordinating conjunction. The *and*-clause cannot stand on its own as a sentence, nor can *and* be left out without a noticeable effect. In this case *and* is preceded by the pause, which is the typical order for pauses and coordinating conjunctions (cf Table 8:13). By contrast, *and* in (24), which constitutes a separate tone unit and is followed by a pause, serves as a link in the discourse very much like the initiator *now* or the particle *well*. One indication that this *and* does not function as an ordinary coordinating conjunction is that it can easily be left out in the same way as *now* and *well* in a similar position.

The pause preceded the conjunction also in the cases of coordination and subordination where clauses met within the tone unit. When sentence and clause boundaries were coterminous with tone unit boundaries (as was generally the case), the pause occurred as in Table 8:13, which shows that the tendency for pauses to precede the conjunction was stronger at clause junctures (94%) than at sentence junctures (82%).

Table 8:13. Pauses and conjunctions cooccurring with sentence and clause boundaries following a tone unit boundary.

| | P CONJ | | P CONJ | | CONJ P | | TOTAL |
|---------------------|--------|-----|--------|-----|--------|----|-------|
| SENTENCE / SENTENCE | 60 | 82% | 11 | 15% | 2 | 3% | 73 |
| CLAUSE / CLAUSE | | | | | | | |
| coord | 28 | | 1 | | | | 29 |
| subord | 13 | | | | 3 | | 16 |
| SUBTOTAL | 41 | 94% | 1 | 1% | 3 | 5% | 45 |
| TOTAL | 101 | 86% | 12 | 10% | 5 | 2% | 118 |

Table 8:14. Pauses and conjunctions between tone units at sentence boundaries.

| | P CONJ | P CONJ P | CONJ P | TOTAL |
|----------------|--------|----------|--------|-------|
| COORDINATORS | | | | |
| <i>and</i> | 47 | 10 | 1 | 58 |
| <i>but</i> | 7 | 1 | | 8 |
| <i>so</i> | 5 | | | 5 |
| <i>because</i> | 1 | | 1 | 2 |
| TOTAL | 60 | 11 | 2 | 73 |

Here are some examples with both coordinating and subordinating conjunctions. First, in (25) and (26) pause + conjunction between tone units:

(25) - ||funnily e'nough my ΔFATHER■ • ||WENT to the 'same SCHOOŁ■ • and ||he was 'one of the 'first ΔPÜPILS■ - (S.12.6:13-15)

(26) - it was ||only AFTER■ ||WÖRŁD War TWÖ■ • that ||WĖ■ ||RĖALLY■ the ||PĖOPLE 'in our VĖLLAGE■ • ||HĀD■ - a ||little to SĀY■ • (S.12.6:372-378)

Then, conjunction + pause between tone units (27):

(27) BE||CAUSE■ • on ||bath • NĖGHTS■ (S.12.6:184-185)

And within tone units (28):

(28) ||and • "ΔŁÖÖKING■ ||at the ▷< lie of the ΔŁĀND■ (S.12.6:1051-1052)

Table 8:14 shows that *and* with a pause served to initiate a sentence more often than any other conjunction.

8.10.3 Pauses between clause elements

The largest proportion of pauses separating clause elements was found between tone units. As a matter of fact, 33% of the total number of pauses were found between tone units (and between clause elements) and 7% were found within tone units (and between clause elements). SPs other than brief and unit were rare in both positions (Table 8:12). Here are two examples, in (29) with a pause between verb and object:

(29) of ||course it would ΔĖTEREST - MÉ {RĖALLY■}■ (S.12.6:617)

in (30) between subject and verb:

(30) ||and perΔhaps Δsome of 'you • could REΔMĖMBER■ (S.12.6:230)

The following examples illustrate pauses between tone units. In (31) the pause occurs between adverbial and subject and in (32) between two adverbials:

(31) ||in 'nineteen ΔTWĖLVE■ - he ||WĖNT■ - (S.12.6:518-519)

(32) he ||STĀYED there one NĖGHT■ - on his ||way to be ΔĖXECUTED■ • (S.12.6:1129-1130)

8.10.4 Pauses between words in phrases

Words in phrases were also separated by SPs, generally within the tone unit. Most of them occurred within noun phrases as in (33) and prepositional phrases (see Table 8:12).

(33) ||his - Δbeautiful Δcopperplate WRĖTING■ (S.12.6:26)

8.10.5 Pauses and reformulations

Only 14 instances of reformulation involved a pause (or pauses). There was no tendency for some types of reformulation to occur within the tone unit and for others just after a tone unit boundary (Table 8:12). Here are examples of some different types:

(34) ||was -- ||had ||CONΔNĖCTION■ (S.12.6:700)

(35) she ||made some Δvery • ||knitted some Δvery itchy VĖSTS■ (S.12.6:90)

(36) during [ði:] • ΔThomas Gray Δ[fest • ə:] CENΔTĖNARY■ (S.12.6:819)

(37) the ||large HÖUSES■ ||in this [vi] ||in this VĖLLAGE■ • ||ĀLL the 'large MĀNSION«S»■ (S.12.6:335-337)

(38) ||when - HĖ■ -- when Mr ΔFortune REΔTĖRED■ (S.12.6:981-982)

(39) ||and we LĖVED■ • we were a ||FĀMĖLY of ΔFĖVE■ • (S.12.6:38-39)

- (40) ||WHICH■ - [ði:] "||HIGHLAND di 'vision■ - was ||stationed HERE■ (S.12.6:645-647)
- (41) «it» and ||thing • the ||Women's ΔINSTITUTE {and ||things like THAT■}■ (S.12.6:998)
- (42) ||only [ði:] • ||possibly 'Lord«s» of the ΔMANOR■ - (S.12.6:1147)
- (43) ||and 'when we 'were -- ||I was 'in the ΔCHOIR■ - (S.12.6:284)

8.10.6 Performance units

Performance units can vary a great deal in length, as in (44):

- (44) - the ||GROUND■ were ||REORGANIZED■ • ||and he ΔINTRODUCED■ ||into the
ΔVILLAGE■ • the most ||modern 'farm ΔBUILDINGS■ that - ||in that PÉRIOD■ were
||rather UΔNIQUE■ (S.12.6:590-596)

With brief SPs regarded as minimal delimiters, the performance units in (44) vary from two to six words. If only unit SPs are considered, they vary from two to 13 words. This should be compared with the average number of words per pause, which is 6.3 in this text and 9.4 in the larger subcorpus consisting of ten texts (see p 214). In (45) the performance units vary in length from one to 13 words:

- (45) - and ||looking 'through my BINOCULARS one ▷ day■ I ||saw on the Δ{OPPOSITE}
ΔMOUNTAIN■ - a ||MAN■ || WORKING■ ||on ['ei] ||one of THESE■ • ||dry 'stone
WALLS■ • d||l||viding • the BOUNDARIES■ • (S.12.6:658-664)

In both (44) and (45) unit SPs separate old from new information. Once the speaker is on the right track, brief SPs serve as demarcators. The somewhat stilted word order in these extracts seems to invite a pause:

and he introduced into the village . the most modern farm buildings that - in that period
were rather unique

I saw on the opposite mountain - a man

The use of nonfinite clauses is more characteristic of writing than of speech:
looking through my binoculars, dividing the boundaries.

In quite a few cases there was a pause between clause constituents, eg between subject and verb (*the grounds - were reorganized*), and between verb and object (*dividing • the boundaries*). These pauses are difficult to explain in terms of linguistic demarcators. One often gets the impression, when listening to the recording, that the speaker inserts a pause before or after a particular word or string of words to obtain a certain emphatic effect rather than using pauses as linguistic demarcators (and for breathing): 'the speaker prosodically empathizes with the hearer' (Quirk et al 1985:1444).

In order to identify a performance unit it was necessary to verify to what extent sentences and clauses were demarcated by a pause, and by what type of pause, and also to examine whether they constituted pause-free units (see Tables 8:15 and 16). Table 8:15 indicates that 253 out of 293 sentences (86%) had an initiating pause; 82 out of 171 finite clauses (48%) had an initiating pause. Perhaps the most striking finding is that unit or longer SPs were more than twice as frequent as brief SPs, not only between sentences and clauses but also between clause constituents (Table 8:16). But note that, in the data as a whole, brief SPs were more frequent than unit or longer SPs between clauses and clause elements.

Table 8:17 gives the percentage of pauses (all types) at sentence and clause boundaries, between clause and phrase elements, and in reformulations. The distribution in the syntactic structure was different between and within the tone units. Among the total occurrence of pauses between tone units those separating sentences and those separating elements of clause structure made up an almost equal percentage (40% and 41%), while the percentage of pauses separating clauses was small (12%), and pauses between phrase elements (single words) constituted the smallest group (4%). Within the tone unit the largest percentage consisted of pauses between words in phrases (51%); the

Table 8:15. Sentences and clauses with and without an initiating pause.

| GRAMMATICAL UNIT | + PAUSE | | - PAUSE | | TOTAL |
|-------------------|---------|-----|---------|-----|-------|
| sentence/sentence | 253 | 86% | 40 | 14% | 293 |
| clause/clause | 82 | 48% | 89 | 52% | 171 |
| TOTAL | 335 | 72% | 129 | 28% | 464 |

Table 8:16. 'Sentences' initiated by a pause.

| TYPE of initiating PAUSE | FLUENT SENTENCES | | NON-FLUENT SENTENCES | | TOTAL |
|--------------------------------|-------------------|--------------------------------|----------------------|---------------------------|-------|
| | S = one clause | S = more than one clause | P between clauses | P between constituents | |
| UNIT or longer | 24 | 25 | 30 | 92 | 171 |
| BRIEF | 19 | 16 | 9 | 38 | 82 |
| TOTAL | 43 | 41 | 39 | 130 | 253 |

proportion of pauses between clause elements was fairly high (38%), while pauses at clause boundaries were rare (6%), and pauses at sentence boundaries were non-existent.

The reason why pauses within tone units seldom preceded a clause and never a sentence is of course that sentence boundaries were always, and clause boundaries nearly always, coterminous with tone unit boundaries.

Table 8:17. Pauses within and between tone units in the syntactic hierarchy, including reformulations.

| | BETWEEN TUs | WITHIN TUs |
|------------------------|-------------|------------|
| Between sentences | 40% | 0% |
| Between clauses | 12% | 6% |
| Between phrases | 41% | 38% |
| Between words | 4% | 51% |
| Between reformulations | 3% | 5% |

8.10.7 Summing up

- 32% of all SPs occurred between sentences; half of them were unit and longer (Table 8:12).
- The proportion of pauses between clauses was only 11% (Table 8:12).
- 39% of all SPs separated phrases as compared with 2% of all FPs; especially sequences consisting of phrases serving as S and V, V and O, A and A (Table 8:12).
- 12% SPs and 1% FPs separated words in phrases; such pauses generally occurred within the tone unit (Table 8:12).
- 81% of all SPs and FPs occurred between tone units; brief FPs were always found within the tone unit; brief SPs in 35% of the cases (Table 8:12).
- More sentences than clauses were initiated by a pause + a conjunction, and coordination exceeded subordination; conjunction + P order was rare but slightly more common with subordinated clauses than anywhere else (Table 8:13).
- *And* dominated as a coordinator initiating sentences (Table 8:14).
- Performance units (separated by a pause on both sides) varied in length from one to 13 words, ie they were either shorter or longer than a clause.

No safe rules for pause assignment can be based on the results of this study alone. First, one single text has been examined; second, the definitions of sentence and clause as used in spoken discourse are fairly vague; third, although the study shows the ratio of pauses to phrases and words, it does not show the corresponding ratio of absent pauses.

8.11 Pauses and verbal fillers as discourse markers

8.11.1 Stage markers

Pauses and verbal fillers can be used unconsciously, as when they occur with breathing or as hesitation signals. They can also be used consciously, for example as structural markers or as a means for the speaker to manipulate the listener and save face. In this section I shall report on pauses and verbal fillers used as organizational and interactional devices.

In addition to functioning as linguistic markers in the syntactic hierarchy (Section 8.10), SPs typically serve to 'mark stages' in the discourse (Labov & Fanshel 1977:156) and to organize the talk into 'paragraphs' in the narrative structure (Chafe 1987:44). This is illustrated in Figure 8:3, which is a

Figure 8:3. Pauses as discourse markers. (w = text)

[illegible]

contracted version of a longer monologue-sequence intended to show how the speaker divides the narrative into a number of paragraphs and subparagraphs, each dealing with a particular topic or subtopic that is part of the main theme. It was possible to identify a large number of such topic and subtopic

Table 8:18. SPs separating topics and subtopics.

| TYPE OF PARAGRAPH | TYPE OF PAUSE | | Unit | TOTAL |
|-------------------|---------------|--------|--------|---------|
| | Treble | Double | | |
| topic | 15 | 7 | 9 | 31 |
| subtopic | 10 (5) | 6 (2) | 5 (3) | 21 (10) |
| TOTAL | 25 (5) | 13 (2) | 14 (3) | 52 (10) |

paragraphs. Pauses between topic paragraphs were found to be longer than those separating subtopic paragraphs. The distribution is shown in Table 8:18 (where the figures in brackets indicate that subtopic pauses coincided with topic-boundary pauses). The following characteristics emerged:

- Treble SPs dominated followed by unit SPs for both categories of topic; double SPs were the least common type.
- 71% of the topic paragraphs and 76% of the subtopic paragraphs ended with an SP longer than unit.
- More treble than double SPs and more double than unit SPs separated topics; the same tendency was observed for subtopics.

Topic transitions were also reflected in changes in the pitch contour, indicated by boosters (see Chapter 7) in our analysis, an area that I shall not go into, however.

8.11.2 Prefaces

Almost half of the topic paragraphs were initiated by a preface (which introduces the topic), all but three accompanied by an SP, usually longer than unit. A preface can be long (46) or short (47):

- (46) I'm ||now GÖING■ to ||talk ABÖUT■ - the ||different HÖUSES■ - ||and ||IN the 'village■
 ||and I'm Δgoing to 'start ÖFF■ with ||Wexham SPRINGS■ - ||which is the ΔHÖME
 TODAY■ ||of Ce'ment and ΔCÖNCRETE As'soci'ation■ - ||which has GÖT■ a ||special
 INTEREST - to MÉ■ --- (S.12.6:390-399)
- (47) we ||now go ÖVER■ - to ||Stoke CÖURT■ -- (S.12.6:697-98)

In some cases an initiator alone served to introduce the paragraph, as in (48):

(48) $\text{N}^{\circ}\text{OW}$ - AFTER • the $\text{ALL}^{\circ}\text{UYSONS}$ (S.12.6:734)

Conjunctions (especially *and*, *but* and *because*) followed by a pause and the conjunct *so* were often used as links between paragraphs:

(49) BUT [ə] we now 'go to Δ Stoke " $\text{H}^{\circ}\text{OUSE}$ " (S.12.6:1165-1166)

A paragraph may also be initiated by the 'fronting' of the new topic:

(50) $\text{L}^{\circ}\text{ARCHMOOR}$ --- of course be Δ fore the present 'school was $\text{B}^{\circ}\text{UILT}$ there stood a
a quite a big (...) (S.12.6:952-954)

The following tendencies could be observed:

- Topics were introduced by a preface plus a unit or longer SP.
- The preface was either introduced by an initiator (eg *now*) followed by an SP or consisted of nothing but the initiator followed by an SP.

8.11.3 Framing

The previous section was devoted to discourse markers in the monologue. In this section I will comment briefly on discourse markers in the dialogues. Many dialogues include narrative sections which resemble monologues and where SPs and VFs, in combination with SPs, serve as 'stage markers' in much the same way. Compare (51) and (52), where *anyway* + SP brings the discourse 'back to order'. Both extracts illustrate that the thread of discourse was momentarily lost:

(51) *but* that didn't Δ HAPPEN until LONG 'after [ði:] - [ə:] - British and 'French
and Δ merican - ARMIES had really sort of --- anyway I'm Δ SORRY I was
 $\text{D}^{\circ}\text{INGRESSING}$ • but what I 'mean IS - the German 'General STAFF was no -
was was very $\text{IMPR}^{\circ}\text{ESSIVE}$ in its $\text{H}^{\circ}\text{EYDAY}$ (S.2.3:362-370)

(52) A: that \triangleright brought Δ HER a 'bout • her and Δ what you MIGHT \triangleright say " HER little
outlook on \triangleright life
b: oh yes * I can understand her*

A: * ANY 'WAY • * ANY 'WAY - the next MORNING - - [sa] SOMEHOW or
'other I hadn't 'got Δ any - BUSINESS to 'do (S.1.14:484-492)

But note that in (52) *anyway* (in a separate tone unit) + SP has an additional, interactive function: it is also used as a device for preventing the other party from taking over the turn (the asterisks indicate simultaneous speech). *Anyway* in (51), which is preceded by a treble SP, does not have that function. *However* + SP can be used in a similar way, indicating 'let's go on'.

The function of *now* + SP is slightly different: it only points forward and would probably never be used as a turntaker/turnholder:

(53) A: but [ʔ] - then this 'other this $\text{pa}^{\circ}\text{edia}$ Δ trician 'showed me a Δ PICTURE of a
 young 'kid who had 'bow Δ LEGS and said what's the \triangleright $\text{DIAGN}^{\circ}\text{OSIS}$ so I said
" Δ RICKETS (...)
a: renal rickets
A: yeah it's called 'renal Δ RICKETS (...)
A: NOW - - then he said " Δ { AH } YES - «well then » I 'told him $\text{AN}^{\circ}\text{OTHER}$
'cause of 'rickets (S.2.9:127-155)

8.11.4 Summing up

- SPs alone may serve as stage markers to demarcate the preface from the narrative proper and to indicate 'end of topic' and topic transition.
- FPs, alone or in combinations, signal hesitation.
- VFs, accompanied by an SP (or alone), indicate either 'resumption of lost topic and continuation' or the beginning of a new topic.

8.12 Discourse interaction

In addition to the functions accounted for so far, pauses and fillers are used as interactional and social devices. What pauses and fillers do in the interaction is not only a function of the way they are realized but also of their position (cf Crystal & Davy 1975:92ff and Chapter 5:

(54) A: I think I'm 'on the 'wrong Δ MAP ---
B: [ə:m m] but that's as a 'bout as Δ near as 'you can Δ hit it OFF - - and it's [ə]
--- it's NOT a 'road {you could really ADVISE } - - «to» somebody who

didn't KNŌW it ■ --- [m] «3 sylls» ||ŌTHERWISE ■ you've ||got to do

ΔĀLDERSHOT ■ ---

A: ||YĒAH ■ --- well in ||THĀT ▷case ■ (S.1.11:781-788)

Example (54), a short extract from a rather special situation with two persons reading a map, contains eight long SPs which occur alone or in combinations. The pauses can have different functions:

turntaking: preceded by an FP

[ə:m] --- but

turnholding: signalling hesitation as when coinciding with repetition

and it's [ə] --- it's

turnyielding:

Aldershot ---

The example illustrates that pauses and fillers can be produced both within a speaker's turn and at speaker shifts. The use of pauses and fillers is both situation-specific and speaker-specific. Especially VFs are for instance less likely to occur in a formal than an informal situation, and some speakers use pauses and/or fillers much more frequently than others.

8.12.1 Turntaking

If a person remains silent too long at a potential speaker shift he will never get the turn. If he wants to take the turn he has to say something, even if he has not yet made up his mind exactly what to say. One way of starting is by a filled pause or a verbal filler, for example: -[ə:m] or well - -, and more items can be added to fill for time:

[əm]

[ə:m] well

[ə:m] well you know

[ə:m] well you know I mean

Note that additional items imply additional functions; what started as pure hesitation (-) develops into stalling (well) and interpersonal activity (you know I mean) before the speaker arrives at his real message. The order of the items and possible combinations are not fixed, but some patterns are much more likely than others. Well, for instance, should come early.

The beginning of a turn is generally where the global planning of an utterance takes place, while the local word-by-word planning is done within the turn (cf Clark & Clark 1977:248ff for 'skeleton' and 'constituent' planning). So even if hesitation phenomena can occur almost anywhere, complex hesitation 'strings' are more likely to occur turn-initially, as in (55), but there are numerous counter-examples:

(55) B: I ||think they've got quite a good OΔPĪNION of him ■ -

A: ||well [ə] ΔI ΔI have TŌO ■

B: ||[m] ■

A: [ə:m] -- «||well I mean» • the ||way these chaps ΔGŌ ■ (S.1.1:592-595)

8.12.2 Turnholding

A speaker who wants to keep his turn cannot afford to remain silent for long, unless he is in a position to prevent the other party from breaking in anyway. This is where FPs and VFs, or combinations of both, help him to gain time:

(56) A: (...) [ə] but I ||heard it •[ə] mentioned by somebody ÊLSE ■ - I ||think ΔWĀTT ■ -

I'm ||not SŪRE ■ *** [ə:m] -- ||and [ə:m]

B: *||[m][hm] ■ *

>A: you KNŌW ■ - ||if Δthis is ΔĀLŌ CŌME ■ ||from [ə] - NĪGHTINGALE (...)

(S.1.1:265-271)

The hedge *sort of*, which was never found at the end of a turn in this data, frequently occurred in turn-medial position with various other functions besides acting as a turnholder:

(57) ||well I Δdon't 'think • 'it's ||«sort of a» • a comΔplete CONΔCLŪSION ■ you're sort of

||left with the -- you ||sort of [ə:m] - it's ||sort [ə?] an Δend to a Δstory in a ΔWĀY ■ •

you can ||just im'agine ▷these ▷things ▷going ŌN ■ it ||sort of Δwinds ŪP ■ it's [ə:m] •

||rather an ΔARTIΔFĪCIAL • ||{[dù:nei'mā] ■ } ■ ||rather 'like [?] 'one of [ə:m]

'MOLIΔÈRE'S 'plays ■ ||where they ▷sort of • bring ÑN a • a man at the ÊND to ■ • to

||finish 'everything ŌFF ■ ||round it ΔŌFF ■ (S.3.5:143-151)

In (57), *sort of* with an SP or an FP, or both, occurs in no less than six places in the same speaker's turn. It is obvious that he has some difficulty in putting his thoughts into words. Other indications of hesitant behaviour are

repetitions: *sort of a • a complete conclusion*
the end to • to

and reformulations: *you're sort of left with the -- sort of [ə:m] – it's sort [ə] an end*
to a story in a way
it's [ə:m] • rather an artificial

However, *sort of* does not only indicate hesitation. It may also have a softening effect:

a sort of simple, incredibly mixed up sort of chap

it may be used as a hedge, in which case it generally modifies another vague word or expression:

sort of stuff / thing / general course

it may serve to indicate approximation:

sort of five, six million

or it may have a pejorative effect (see further Aijmer 1984):

a sort of dinner

In the present data, *I mean* and also *you know* and *you see* were more often found within the turn than in turn-initial and turn-final position. And *well* occurred unexpectedly often within the turn. Obviously, a great deal of planning takes place within the turn. Turn length is of course an important variable; if the turn is long, the speaker is likely to undertake some new global planning within the turn.

Besides signalling hesitation, the VF categories are inherently different. *Anyway*, *however*, and *now* are message-oriented and connected with the organization of the discourse, while *I mean*, *you know*, and *you see* are mainly interpersonal and appeal for understanding and feedback.

Sort of is also message-oriented but, unlike the other verbal fillers, often directly involved in the syntactic process instead of standing 'outside'. It can be described in syntactic terms as a modifier of a preceding or following content word or phrase.

The staller *well* is the most 'neutral' verbal filler, very often equivalent to the filled pause *ə:m*. The fact that the softeners *I mean*, *you know* and *you see* were twice as frequent as the staller *well* seems to indicate that the social aspect

with the speaker appealing to the listener for understanding and feedback is more pronounced in conversation than just the need to gain time for planning.

8.12.3 Turnyielding

SPs are of course the most typical turnyielders. Whether they should be attributed to the speaker who yields the turn or to the one who takes over is difficult to determine from reading a transcript. However, one might speculate that SPs serve as turnyielders more often in spontaneous conversation than, for instance, unprepared interviews where the addressee probably needs more time. The FP [ə:m] followed by an SP may occur at the end of a turn, however, as a speaker's last effort to keep the turn when he does not know how to continue, as in (58):

(58) [ə:m] --- it ||seems to ME that - [ə:m] --- (S.1.1:627-628)

VFs like *you know* and *you see* (often with a rising tone) cooccurring with SPs add a social dimension by not only appealing for understanding but also inviting feedback, preferably agreement, or just a minimal response like *mhm*, or laughter:

(59) A: ||which is «a» GREAT help - and ||then he says Δcourse «if» you Δdon't
 UNDERSTAND this - this ||subject's Δnot for YÓU • (• laughs) you ||KNÓW
 B: (- laughs) - (S.1.6:919-923)

The 'inviting force' is affected not only by lexical choice and choice of tone but also by the position of the SP before or after VF. Compare eg (a-d) below (note that VF in (b) and (d) would occur in a separate tone unit):

- (a) this is exactly what he did you know --
- (b) this is exactly what he did -- you know
- (c) this is exactly what he did isn't it --
- (d) this is exactly what he did -- isn't it

It seems that the urge for the listener to provide feedback is more pronounced in (b) than in (a), and in (d) than in (c), and that the degree of 'questionness' increases from (a) to (d).

8.12.4 Summing up

- Both pauses and VFs were used as hesitators.
- More treble than double SPs separated both topic and subtopic paragraphs. Unit SPs were somewhat more common than double SPs between topic paragraphs whereas double SPs were somewhat more common than unit SPs between subtopic paragraphs.
- Double or longer SPs separated topic and subtopic paragraphs in the monologue.
- Approximately half of the topic paragraphs were introduced by a preface, usually followed by a unit SP.
- Both pauses and VFs served as interactional devices in the dialogue: as turntakers, turnholders, and turnyielders.
- VFs with or without a pause served as social devices and as markers of discourse organization.

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Index

- a bit* 200
a little 200
about 200
absolutely 175, 200
 accept 140, 170ff
 act 80, 139ff
 adjacency-pair 147
 adjective 185, 198ff; ~ phrase 120ff
 adjunct 93, 178, 255, 262
 adverb 109, 178ff, 185, 198, 300, 313; ~ phrase 120ff
 adverbial 88, 178, 255ff, 282, 310ff; ~ punctuation 81, 253, *passim*
after all 256ff
again 256ff
agree 171; agreement 185
ah 174, 183ff; *aha* 174
all 198; ~ *right, alright* 161ff, 174
also 256ff
 amplifier 200ff
and 224, 237, 246
 annunciatory function 194
anybody, anything 198
anyway 139, 175, 215, 222ff, 250, 256ff
 APH, *see* adverb phrase
 apologizer 185
 apology 140ff, 183
apparently 256ff
 apposition 285, 298, 307
 approximation 250
 artificial intelligence 83, 89
as 87, 298; ~ *a matter of fact* 256ff; ~ *it were* 186, 256ff; ~ *you know* 150
 asyndetic coordination 284
 attention signal 183ff
 attitudinal function 283
 automatic segmentation, *see* segmentation
- backchannel item 162, 229
 backtracking 85, 119
basically 256ff
because 246
 booster 7, 15, 80ff, 193, *passim*
 bottom-up processing 286, 293
 breaking point 278
 breath group 74
briefly 178
 Brown Corpus 17, 66ff, 82, 89, 107ff
but 224, 246
- call-off 140ff
 catenative verb 131ff
 CEC = *A Corpus of English Conversation* 19
 central determiner 198
certainly 162ff
 chunk 70ff, 85, 92ff; ~ing 84, 287
 clarify 140
 clause 234; basic ~ 282; comment ~ 155; coordinate ~ 280; ~ element 234; ~-initial
 adverbial 311; expanded ~ 282; final ~ 280; finite ~ 280; ~ level 91; matrix ~ 280; nominal ~ 280, 309; nonfinite ~ 280; postmodifying ~ 281; relative ~ 280, 309; *that* ~ 281
clearly 180, 255ff
 close 140ff
 COBUILD 184
 cohesiveness 280
 collocation 77, 85
 comma 253
 comment 140; ~ Q 146ff
 communicative weight 291
 complement 282, 310
 complete version of LLC 14, 19
completely 200
 complex pause 226, *passim*
 composite texts 19
 computational linguistics 89
 conclude 140
 concordance 17
 confirm 140
 conjoin 296, 308
 conjunct 178, 255, 262; ~tion 109, 185, 237, 246
 connective function 283
 constituent planning 249
 contextual comment 7, 15
 continuance 7
 continuer 159
 continue/terminate function 141
 contour-defined tone unit 74, 228
 contraction 303
 conversation 12ff
 coordination 237, 284, 312
 coordinator 298ff
 copula 133
- dammit, damn, damn it* 185f
dear 186
 determiner 125ff, 185, 198
 dialogue 12, 81, 148ff, 211ff
 dictionary 109, 177ff
- difference coefficient 198
 direct 140, 171
 discourse item 80ff, 182ff; ~ level 91, 234; ~ marker 161, 243
 disjunct 93, 155, 178, 255, 262
 distal relationship 213
do 130, 198
 downtoner 200
 D-item, *see* discourse item
- E = final sentence position 255
 -ed form 109, 120
eh 183ff
 elicit 140ff; ~or 185
 ellipsis 280
 emotive highlighting 286
 emphasize 138ff
 encoding unit 213
 endorse 140
especially 256ff
 evaluate 140; ~r 153ff
eventually 256ff
exactly 186
 exchange 80, 139
 exclamation 185
 exemplifier 140ff
 expletive 140ff, 183ff
 extralinguistic influence 286
extremely 200
- face-to-face conversation 12
 fall, ~-plus-rise, ~-rise~ tone 7
 feedback 147, 158, 251; ~ signal 224f
 filled pause (FP) 212, *passim*
 filler 140, 159, 212, 222, 250
finally 256ff
fine 186
 first pair part 170
 fluency 77, 286
 fluent unit 232
 focus 280ff; ~ing subjunct 201
 follow-up 138ff, 165, 171
for example 256ff
for God's sake 186
for instance 256ff
 foregrounding 194
 formula 173
fortunately 256ff
 FP, *see* filled pause
 frame 140ff, 165, 215
 framing 246
frankly 180, 256ff
 fronting 246
 functional versatility 207

- generally 256ff
genitive nesting, ~ premodifier 124
give over 183
global planning 249f
God 183ff
good afternoon 185
gosh 186
go-on 138ff
gradable quality 201
greet 140; ~ing 144ff, 183ff
grounding function 283
grouping function 205
- happily 180
head 127
heavens 183
hedge 140ff, 183, 215ff, 249f
hesitation 149, 247f, 283
hesitator 183, 252
hey 183ff
hierarchical structure 93
hold-up/terminate function 141
homomorph 181
homonymy 263
honestly 175, 256ff
hopefully 180
however 150, 175, 250ff
- I mean* 81, 174, 183ff, 215ff, 250
I see 81, 158, 174, 183ff
I = initial sentence position 255
ICAME, *see* International Computer Archive of Modern English
idea unit 74
in fact 175, 256ff
in particular 256ff
incomprehensible words 15
indeed 162, 175, 256ff
infinitive marker *to* 132f, 300
inform 140, 151ff, 171
information receipt 162;
~ structure 283; ~ unit 74
-ing form 120, 129
inherent superlative 201
initial sentence position 255
initiate 140
initiator 144ff, 183ff, 215, 226ff, 245
instead 256ff
intensifier 153, 198
interaction 247
interjection 173, 185
International Computer Archive of Modern English (ICAME) 17
interpersonal activity 248;
~ relationship 148
intonation 189; ~ unit 74
- ironically 180
- jolly 200
JPH, *see* adjective phrase
- kind of 215
know 137
- Lancaster-Oslo/Bergen Corpus (LOB) 17, 66ff, 89, 137
laughter 251
LDOCE 184
length factor 281
level tone 7; ~ of analysis 91
lexical density 152; ~ item 137ff;
~ salience 198
listener-oriented information structure 277
literally 180
LLC, *see* London-Lund Corpus of Spoken English
LLC:c, LLC:o, LLC:s 14, 19
LOB, *see* Lancaster-Oslo/Bergen Corpus
location of nucleus 15
London-Lund Corpus of Spoken English 11, 19, *passim*
look 183ff
loudness 15
- m* 183, 224
M = medial sentence position 255
Matrix Rule 281
maybe 175, 256ff
mean 137
message-oriented discourse 148
mhm 158, 162, 174, 183, 226, 251
modal auxiliary 129, 132, 198;
~ idiom 133
modality 204
model of analysis 172
monologue 12, 81, 148ff, 211ff
moreover 256ff
move 80, 139f
multi-tasking process 293
multi-word combination 186
my 186, 188
- naturally 180
negative 144, 149
nevertheless 256ff
new tagset 92
no 137ff, 161, 174, 183ff, 224
nominal subordinator *that* 300
non-deterministic parsing 119
Norwegian Computing Centre for the Humanities 17
- noun 185, 198; ~ phrase 120, 123;
~ noun modifier 127
now 139, 150, 175, 183ff, 215ff, 250ff, 266
NPH, *see* noun phrase
nucleus 7, 15, 85
- object 140, 282
obviously 175, 257ff
of course 162, 175, 257ff
of-phrase 312
oh 137, 162, 174, 183ff; ~ dear 186
OK, okay 161ff, 174, 185
old tagset 92
on the other hand 257, 266
onset 7, 15
open function 141; ~ word class 198
order 144ff, 183
original corpus (LLC:o) 14, 19
- P, *see* pause
paragraph 243ff
paralinguistic features 15
pardon 186
parsing 78ff, 84, 87ff, 107ff, 276
passive clause 302
pause 7, 15, 70ff, 81, 149, 211, *passim*; brief ~ 7, 214f, 234;
complex ~ 226ff; double ~ 234;
filled ~ (FP) 212ff; hesitation ~ 212; juncture ~ 212; long ~ 214;
silent ~ (SP) 81, 212ff; treble ~ 234; unit ~ 7, 214f, 234;
vocalized ~ 219; voiced ~ 81, 212, *passim*; ~ defined tone unit 228
- pejorative effect 250
perfectly 200
performance unit 218, 232, 240
perhaps 175, 257ff
personally 180
phonemic clause 74
phonic substance 77
phrase level 91
planner 138ff, 153ff
planning 249f; ~ strategy 157;
~ unit 218
please 141, 174, 183; *please* 146, 185, 257ff
politeness marker 144, 146, 149, 183, 185
position of adverbial 255
positive 144, 149
postdeterminer 125, 198
PPH 129
pragmatic function 189;
~ influence 286
- predeterminer 125, 185, 198
prefab lexical item 85
preface 245
prepared monologue 12
preplanned speech 148
preposition 93, 185; ~al phrase 120ff, 303
presumably 257ff
probabilistic statements 89
probably 162, 175, 257ff
process adjunct 255
Profile A, B 194
projecter 159
Prolog programming language 110, 325
prominence 200
prompter 141, 165ff
pronoun 185, 198, 300
prosodic feature 7, 15, 253; ~ level 91; ~ prominence 200;
~ segmentation 253ff
proximal relationship 213
public discussion 12
punctuation 253, *passim*
- Q tag 147
qualifier 150
quality 201
quantifier 124, 198
quantity 201
question 140ff; ~ tag 138; ~ness 251
quite 162, 183ff, 198ff
Q-tag 138, 144, 149
- rather 200
react 138ff, 159
real-time processing 76ff, 85
really 137ff, 152, 162, 175, 185f
reduced transcription 15
redundancy 315
reformulation 234
reinforcer 162
relative pronoun 300
re-open 140, 165ff; ~er 138, 153ff
repair signal 206
request 170
response 140ff, 165, 171, 183ff;
~ elicitor 183; ~ item 146;
~ initiator 162; ~ inviter 147;
~ prefix 151
restart 149
rhetic element 280; ~ function 195; ~ position 282
rheme 283
rhythmical function 206
right 141, 161ff, 174, 183ff, 200, 226; ~ oh 186
rise, ~fall~, ~plus-fall tone 7
- scale of cooccurrence 280
second pair part 170
secondary breaking-point 291
segmentation 84f, 91, 275ff, 287ff, 325ff; ~ cycle 291; ~ rule 82ff, 287ff
semi-auxiliary 131
sentence 73ff, 234; ~ adverbial 178, 254
SEU, *see* Survey of English Usage
shunting 85
silent pause (SP) 212ff
simply 180
simultaneous talk 7, 15, 225
situation-specific use 248
skeleton plan 249, 293
slow delivery 283
smooth-over 141, 144ff
so 200, 224, 257ff
softer 141ff, 183ff, 215, 226ff, 250
somewhat 200
sorry 183, 185-186
sort of 139, 150, 183ff, 215, 223ff, 249; ~ thing 183, 188
SP, *see* silent pause
speaker identity 15; ~oriented thematic structure 277; ~shift 232; ~specific use 248 speech (and writing) 70ff, 89ff;
~ recognition 69; ~ synthesis 69
speed of delivery 262, 286
spontaneous speech 12, 77, 148
SSE, *see* Survey of Spoken English
stage marker 243, 246
staller 141, 162, 215, 250
stalling 248
still 257ff
stress 7, 15
subaudible words 7
subject 282
subjunct 178, 201
subordinate clause 308;
~ tone unit 7
subtext 19
subtopic 244ff, 283
success rate 84, 317
suggest 141, 171
superficially 180
supplement corpus (LLC:s) 14, 19
sure 174, 185; ~ly 257ff
Survey of English Usage (SEU) 11ff
Survey of Spoken English (SSE) 11ff
switch-off/on signal 169
syndetic coordination 284, 312
syntactic construction 85
- tag Q 174
tagging 78, 84, 87ff, 107ff, 289
tagset 92
technically 180
telephone conversation 12, 163
tempo 15
terminate function 141
terminatory function 195
terribly 200
TESS = Text Segmentation for Speech 63ff
text level 91; ~ segmentation 275ff, 287ff; ~to-speech conversion 69ff, 86; ~ual comment 7
thank you 174, 183ff; thanks 141ff, 171, 183ff; *thanks* 183
that 300; ~s (all) right 162, 174, 183ff; ~s it 186; ~s OK 162; ~s it 186; ~s OK 162
thematic function 194;
~ highlighting 206;
~ position 282
theme 244
therefore 257ff
think 137
thus 257ff
to 300
tone group 74; ~ unit 7, 15, 73, *passim*; ~ units/pause ratio 217
too 200, 257ff
topic 244ff, 283
top-down processing 278, 293
transcription 15
treble pause 234
TU, *see* tone unit
turn 80, 139ff; ~ initiator 227;
~ length 250; ~ organization 224; ~ shift 224; ~holding 145, 248f; ~taking 145, 224, 248;
~yielder 227; ~yielding 145, 248ff
- uh huh 159
unfortunately 257ff
unit pause 7, 214f, 234
unsmooth speaker shift 227
uptake 141, 165
utterly 200
- verb 185, 198, 131ff; ~ phrase 120, 129
verbal filler (VF) 81, 149, 212ff, 250
very 200
VF, *see* verbal filler
virtually 200
vocalized pause 219
vocative 307

voice quality 15
voiced pause, *see* pause
VPH, *see* verb phrase

well 137ff, 162, 174, 183ff, 215,
222ff, 250
word 234; ~ class 80, 87ff, 107ff;
~by-word planning 249;
words/pause ratio 217
writing (and speech) 70ff, 89ff

yea(h), yes 137ff, 161f, 174,
183ff, 224ff, 257
yet 257ff
you know 81, 139ff, 183, 215,
223ff, 250
you see 174, 183, 215, 223ff, 250

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