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This is a contribution from *Errors and Disfluencies in Spoken Corpora. Crosslinguistic perspectives*.

Edited by Gaëtanelle Gilquin and Sylvie De Cock.

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# Windows on the mind

## Pauses in conversational narrative

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This paper investigates four different types of pauses in conversational narrative: the filled pauses *er* and *erm*, and short and long silent pauses. The study is based on the *Narrative Corpus* (NC), a recently created corpus of everyday narratives. The texts, which include both the narrative and some context, have been annotated for important textual components. The current analysis reveals that pauses are more frequent in conversational narrative than in general conversation.

We suggest three factors that account for this high frequency: (i) the need for narrators, in the opening utterance of the story, to provide specific information to orient listeners to the situation in which the events unfolded, (ii) the need to coordinate narrative clauses to match the story events, and (iii) the preference of narrators to present speech, thought, emotion and gesture using direct-mode discourse presentation, which is more 'dramatic' but also more costly in terms of reference resolution.

### 1. Introduction

Pauses used to have a bad press in linguistic research. In Chomskyan linguistics, they were considered 'performance errors' obscuring the mechanisms underlying language competence and therefore unworthy of linguistic study. For example, in the context of discussing features of natural speech, Chomsky (1965:4) argues that "[o]bserved use of language (...) surely cannot constitute the actual subject of linguistics, if linguistics is to be a serious discipline". Even in non-Chomskyan research, pauses, along with other 'hesitation' phenomena, were often regarded "as a nuisance, as a kind of debris lying in the way of ordered exposition" (Kjellmer 2003: 170). This widespread dismissal of pauses is reflected in the term 'dysfluency', which continues to be widely used, although the negative prosody of the prefix *dys-* tacitly portrays pauses, along with a range of similar phenomena, as part of

a pathological speech condition (Rühlemann 2006). Corpus-based research, by contrast, has unearthed a wealth of vital functions pauses perform in discourse and interaction. Besides the crucial role pauses play in the way speakers take, keep, claim and yield turns (e.g. Stenström 1990, Biber et al. 1999, Wennerstrom 2001, Kjellmer 2003, Rühlemann 2007), recent corpus research (e.g. Biber et al. 1999: 1054, Kjellmer 2003) has demonstrated the intimate correlation of pauses with processes of information structuring and speech planning. For example, Kjellmer (2003: 174) found that one main function of the filled pauses *er* and *erm* is “to introduce what I will loosely call a new ‘thought unit’”, thus echoing, to an extent, Chafe’s (1992) notion that both filled and unfilled pauses serve to signal tone unit boundaries, which in turn are seen as restricted to “one new idea” (Chafe 1992: 91; see also Allwood et al. 1990, Stenström & Svartvik 1994). Intriguingly, Tottie (2010) used evidence from newspaper headlines in which filled pauses are used purposefully to argue that *er* and *erm* should be seen as discourse markers.

Indeed, the tide has turned so much that pauses are now seen by many as “integral elements, important and sometimes even indispensable, in spoken delivery” (Kjellmer 2003: 191), leading Stenström & Svartvik (1994: 243) to note, somewhat provocatively, that “a native-like use of pauses, fillers and repeats is a quick way for foreign learners to improve their English language proficiency”.

While pauses have thus begun to appear in a better light, their role in storytelling has been left largely in the dark. The only study into the relationship between narrative and pausing we are aware of is Chafe (1987). He observed for pauses an information-structuring function in narrative whereby pauses are interpreted as signaling “spoken paragraphs”, that is, as major breaks in content such as “summary”, “instantiation” and “wrap-up”. Chafe’s study though analyses just a single narrative. The extent to which his analysis of pausing as an index of narrative paragraphs holds empirically is as yet unknown.

The aim of this paper is to contribute to a better understanding of the roles played by pauses in conversational narrative. The data used are drawn from the newly created *Narrative Corpus*, a corpus of conversational narratives described in more detail in Section 2.

We start from the following two premises:

1. Pauses signal ‘thought units’.
2. Stories are unusually complex ‘thought units’.

Premise 1 builds on Kjellmer’s view of pauses as indices of ‘thought units’ and Chafe’s related notion of pauses framing “one new idea”. Premise 2 builds on the numerous demanding tasks (incipient) narrators face. As will be shown in more detail in Section 4, launching a story requires the incipient narrator to secure the right to an extended series of turns, while telling a story requires not only

(re)constructing an anterior situation composed of, essentially, time, place, and protagonists, but also matching narrative clauses to story events. We therefore hypothesize that stories contain more pauses than general conversation.

Our first methodological step, described in Section 3, is to test this hypothesis. As will be shown, the evidence is highly in favor of the hypothesis. The methods used and analyses performed thereafter all serve the purpose of addressing the question of *how* pauses in conversational narrative are used, thus contributing to an explanatory account of *why* the higher frequency of pauses in conversational stories may exist.

## 2. Data: The Narrative Corpus

The *Narrative Corpus* (NC) is a specialized corpus of narratives extracted from the 153 files contained in the demographically-sampled, or conversational, subcorpus (BNC-C) of the *British National Corpus* (BNC, XML Edition, 2007), a large general corpus assembled in the early 1990s in the UK.<sup>1,2</sup>

**Table 1.** *Narrative Corpus* — basic facts and figures

No. files	No. texts	No. narratives	No. words
143	279	531	149,520

The basic statistics for the NC are listed in Table 1. No stories were found in ten of the 153 files contained in the BNC-C. The NC thus contains texts from 143 BNC-C files. We included up to two texts from each of the 143 files. Since in some files only one story could be identified, the total number of texts included in the NC is 279. The total number of words in the NC is almost 150,000. The total number of narratives in the NC is roughly twice as large as the number of texts. This is due to the phenomenon of ‘response story’: many stories receive, as a kind of response, another thematically related story, told typically by another participant. While response stories may at times be quite lengthy, concatenating up to ten response stories, we restricted the admissible number of stories in a response story to three consecutive stories.

As regards annotation, given that the data were extracted from the BNC, both POS tags and XML meta-information relating to social information about the speakers were already in place. There are over 600 different speakers represented in the NC. Additionally, the data received annotation at discourse level (for a comprehensive description of the annotation scheme underlying the NC, see Rühlemann & O’Donnell 2012). Among these additional layers of annotation, three levels are relevant for the analyses carried out for this paper and are described



Table 2. Tagset “quotative GO”

Q	QG	QGB	(quotative GO base form <i>go</i> )
		QGZ	(quotative GO 3rd-pers. sing. pres. tense form <i>goes</i> )
		QGD	(quotative GO past tense form <i>went</i> )
		QGG	(quotative GO progressive form <i>going</i> )
		QGN	(quotative GO past participle form <i>gone</i> )

### 2.3 Discourse presentation modes

Extending McIntyre et al.’s (2004) model of discourse presentation, we distinguish various presentation modes. The categories relevant for this study include direct and indirect mode.<sup>4</sup> They are exemplified as follows:

- (1) direct (MDD): I says<sup>QSZ</sup> [<sup>MDD</sup> Lindsey if you want us to trust you, you have got to tell the truth]  
(KDS-N1)
- (2) indirect (MII): you know this erm, you know this young girl that was killed along Benji Avenue with her mother? Well I **thought**<sup>QTD</sup> [<sup>MII</sup> it was Wendy’s daughter]  
(KCP-N1)

The direct category MDD, as in (1), presents speech “in the form in which it is directly manifest to a listener” (Leech & Short 1981: 345) in an anterior situation. Indirect mode, by contrast, makes no claim “to present the words and structures originally used to utter that proposition” (McIntyre et al. 2004: 61); instead, only the propositional content of the original speech is specified.

### 2.4 Tools and methodology

The analyses carried out for this study and reported in the following sections made use of two tools. We used WordSmith Tools Version 5.0 (WST5, Scott 2008) to examine collocation patterns around pause words and elements. Although WST5 does not have full support for XML processing and element-based structure searches and analysis, it does allow specific XML start tags to be searched like any other lexical item and the associated clusters, contexts and collocations to be investigated. However, it is not always the most suitable tool for richly structured annotated texts, such as the augmented BNC-XML used in this study where we have included new levels of structure to mark the narrative components and other relevant discourse elements. For this we made use of XPath and XQuery queries to locate specific elements within the narrative structure (e.g. //seg[@Components=‘CPR’]/u[1]

locates the first utterance in the CPO component of a text). Using an XML document database (eXist — see <http://exist-db.org>) we were able to create queries and derive frequency information targeted to specific discourse components, discourse modes and so on (see Rühlemann forthcoming for more details).

### 3. Results

In this section we present the results of our analyses. First we introduce frequencies of different types of pauses across the three major textual components CPR (pre-narrative conversation), CNN (narrative), and CPO (post-narrative conversation). In a second step, we perform a collocational analysis across the narrative (CNN) and non-narrative subcorpora (CPR and CPO) to establish the lexical association of pauses. Third we focus on pauses in the narrative (CNN) component only, investigating in more detail those patterns of use that the collocational analyses have suggested.

#### 3.1 Frequencies of pauses

As noted in the introduction, the present investigations all build on the hypothesis that pauses are more frequent in conversational stories than in general conversation. To test this hypothesis, we compared the frequencies of the filled and silent pauses across the three major textual components of the *Narrative Corpus*, viz. CPR (pre-narrative), CNN (narrative), and CPO (post-narrative). The filled pauses investigated include the forms *er* and *erm* respectively (the only filled pauses given in the BNC), while the silent pauses investigated fall into pauses up to five

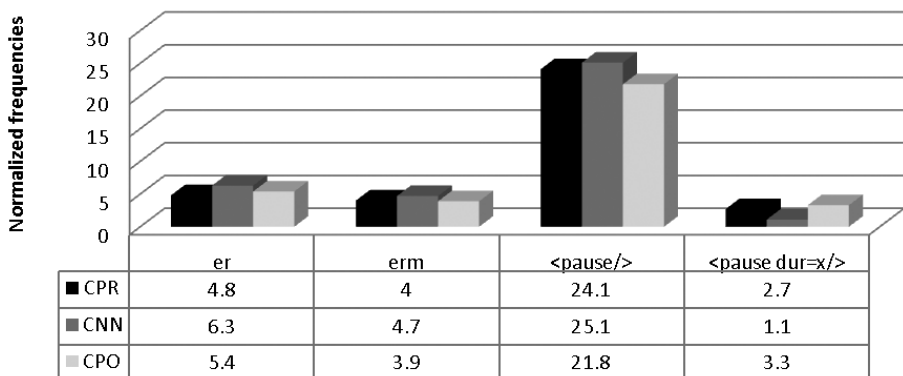


Figure 2. Normalized frequencies per 1,000 words across pre-narrative (CPR), narrative (CNN), and post-narrative (CPO) components

seconds (<pause/>) and pauses longer than 5 seconds (<pause dur=x/>). Figure 2 shows the normalized frequencies per 1,000 words.

As shown in Figure 2, all pause types except long pauses are more frequent in CNN (narrative) than in CPR and CPO (non-narrative). While *er*, *erm*, and short silent pauses occur more frequently in CNN, there are significantly fewer long silent pauses in CNN as compared to CPR and CPO: long pauses are more than twice as frequent in pre-narrative conversation while they are even three times as frequent in post-narrative conversation.<sup>5</sup> Why are extended pauses more frequent in non-narrative talk than in narratives? We offer two possible explanations.

First, longer pauses are more common in general conversation because telling a story focuses the participants' attention on the unfolding story as the overriding topic whereas in general conversation, "[w]hat parties say is not specified in advance" (Sacks et al. 1974: 710). This indeterminacy of topic characteristic of general conversation allows the temporary standstill of conversation and/or the intrusion of non-topic-related objects of attention. Longer pauses may thus be motivated less by planning pressures in the course of talk-in-interaction than by the fact that "participants, engaged in some extra-linguistic action, temporarily suspend the conversation" (Rühlemann 2007: 156–157). Consider (3): speaker PS08X is just about to complete a story about one Steven, referred to in CNF as *he*; utterances in CPO are numbered:

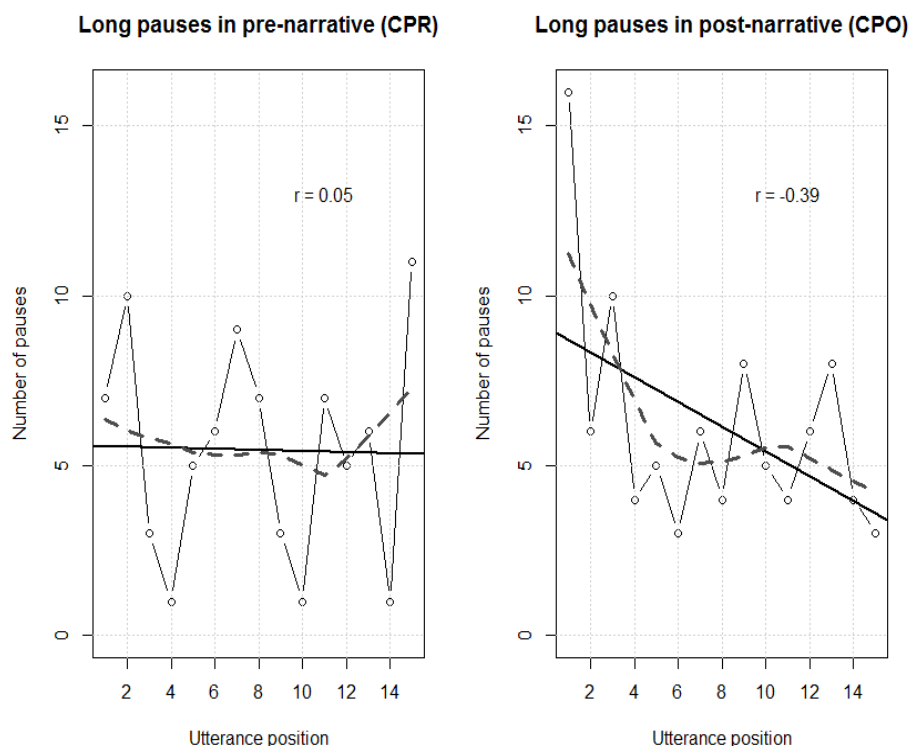
- (3) "Telling mum about it"  
 CNF:  
 PS08X: Oh yeah! He's on top of the world!  
 CPO:  
 1 PS0F9: Well I, I'm gonna go out with somebody called Kath.  
 2 PS08X: Mm.  
 3 PS10K: It'll happen in his Ford Capri at least once a week. <unclear/>  
 4 PS08X: Yeah.  
 5 PS10L: So yo you don't know what time he's starting do you?  
 6 PS10K: Er, <unclear/> tomorrow.  
 7 PS10L: Who told you today?  
 8 PS10K: Carol (name anonym.). <pause dur="8"> Pass me the erm  
 <pause/> bread please?  
 9 PS10L: And what did he say?  
 10 PS08X: I think these chips are slightly thick dad.  
 (KBY-N2)

Example (3) illustrates an 8-second pause. It occurs after the participants have discussed some aspects loosely related to the preceding story (whose concluding utterance is *Oh yeah! He's on top of the world!* in CNF) and before a request by



speaker PS10K to be passed the bread. The long pause is thus intimately linked up to some extra-linguistic action, namely having lunch or dinner.

The second explanation pertains to the position of longer pauses in the non-narrative parts of the texts. The pause in excerpt (3) occurred in the eighth utterance after the story. Upon casual inspection of the data we noted that a substantial number of the longer pauses seemed to occur close to the CP\*-CNN boundaries, that is, either before the shift from conversation to narrative or after the shift from narrative back to conversation. We thus hypothesized that, not dissimilar to Chafe's (1987) notion of pauses demarcating spoken paragraphs, longer pauses might act as demarcators between the two conversational subgenres. To test this hypothesis, we created a subset consisting of those texts that fulfilled two criteria: the pre- and post-narrative components contained at least one instance of a long pause and they were 15 pre-narrative utterances and 15 post-narrative utterances long.<sup>6</sup> These subsets included, for CPR, 82 long pauses in 50 texts and for CPO, 92 long pauses in 52 texts. We then counted the number of long pauses occurring in the altogether 30 utterance positions. The results are displayed in Figure 3.



**Figure 3.** Left panel: distribution of long pauses across 15 utterances in pre-narrative components (CPR) (82 long pauses in 50 texts); right panel: distribution of long pauses across 15 utterances in post-narrative components (CPO) (92 long pauses in 52 texts)

Figure 3 shows the distribution of long pauses across pre-narrative (CPR; left panel) and post-narrative (CPO; right panel) components; also inscribed are regression lines (straight black lines) and smoothers, that is, locally weighted regression lines (grey dashed lines). In CPR, long pauses are unevenly scattered across the 15 utterance positions. The regression line is almost perfectly level, indicating that, across the 15 utterances, there is no correlation (Spearman's correlation coefficient  $r = 0.05$ ). To judge from this evidence, the hypothesis that pauses gradually build up before the beginning of stories cannot be confirmed. However, this analysis of long pauses in pre-narrative discourse is preliminary at best: for example, it does not distinguish between speakers and their roles in the upcoming narrative and there is no principled reason to look as far back as 15 utterances; as indicated by the smoother, there may be an upward trend in the last six utterances before story launch.

While at best iffy with regard to CPR, Figure 3 suggests a clear trend for long pauses to occur immediately after the story, in CPO. Sixteen texts contain long pauses in utterance position 1 and ten texts in position 3, and, as indicated by the linear regression line, the decrease in long pauses continues as one moves up the remaining utterance positions: accordingly, Spearman's  $r = -0.39$ , which indicates a negative correlation of medium strength; the  $p$ -value is just above significance level ( $p$ -value = 0.07541). Again, there is no principled reason to look ahead as far as 15 utterances. If we narrow the scope of attention, the correlation gains in strength and significance. As indicated by the steep drop of the smoother across positions 1 to 6 (that is, the six utterances immediately following the end of stories), the correlation for this positional range is very strong and significant:  $r = -0.89$ ,  $p$ -value = 0.01667.

So far, we have looked at frequencies of silent and filled pauses across the major textual components CPR (pre-narrative), CNN (narrative), and CPO (post-narrative). How do silent and filled pauses distribute across the minor, strictly narrative, components CNI (narrative-initial utterance), CNM (narrative-medial utterances) and CNF (narrative-final utterance)?

Narrative-initial utterances (CNI) have been shown to largely fulfill a scene-setting function (Rühlemann et al. 2010), in which narrators not only flag their wish to embark on a story (and hence their right to an extended series of turns) but also provide important chunks of what Labov (1972: 363) called the 'orientation' section (identification of the time, place, persons, and their activity or situation). Clearly, 'setting the scene' in this sense in CNI requires a great deal of memory activation and linguistic skills. Therefore, we hypothesized that pausing peaks in this first narrative-internal component.

Figure 4 shows the results of an analysis of the frequencies of all four types of pauses across the three story components. The data in Figure 4 support the

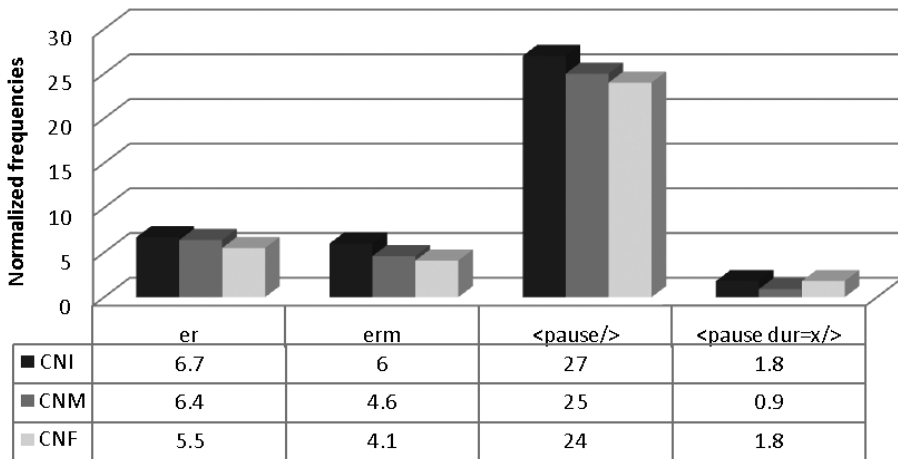


Figure 4. Normalized frequencies per 1,000 words of silent and filled pauses across the narrative-initial (CNI), narrative-medial (CNM), and narrative-final utterances (CNF)

above hypothesis: *er*, *erm*, and short silent pauses are more frequent in CNI than in CNM and CNF. Only long silent pauses show a divergent behavior in that they are equally frequent in CNI and CNF (1.8 occurrences per 1,000 words).<sup>7</sup>

In summary, we noted that both *er* and *erm* as well as short silent pauses are more frequent in the narrative components (CNN) than in the pre-narrative (CPR) and post-narrative (CPO) components. We also established that *er*, *erm*, and short silent pauses are more frequent in narrative-initial utterances (CNI) compared to narrative-medial (CNM) and narrative-final (CNF) utterances. As regards these three types of pauses, the initial hypothesis that pauses are more frequent in stories than in general conversation is confirmed. As regards long pauses, we saw that they are noticeably more frequent in the non-narrative components than in the narrative components. We will disregard long pauses in the remainder of this study, leaving their in-depth investigation to future research, and focus on *er*, *erm*, and short pauses. For convenience, in the following we will refer to these three types of pauses summarily as PAUSES.

### 3.2 Lexical associations of PAUSES in narrative and non-narrative

We have established that *er*, *erm*, and short silent pauses are more frequent in stories than in the surrounding conversational texts. We now turn to the question of how they are used in context. To approach this question, we compared their collocates in L3-R3 (three words to the left and three words to the right) in the narrative component (CNN) and the surrounding general-conversation components (CPR and CPO). The results are displayed in Tables 3 and 4.

Tables 3 and 4 reveal a number of similarities and differences. We begin with the similarities. It can be seen that PAUSES both in CNN and CPR/CPO frequently collocate with filled pauses (in italics). Indeed, the way that PAUSES collocate with filled pauses is almost identical across the two subcorpora: (a) <pause/> most commonly collocates with *erm* and *er* in L1 position, (b) *erm* does not collocate with *er* within the L3-R3 span (at least within the top four lists), and (c) *er* frequently collocates with itself both in L1 and R1. This latter finding ties in well with Kjellmer's (2003: 173) observation that "*er er* is a very frequent combination".

**Table 3.** Top four most frequent collocates (L3-R3) of PAUSES in narrative (CNN) (raw frequencies)

	L3	L2	L1	R1	R2	R3
<pause/>	<u>and (73)</u>	the (83)	<i>erm</i> (130)	<u>and (206)</u>	<b>i (120)</b>	<b>i (72)</b>
	<b>i (60)</b>	<u>and (79)</u>	<i>er</i> (105)	<b>i (144)</b>	you (71)	the (50)
	in (40)	<b>i (62)</b>	<u>and (64)</u>	you (69)	s (70)	it (48)
	on (20)	to (61)	<u>said (59)</u>	<b>he (52)</b>	was (59)	s (45)
<i>erm</i>	<u>and (20)</u>	it (15)	<u>and (52)</u>	<b>i (26)</b>	<b>i (14)</b>	<u>and (13)</u>
	a (10)	<b>she (14)</b>	but (16)	<u>and (17)</u>	s (14)	a (12)
	it (8)	<b>i (13)</b>	was (16)	<b>she (14)</b>	was (13)	<b>i (12)</b>
	n't (8)	<u>and (11)</u>	<u>said (15)</u>	you (14)	<u>said (12)</u>	n't (12)
<i>er</i>	<u>and (25)</u>	<b>he (16)</b>	<u>and (70)</u>	<b>i (32)</b>	was (22)	<b>i (17)</b>
	<b>he (12)</b>	<b>i (15)</b>	<i>er</i> (26)	<i>er</i> (26)	<b>he (18)</b>	<u>and (15)</u>
	the (12)	you (15)	<u>said (26)</u>	you (15)	<b>i (18)</b>	it (13)
	it (10)	<u>and (14)</u>	but (19)	a (14)	you (16)	<u>said (12)</u>

**Table 4.** Top four most frequent collocates (L3-R3) of PAUSES in pre-narrative (CPR) and post-narrative (CPO) components (raw frequencies)

	L3	L2	L1	R1	R2	R3
<pause/>	it (44)	the (47)	<i>erm</i> (81)	<b>i (120)</b>	s (72)	n't (44)
	the (39)	<b>i (41)</b>	<i>er</i> (68)	<u>and (70)</u>	<b>i (67)</b>	the (40)
	<b>i (36)</b>	<u>and (38)</u>	mm (38)	you (59)	you (51)	a (39)
	s (33)	a (35)	yeah (37)	it (44)	the (36)	<b>i (37)</b>
<i>erm</i>	you (9)	it (10)	the (17)	<b>i (18)</b>	<b>i (18)</b>	n't (9)
	<b>i (7)</b>	s (9)	but (16)	you (11)	s (11)	the (9)
	s (7)	you (8)	that (15)	a (9)	was (9)	it (7)
	a (6)	<b>i (7)</b>	<u>and (10)</u>	what (14)	<u>said (9)</u>	s (6)
<i>er</i>	you (13)	it (17)	<u>and (26)</u>	<b>i (28)</b>	s (27)	<b>i (11)</b>
	the (10)	<b>i (14)</b>	but (19)	<i>er</i> (13)	you (11)	<u>and (9)</u>
	s (7)	that (10)	that (14)	it (12)	<b>i (8)</b>	a (8)
	to (7)	s (8)	<i>er</i> (13)	the (9)	to (8)	s (7)

Another similarity between CNN and CPR/CPO is the role of *I*, given as ‘i’ in Tables 3 and 4 (in bold): (a) *I* is a very frequent collocate of PAUSES in various positions in both subcorpora, (b) it collocates with PAUSES slightly more frequently in R-positions (i.e. following the PAUSE), and (c) it is by far the most frequent collocate in R1-position (i.e. immediately following the PAUSE) across both silent and filled pauses. This, too, replicates one of Kjellmer’s (2003: 173) findings that “the word most frequently following [*erm*] is *I*”. Interestingly, among the R1 collocates of <pause/> in CNN, *I* is topped in frequency by *and* — an observation which will be seen as meaningful below.

More important though than the similarities are the differences between Tables 3 and 4. The coordinator *and* (underlined in Tables 3 and 4) collocates by far more frequently with PAUSES in CNN than in CPR/CPO. This observation is striking considering that Biber et al. (1999: 82) note “a comparatively low frequency of *and*” in conversation (compared to fiction and academic prose), which, Biber et al. say, is surprising given that “speech is characterized by coordination and writing by subordination” (ibid.). In this context, it is interesting to observe that in the NC, *and* is strikingly high up the frequency lists: it is the third most frequent word in the whole NC, the second most frequent word in CNN, but only the seventh most frequent word in CPR/CPO (see Table 5).

With regard to *and*, Biber et al. (1999: 81) also note that, while it is more typically used as a phrase-level coordinator in academic writing, “*and* is generally used as a clause-level connector” in conversation. In Section 3.3.1, we investigate whether this observation holds for conversational narratives too.

Another striking difference between the lexical associations of PAUSES in the two subcorpora has to do with third-person personal pronouns: *he* and *she* (in bold) feature *only* in the top four L3-R3 collocates of PAUSES in the narrative subcorpus but not in the top four collocates in the non-narrative subcorpus. Note that in CNN, *he* and *she* are listed six times as collocates of PAUSES: once in L3 (*he*), twice in L2 (*he* and *she*), twice in R1 (*he* and *she*), and once in R2 (*he*). This association has, to our knowledge, not yet been observed. We suspect that the high rates of collocation of *he* and *she* with PAUSES in narrative might be linked to the high rates of quotative verbs as in *he said/she said*, etc. introducing reported discourse, which are also closely connected to PAUSES. We will investigate this line of thought more closely in Section 3.3.2.1.

As is shown in Tables 3 and 4, a third crucial difference between the lexical associations of PAUSES in CNN compared to CPR/CPO pertains to the collocate *said* (framed in Tables 3 and 4). *Said* is only listed once in Table 4, as an R2-collocate of *erm* in the non-narrative subcorpus, but it does not appear among the top four collocates of <pause/> or *er* in that subcorpus. In the narrative subcorpus, by contrast, it is listed as a collocate in five positions: it is an L1-collocate of all

Table 5. Top ten most frequent words in (subcomponents of) the *Narrative Corpus*

Whole corpus (NC)			Narrative (CNN)		Pre-/Post-narrative (CPR/CPO)	
Rank	Item	Freq	Item	Freq	Item	Freq
1	i	6245	i	3295	i	2942
2	you	4366	and	2958	you	2296
3	and	4331	the	2229	it	2199
4	it	4309	it	2102	's	1967
5	the	4005	you	2065	the	1768
6	's	3493	he	1670	a	1376
7	a	2818	's	1521	and	1360
8	to	2669	to	1476	n't	1357
9	that	2604	a	1439	that	1337
10	n't	2571	was	1403	to	1191

three types of pauses investigated and, additionally, it is a collocate of *erm* in R2 and of *er* in R3 position. Given that *said* is overwhelmingly used as a quotative verb we hypothesize that this lexical association of PAUSES with *said* is evidence of an association of PAUSES with discourse presentation (alternatively labeled 'speech reporting'), and, more specifically, given that *said* predominantly introduces *direct* discourse presentation (cf. Rühlemann 2007), that PAUSES are associated with direct discourse presentation. We explore this hypothesis in Section 3.3.2.<sup>8</sup>

Before we turn to these analyses, it may be interesting to note that the words involved in the lexical associations of PAUSES in narratives share another property: *and*, *he*, *she*, and *said* are not only associated with PAUSES but they are also intimately associated with narrative as such. This is suggested by an analysis of keywords in CNN (narrative) compared to CP\* (that is, the non-narrative components CPR and CPO). The results of this analysis are displayed in Table 6.

As can be seen in Table 6, *said*, *and*, *he*, and *she* occupy prominent ranks in the list of keywords in CNN as compared to CP\*: *said* is by far the most characteristic word in CNN, immediately followed by *and* at second rank, while *he* and *she* follow in ranks four and five. That is, the four words we have identified as the words most typically associated with PAUSES are at the same time among the five most characteristic words of the genre of conversational narrative. It seems justifiable hence to conclude that PAUSES, too, as part of the company the keywords keep, are most characteristic of the genre of conversational narrative.<sup>9</sup>

**Table 6.** Top ten keywords in narrative (CNN) vs. pre- and post-narrative (CP\*) components ( $p < 0.001$ ; critical value: 10.83)

Item	Freq. CNN	Freq. CP*	Keyness
said	1087	142	717.653
and	2958	1360	433.624
was	1403	530	313.455
he	1670	734	273.040
she	1233	521	220.291
went	284	57	139.536
says	250	49	125.290
had	443	184	82.123
came	115	19	65.600
were	380	164	64.781
goes	161	41	62.878

### 3.3 Discourse associations in CNN

In the preceding section we have reported on the results of our collocational analyses of PAUSES. We noticed three patterns of lexical association in CNN: association of PAUSES with (i) *and*, (ii) with the personal pronouns *he* and *she*, and (iii) with *said*. In this subsection, we wish to take these analyses one step further by investigating the discourse patterns potentially underlying these lexical associations. We start with discourse patterns underlying the association of PAUSES with the coordinator *and*.

#### 3.3.1 PAUSES and *and*

As noted earlier, the coordinator *and* can function as a phrasal connector and a clause connector. Examples (4) and (5) illustrate the two uses of *and* in association with PAUSES, with (4) illustrating *and* as a phrasal connector and (5) exemplifying *and* as a clause connector. Assigning features to functional classes is often difficult, particularly in spoken data with its multiple speech management phenomena resulting in unclear instances. Example (6) features an ambiguous use of *and*.

- (4) “Wendy’s daughter”

CNI

S1: you know this erm, you know this young girl that was killed along Benji Avenue with her mother? Well I thought <sup>QTD</sup> [<sup>MII</sup> it was Wendy’s daughter]

CNM:

S2: Did they?

S1: Half past eleven at night they went and knocked Wendy's door and says QSZ [<sup>MDD</sup> can you give me some photos of your daughter] and there were two girls and they thought QTD [<sup>MII</sup> that they were the only two] and the woman said QSD that [<sup>MDD</sup> the only two girls I know that are alike them, their age group, erm, er are Nicholas [name] daughter **and erm, and erm** her friend] (KCP-N1)

(5) "Choking boy"

CNI:

S1: when Sheila was here last week and Linda, and Linda's little boy Christopher and he's only about a month younger than Annabel and erm she feels QOO [<sup>MII</sup> the bits would be too tiny for him. He would eat them.] Cos one day we found him and he was choking to death practically **and erm er** Tam, Linda's husband turned him upside down and smacked his back, he'd eaten a one pound coin.

CNM:

S2: Blimey!  
(KB3-N1)

(6) "Fire at Bunbury"

CNI:

S2: But anyway as usual you get on the station. All of a sudden as they like to do in Birmingham station, all the trains are coming in on different platforms from usual and **and er** delays here and do you know what it was? [<sup>MVV</sup> It was on the television last night] . It was a huge fire at erm

(KBW-N1)

How does *and* distribute across the three functions clause connector, phrasal connector and unclear? As noted in Section 3.2, *and* is among the top most frequent words in the NC. The frequencies of *and* co-occurring with PAUSES are given in Table 7.

The high frequency of PAUSES as collocates of *and* prevents exhaustive analysis of concordance lines. We decided to work with six subsamples. For <pause/> we downloaded two subsets of 100 randomly chosen occurrences each: one for the L3-L1 span, one for the R1-R3 span. Since *er* and *erm* occur in the R1-R3 positions

Table 7. Frequencies of occurrences of PAUSES as collocates of the node *and* in CNN

	L3-L1	R1-R3	Total
<pause/>	274	216	490
er	109	30	139
erm	83	38	121



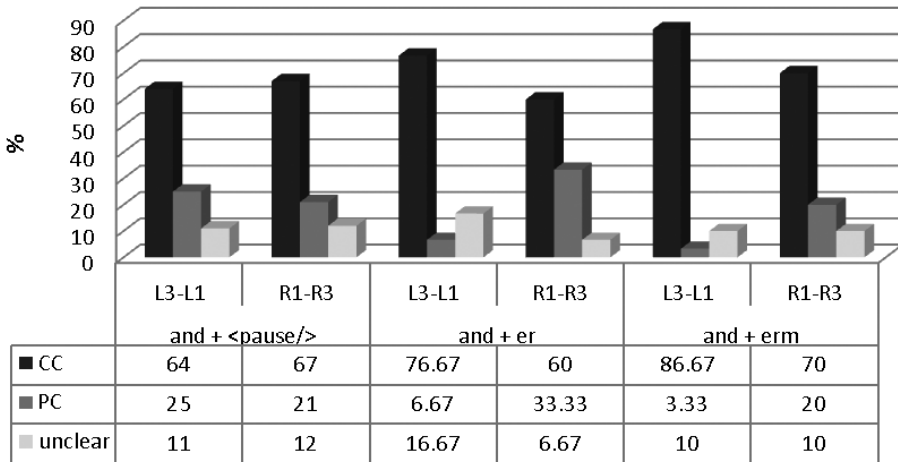


Figure 5. Percentage use of coordination patterns of *and* collocating with PAUSES in CNN (CC: *and* as clausal coordinator; PC: *and* as phrasal coordinator; unclear: ambiguous uses of *and*)

with frequencies far less than 100 occurrences we selected for both filled pause types equally-sized subsamples of 30 occurrences to the left and the right of *and*.

Figure 5 presents the percentage values of occurrences of *and* collocating with PAUSES in L3-R3 across its functions as a coordinator. It emerges quite clearly that the overwhelming coordination pattern of *and* in the immediate context of PAUSES is clause-coordinative rather than phrase-coordinative. The percentage values that clausal *and* reaches in association with PAUSES range from 60 per cent in R1-R3 of *and + er* to 86.67 per cent in L3-L1 of *and + erm*. That is, clausal *and* in association with PAUSES accounts for roughly two thirds of all PAUSE-related *ands*. Figure 5 also shows that, except for *and + <pause/>*, clause-coordinative *and* more frequently follows the PAUSE rather than precedes it. The inverse holds, in part, for phrase-coordinative *and*: only short silent pauses precede phrase-coordinative *and* more commonly; by stark contrast, both *er* and *erm* follow phrasal *and* far more commonly.

### 3.3.2 PAUSES and discourse presentation

We approach the potential association of PAUSES with discourse presentation from two angles: quotatives and reporting modes. We first look into the correlation of PAUSES and quotatives.

3.3.2.1 PAUSES and quotatives. We noted in Section 3.2 that *said* figured prominently among the most frequent collocates of PAUSES and hypothesized that this was due to the use of *said* as a quotative form introducing discourse presentation and, specifically, direct discourse presentation. In this section we want to explore

this hypothesis and, at the same time, extend the analysis beyond the word *said* so as to establish whether PAUSES are not only significantly associated with *said* but with the use of quotatives in general.

For space considerations we will restrict the analysis to the four most frequent quotative forms in the NC. These are shown in Table 8.

**Table 8.** Quotatives in narrative (CNN) with frequencies greater than 100 occurrences

N	Quotative	Tag	Frequ.
1	said	QSD	1,006
2	says	QSZ	241
3	thought	QTD	178
4	goes	QGZ	124

As can be seen in Table 8, the top most frequent quotative form in the NC is *said* with more than 1,000 instances. *Says*, *thought*, and *goes* are all much less frequent. All other quotative forms such as *think*, *was like*, or *asked* have frequencies far below 100 occurrences and are therefore excluded here.

It should also be noted that three of the four quotatives are included in the top ten keyword list discussed earlier (Table 6, repeated below as Table 9): the list includes not only *said*, whose keyness was mentioned already, but also the quotatives *went*, *says* and *goes*. Note that the keyword list displays frequencies slightly higher than the ones shown in Table 8 above. This difference is due to the fact that Table 8 lists only occurrences of *said*, *says*, *thought*, and *goes* which have been tagged as quotatives, while the keyword list also counts in uses of the words in non-quotative function(s). As regards *said* and *says*, the proportions of use as quotatives are very high, accounting for 93 and 96 per cent respectively, as shown in the last column in Table 9. Even *goes* is used predominantly as a quotative form (77 per cent), while *went* is much more often used in non-quotative function(s) than as a quotative (14 per cent for the quotative use).

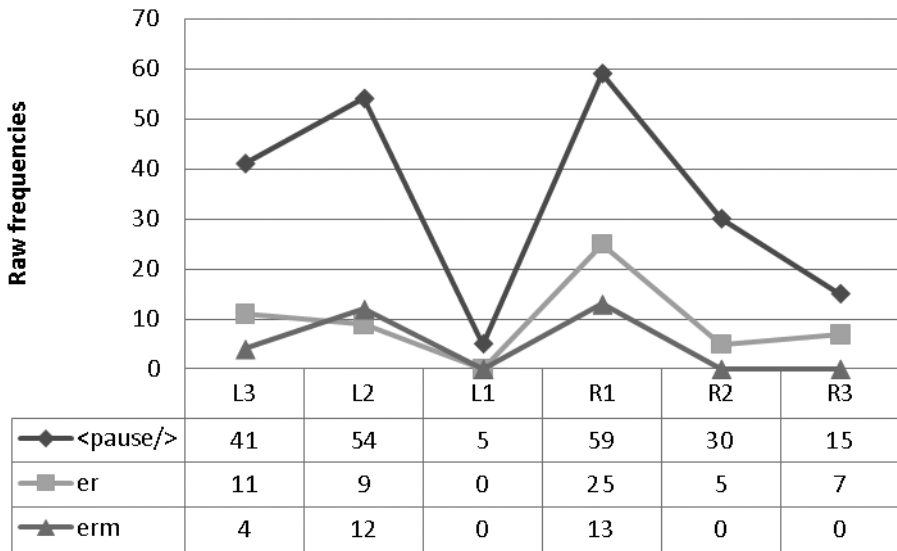
First, we investigate how PAUSES are associated with *said* tagged as QSD. Figure 6 shows how PAUSES are distributed across L3-R3 of the node *said*.

The data shown in Figure 6 suggest a pattern consistent for all three types of pauses. While PAUSES tend to increase from L3 to L2 (only *er* decreases slightly), there is a sharp drop in L1 (that is, right before *said*) followed by a steep rise in R1 (that is, right after *said*) particularly with regard to <pause/> and *er* (but less so for *erm*), from where the occurrences of PAUSES overall tend to decrease across R2 to R3.

While *er* and *erm* thus occur to some degree in the vicinity of *said* (QSD), the two types of filled pauses have frequencies consistently below 5 occurrences

**Table 9.** Top ten keywords in narrative (CNN) vs. pre- and post-narrative (CP\*) components ( $p < 0.001$ ; critical value: 10.83) and proportions of quotative use of *said*, *went*, *says*, and *goes*

Item	Freq. CNN	Freq. CP*	Keyness	Quot. (%)
said	1087	142	717.653	93%
and	2958	1360	433.624	–
was	1403	530	313.455	–
he	1670	734	273.040	–
she	1233	521	220.291	–
went	284	57	139.536	14%
says	250	49	125.290	96%
had	443	184	82.123	–
came	115	19	65.600	–
were	380	164	64.781	–
goes	161	41	62.878	77%



**Figure 6.** PAUSES in L3-R3 of *said* (QSD) in narrative (CNN)

or even zero frequencies in the vicinity of *says* (QSZ), *thought* (QTD), and *goes* (QGZ). In the following analysis of *says*, *thought*, and *goes*, we therefore discarded *er* and *erm*, focusing on short silent pauses only (<pause/>).

Figure 7 shows the frequencies of short pauses before and after the three quotatives. To begin with, we note that short silent pauses in the surrounds of the

three quotatives are much less frequent than in the surrounds of *said* as shown in Figure 6. This may be largely due to the overall much lower frequencies of these quotatives, referred to in the discussion of Table 8 above. However, the three quotatives still exhibit a pause pattern very similar to the one observed for *said* (QSD) in Figure 6 above. As regards *says* (QSZ) and *thought* (QTD), short silent pauses increase from L3 to L2 (as regards quotative *goes*, however, silent pauses decrease from L3 to L2). The frequencies of short silent pauses in L1 drop drastically for all three quotatives, and rise steeply in R1, from where they fall across R2 and R3 (only pauses following *thought* increase slightly in R3). The overall pattern we can then observe for short silent pauses in the surrounds of all four quotatives is as follows:

High in L3 and L2 → sharp drop in L1 → steep rise in R1 → steady drop in R2 and R3

The most striking shifts in this pattern are the sharp drop in L1 and the subsequent high rise in R1. How can these shifts be explained? As regards the rise in R1, it is intriguing to note that not only, as noted earlier, *said* has been shown to overwhelmingly co-select direct-mode discourse presentation but also quotative *thought* and quotative *goes*.<sup>10</sup> We therefore hypothesize that the rise in PAUSES immediately following the quotatives is indicative of a *general* association of PAUSES with the launch of direct-mode discourse presentation rather than the launch of indirect discourse presentation. We put this hypothesis to the test in Section 3.3.2.2.

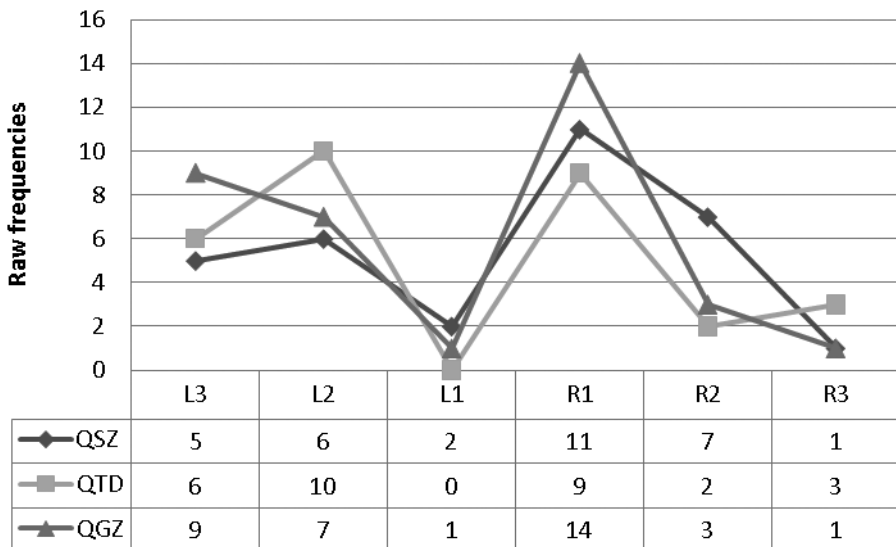


Figure 7. Silent pauses in L3-R3 of *says* (QSZ), *thought* (QTD), and *goes* (QGZ)

As regards the sudden drop in L1, it appears that it is here that the personal pronouns come into play which we observed in Section 3.2 to be among the most frequent collocates of PAUSES in CNN, including not only *I* but also *he* and *she*. A collocational analysis of the four quotatives, shown in Table 10, suggests that, unsurprisingly, the four quotatives are hardly ever used without a personal pronoun immediately preceding them.

**Table 10.** Top five L1 collocates of *said* (QSD), *thought* (QTD), *says* (QSZ), and *goes* (QGZ)

N	<i>said</i> (QSD)		<i>thought</i> (QTD)		<i>says</i> (QSZ)		<i>goes</i> (QGZ)	
1	<i>i</i>	<u>323</u>	<i>i</i>	<u>130</u>	<i>he</i>	<b>103</b>	<i>he</i>	<b>50</b>
2	<i>she</i>	<b>266</b>	<i>they</i>	5	<i>i</i>	<u>54</u>	<i>she</i>	<b>34</b>
3	<i>he</i>	<b>221</b>	<i>and</i>	2	<i>she</i>	<b>46</b>	<i>i</i>	<u>18</u>
4	<i>and</i>	32	<i>that</i>	2	<i>and</i>	4	<i>and</i>	2
5	<i>it</i>	3	<i>it</i>	1	<i>it</i>	3	<i>no</i>	1

As can be seen in Table 10, personal pronouns invariably top the list of L1 collocates of the four quotatives. *I* is the most frequent collocate of *said* and *thought*, and, somewhat surprisingly at least from a Standard English perspective, the second and third most frequent collocate of *says* and *goes*. Indeed, the frequent use of *I says* and *I goes* in conversational narratives has been observed (Tagliamonte & Hudson 1999, Stenström et al. 2002, Tagliamonte & D'Arcy 2004) and interpreted as speech economy devices (cf. Rühlemann 2007 and 2008).<sup>11</sup> Given the intra-personal nature of thought, it will not be surprising that *he* and *she* are not included in the top five collocates of *thought* (but note that *they* is, in second rank after *I*, trailing, however, far behind in frequency). However, *he* and *she* figure prominently among the top five collocates of *said* (second and third ranks), *says* (first and third ranks), and *goes* (first and second ranks). So, personal pronouns seem to be indispensable company of the quotatives. This is, of course, not by chance. All four quotatives are unmarked morphologically for gender and, additionally, the quotatives *said* and *thought* are unmarked for person and number, while *says* and *goes* are unmarked, to an extent, for person in that both *I goes* and *I says* are very frequent collocations. The 'job' of marking the speaker whose discourse is going to be reported is hence overwhelmingly accomplished by the three pronouns *I*, *he*, and *she*. Therefore, the answer to the question above, how the dramatic drop in short silent pauses in the L1 slot of the quotatives can be explained, is this: the drop is mainly owed to the intimate grammatical association between personal pronouns and quotatives, which cannot easily be separated.

How can we account for the steep rise in short silent pauses in R1, which we observed in Figures 6 and 7 above? Given that we are dealing with quotatives introducing either direct- or indirect-mode 'reports', R1 is a pre-eminent position: it is the onset of direct or indirect discourse presentation.

In the next section, we investigate how PAUSES and discourse presentation are correlated.

**3.3.2.2 PAUSES and reporting modes.** Speakers in the NC show a clear preference for direct discourse presentation. The tag MDD (direct presentations) occurs 1,574 times, accounting for 58.02 per cent of all reporting units. Indirect presentations (MII) occur less than 300 times, accounting for 10.62 per cent.

In the analyses to follow we will focus on the direct and indirect categories, because it is here that we can test our hypothesis, set out in the preceding section, that the rise in PAUSES immediately following the quotatives investigated is evidence of a general association of PAUSES with the onset of direct-mode discourse presentation rather than with the onset of indirect discourse presentation.

Table 11 shows the number of reporting units, 1,574 MDD and 288 MII, and the number of words and pauses they contain. The difference in mean tokens per unit is less than one (MDD 7.8 to MII 8.6), suggesting that direct and indirect reporting modes differ little in size.

Taken together there are no significant differences ( $\chi^2 = 0.537$ ,  $df = 2$ ,  $p = 0.765$ ) in the frequency of PAUSES between MDD and MII. Both *er* and <pause/> are more frequent in MII (4.8 and 21.3 occurrences per 1,000 words respectively) than in MDD (3.9 and 16.9 respectively); only *erm* is slightly more frequent in MDD (2.7) than in MII (2.4). Certainly the figures do not indicate a higher relative frequency of PAUSES in direct discourse presentation in comparison to indirect discourse. We can thus rule out the possibility that PAUSES are associated with direct discourse presentation *as such*, regardless of position.

We next considered whether the impression that direct discourse instances contain more PAUSES than indirect, although not accurate as indicated in Table 11, might arise on account of the fact that the PAUSES tend to occur near the beginning of MDD units. To test this notion we generated positional data for

**Table 11.** Distribution of PAUSES in direct (MDD) and indirect (MII) reporting categories

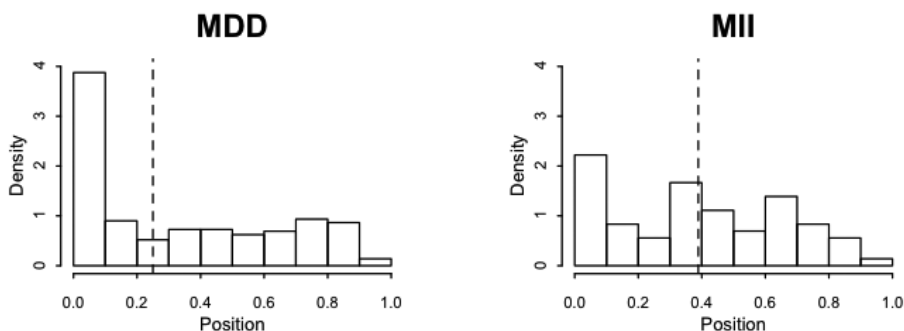
Category	Number of units	Tokens	Mean per unit	Pause type					
				er	erm	<pause/>			
				raw freq.	per 1000	raw freq.	per 1000	raw freq.	per 1000
MDD	1,574	12,223	7.8	48	3.9	33	2.7	207	16.9
MII	288	2,483	8.6	12	4.8	6	2.4	53	21.3

each PAUSE, indicating the position of a PAUSE within the MDD or MII unit as a proportion. For example, in (7) there are two instances of the pause *er* in a nine-word MDD unit. We calculated the positional data for each PAUSE by dividing the number of preceding words (or pauses) by the length of the unit, e.g. the first as  $0/9=0$  and the second as  $3/9=0.33$ .

- (7) I said to `em over there I says [<sup>MDD</sup> **er** have you **er** moved in then? Got settled?]  
(KB1-N1)

This procedure results in a positional distribution for the PAUSES in MDD and MII that can be displayed in two histograms (see Figure 8). They show the proportion of PAUSES occurring in ten equally spaced divisions across the MDD and MII units. The dotted lines in Figure 8 indicate the median value for each distribution, which highlights the distributional skew of PAUSES.

The median values are 0.25 for MDD and 0.39 for MII. That is, half of all the PAUSES in MDD segments occur within the first 25 per cent of the unit, whereas the same proportion spreads over the first 40 per cent in MII units. As is indicated by the bars, in both MDD and MII the most common location of PAUSES is in the first 10 per cent of the units, where the proportion in MDD is twice that of MII. For the remaining nine divisions PAUSES spread much more evenly in MDD than in MII. There is thus a clear tendency for PAUSES to occur at the beginning of direct-mode events compared to indirect. We take this finding as direct evidence in favor of our hypothesis that PAUSES are associated with the onset of direct discourse presentation.



**Figure 8.** Distribution of the location of PAUSES within the reporting unit in which they occur for both direct (MDD) and indirect (MII) reporting units

## 4. Discussion

In Section 3, it became clear that PAUSES (excluding long silent pauses) are more frequent in conversational storytelling than in general conversation. The analyses have suggested three major factors to account for this: (1) the fact that PAUSES tend to occur more frequently in narrative-initial utterances (CNI), (2) the close connection of PAUSES with clause-level coordinator *and*, as well as (3) the importance of direct discourse presentation to conversational narrative. The three findings are briefly discussed in the following.

### 4.1 PAUSES and narrative-initial utterances

Why are PAUSES more frequent in the first utterance of a story (CNI) compared to the other narrative components? As noted earlier, CNI is the locus in which narrators accomplish important tasks: (i) making clear to their co-conversationists that what they are going to do is tell a story and (ii) giving their listeners orientation as to the basic parameters of the situation in which the events evolved. Both tasks, we argue, are difficult tasks requiring planning and, hence, pausing.<sup>12</sup>

The first task, signaling that a story is going to be told, amounts to seeking a change from one conversational subgenre (general conversation) to another conversational subgenre (conversational narrative). This may be unproblematic to conversationists, who are used to switching to and fro between conversational subgenres all the time. However, the switch from conversation to narrative entails a switch in the turn-taking system. Unlike, for example, Labov (1972:366) and Chafe (1987:43) who see narrative as “a single turn”, more recent research views narrative as an interactional achievement accomplished not only by the narrator but also by co-narrators and recipients who may all contribute to the storytelling in some way (e.g. Schegloff 1997). Because of this interaction, the turn-taking pattern controlling narrative is best described as “an attempt to control a third slot in talk, from a first” (Sacks 1992: 18). The difficulty involved, then, in the first utterance of a storytelling performance is to secure that “third slot” for a series of turns taken during the narrative.

Second, as has been shown in a study of introductory *this* (Rühlemann et al. 2010), as in *And we got this mad bloke come in!* (KC6-N1), the first utterance in a narrative also serves to orient listeners to the situation in which the events occurred. Labov (1972) referred to this as the “orientation” section. Orientation is given by way of identifying “the time, place, persons, and their activity or the situation” (Labov 1972: 364). This task seems a tall order: numerous crucial pieces of information need to be conjured up from memory in little time and little space. Often the information required is quite specific, involving, for example, names of



people and locations. (8) and (9) are illustrative examples: (8) illustrates the narrator's search for the name of Linda's husband (Tam) flagged by the filled pauses *erm*, while (9) exemplifies a filled pause preceding the name of a location in Russia:

(8) "Choking boy"

CNI

S1 when Sheila was here last week and Linda, and Linda's little boy Christopher and he's only about a month younger than Annabel and *erm* she feels <sup>QOO</sup> [<sup>MII</sup> the bits would be too tiny for him. He would eat them.]  
Cos one day we found him and he was choking to death practically and *erm* *er* Tam, Linda's husband turned him upside down and smacked his back, he'd eaten a one pound coin.

(KB3-N1)

(9) "Russian winter"

CNI

S3 so it shows that *er*, you know, the globe is warming up, even in Russia where I went, my mother, where I, where I was staying at *er* Dunyask, there was five metre snow sometimes in the, it, it came and it just blocked your windows, it blocked your doors and you were inside the house and you couldn't get out

(KBX-N1)

Both remembering these specific details and bringing them quickly into a coherent order is costly in terms of processing and planning. Hence the clustering of PAUSES in this early section of the narrative.

#### 4.2 PAUSES and clause-coordinative *and*

Why is clause-coordinative *and* so common in conversational stories and why does it so commonly co-occur with PAUSES? The coordinator *and* is essential to storytelling precisely because the essence of storytelling may be seen in the coordination of clauses. This is due to what could be termed the 'clause-event match' that characterizes narrative. Labov & Waletzky (1967/1997: 12) define narrative as a "method of recapitulating past experience by matching a verbal sequence of clauses to the sequence of events that actually happened". On that definition, clauses match events. Stories are not about one event alone. Labov & Waletzky (1967/1997: 25) maintain that the 'a-then-b relation', that is, the coordination of at least two temporally junctured narrative clauses, is "the most essential characteristic of narrative". Obviously, most stories are about many more than just two events in a temporal sequence. Therefore, the need to coordinate clauses to match events arises as often as the story recapitulates temporally junctured events.

Why do PAUSES so commonly accompany coordinative *and*? We wish to suggest that they do so because the narrative clauses which *and* coordinates can be seen as instances of what Kjellmer (2003) termed ‘thought units’ (for which he observed a close connection with the filled pauses *er* and *erm*). This notion reflects the nature of elements that

(...) require some deliberation, some planning, which may range from very simple, such as finding an appropriate word, to quite *complicated, such as deciding on which out of a great number of facts to communicate, and in what order.*

(Kjellmer 2003: 174, emphasis added)

The emphasized element of the quote above fittingly describes the challenging tasks narrators face when telling their story as a sequence of temporally junctured narrative clauses and which, in a nutshell, serve to impose “temporal order on the cacophony of daily life” (Ochs & Capps 2001: 37). The tasks include the need to (i) select, out of a great number of “facts” that characterized the past situation and the events that occurred therein, those facts that narrators deem necessary for the story to become coherent and appealing for the listeners, and the need to take decisions (ii) as to the order in which the events are to be told, (iii) as to how to chunk the flow of what happened into distinct events and (iv) how to coordinate these chunks linguistically into narrative clauses.

Consider (10). In this ‘generalized experience’ story, the narrator reminisces on the time when shepherds used to drive sheep on the road. The story suggests an analysis into eight narrative clauses (which each relate a distinct event). Five of these clauses (2, 3, 5, 6 and 8) are introduced by a PAUSE, of which three clauses (2, 3 and 5) are coordinated by *and*. Clause 4, by contrast, is coordinated by *and* alone. Clauses 6 and 8 are launched by <pause/> alone. The narrator thus marks off most of his/her clauses by *and* and/or a PAUSE:

(10) “Sheep herds”

CNI-CNF<sup>13</sup>

PS0T5: I can remember

- 1 when you’d see <pause/> a cloud of dust, perhaps it’ll be a mile away
- 2 <pause/> **and** this would be <pause/> a flock of sheep. Course, they hadn’t had <pause/> lorries in them days, they drive them on the road
- 3 <pause/> **and** you see old shepherd coming along with a couple of dogs <pause/> and goodness knows how many sheep!
- 4 **And** of course, the roads were all gravel then, no tarmac, see this cloud of dust across there.
- 5 **And er** <pause/> if you see it was coming towards
- 6 <pause/> of course you run into them,
- 7 but if they were going the other way

8 <pause/> course the dust still keep going.  
 But <pause/> but of course this was many years ago. Never see a flock of  
 sheep on the road now ...  
 (KE0-N1)

Event-matching narrative clauses are thus complex thought units, so complex indeed that the ubiquity of PAUSES in conjunction with clause-coordinating *and*, then, can be seen as a reflection of the considerable cognitive effort involved in the production of stories as a sequence of coordinated clauses.

### 4.3 PAUSES and discourse presentation

Why are PAUSES more frequently associated with the onset of direct-mode discourse presentation than with the initial parts of indirect-mode discourse presentation? A plausible answer, we believe, can be derived from considering what is involved in these types of discourse presentation in terms of *reference*.

Direct and indirect discourse presentations involve rendering (or constructing) what was (or might have been) said, thought, felt, or done gesturally in other (mostly anterior) situations. This is a procedure which is costly in terms of processing and planning: (i) presentations of discourses may be lengthy; (ii) they may be numerous, for example in presentations of a series of speaking turns by more than one speaker; and (iii) crucially, in the case of direct-mode presentations they may require the presenting speaker to perform (frequent) shifts in the reference system.

It is with regard to the phenomena of perspective and reference that a fundamental difference between direct and indirect presentation can be observed (cf. Coulmas 1986:2). In the direct modes, the perspective is that of the presentee: all referring expressions are appropriate to the speaker in the anterior situation.<sup>14</sup> By contrast, in the indirect modes, the perspective is that of the presenting speaker: all referring expressions are appropriate to the speaker in the posterior, discourse presenting, situation (cf. McIntyre et al. 2004:60). That is, in the indirect categories, the presenter can use one and the same reference system both for the presented discourse and the presenting discourse, while, in the direct categories, the presenter is required to switch from one system to another. In extended stories with multiple speaking turns presented, these reference shifts may be frequent.

The interaction of direct-mode discourse presentation and reference shift is illustrated in the following excerpt. The narrator is a 57-year-old housewife, relating to her interlocutor how a female friend's husband reacted to learning that their daughter had apparently had her first period; instances of indirect and (free) direct discourse presentation are in bold and tagged for presentation mode; reporting clauses are underlined:

## (11) “Women’s problems”

PS04B >: Did I tell you about her little one ... who had stomach pains? ...  
 As she come back she said [<sup>MDD</sup> Dad] ... [<sup>MDF</sup> what?] [<sup>MDF</sup> How long’s our  
 Mum going to be before she comes in?] [<sup>MDF</sup> Another hour.] [<sup>MDF</sup> Oh.]  
 [<sup>MDF</sup> Why?] [<sup>MDF</sup> Oh well I’ve got a bit of a stomach ache and I want to  
 talk to her you know it’s women problems.] [<sup>MDD</sup> All right] he said. Well  
he knew<sup>QOO</sup> [<sup>MII</sup> what it was.] He said [<sup>MDD</sup> you go up and lay in your  
 bedroom] he said [<sup>MDD</sup> and I can send her up when she comes in.] [<sup>MDF</sup>  
 All right.] The little ‘un goes to bed. The little one’s heard Mummy pull up  
 on the drive and has come down the stairs well before anyone could say  
 anything he got it out. [<sup>MDF</sup> She might have er period you’d better go and  
 sort her out.] [laugh] She said [<sup>MDD</sup> what.] [<sup>MDF</sup> She might have one of her  
 periods you’d better fucking go and sort her out. She’s your daughter] ...  
She said [<sup>MDD</sup> there’s no need to ... up and say it like that.] She said [<sup>MDD</sup>  
 you could have kept this shut and I could tell her myself.]  
 PS000 >: Oh!  
 PS04B >: Well he said [<sup>MDD</sup> your fucking daughter you sort her out.]  
 [laugh]  
 (KBE-N2)

The narrator is animating the speech of three non-present speakers: her friend’s husband’s, her friend’s, and their daughter’s. As is shown by the tags, eight utterances are presented using MDD, nine using MDF (the tag used for free direct presentation) and only a single report is indirect (MII). In terms of reference, the narrator is switching to and fro between no less than four different perspectives and the concomitant reference systems: the three characters’ systems and her own system (expressed for example in the preface *Did I tell you ...*, narrative talk, e.g. *As she come back ...*, and all reporting clauses *he said*, *she said*, etc.). Because of the shifts in perspective, the numerous referring pronouns *I/me/myself*, *you/your*, and *she/her* oscillate in reference across the whole narrative (only the male pronouns referring to the only male character involved do not undergo this shift in reference).

On a general level, we hypothesize that the association of PAUSES with the onset of direct-mode discourse presentation has its basis in the peculiar way that direct mode constrains reference resolution. While any type of (direct or indirect) discourse presentation may be costly to process and produce, the need in direct mode to handle the ever oscillating reference of referring expressions increases the processing and production costs considerably.<sup>15</sup> Specifically, given that the association of PAUSES with direct discourse presentation is confined to the *onset* of discourse presentation, our findings suggest that it is the *shift* into a non-present speaker’s voice and reference system that is costly to process. Once the shift has been achieved the costs of remaining within the presentee’s reference system are relatively negligible.

We admit the hypothetical nature of this claim and invite any psycholinguistic attempt at falsifying or verifying it. We are also aware that the hypothesis seems open to challenge from a cost-benefit perspective. Why, one might argue, should narrators show such a clear preference for direct mode, as has been noted in Section 3.3.2.2, when this mode is so much more costly? Would not a cost-benefit analysis prove direct mode to be utterly uneconomical and, hence, undesirable? In response, we feel it helpful to consider the overall goal in storytelling, which is, in Labov's (1972: 366) terms, to ward off the question "So what?". This is achieved by means of evaluation, of which direct mode is a prime means. Direct mode contributes to the story as drama, creating interpersonal involvement and rapport. In Tannen's (1986: 312) view, direct mode (her term being 'constructed dialogue') "is a means by which experience surpasses story to become drama". The cost-benefit analysis for direct mode is therefore satisfactory: although highly costly to process and produce (and hence prone to co-occur with PAUSES), direct mode is indispensable for narrators in achieving their ultimate goal: involving listeners affectively in the story.

## 5. Conclusions

This paper has focused on various types of pauses in conversational storytelling. We have argued that pauses contribute greatly to understanding the cognitive processes involved in storytelling. This study has facilitated a number of observations.

We observed that *er*, *erm*, and short silent pauses are more frequent in storytelling than in general conversation. Long silent pauses, by contrast, were found to be more frequent in the non-narrative components of the NC texts. For this latter finding, we offered two explanations: (i) we proposed that long pauses may occur more frequently in non-narrative general conversation than in storytelling due to temporary suspension of conversational interaction and/or diversion of the participants' attention caused by some extra-linguistic action, and (ii) we proposed the boundary hypothesis, according to which long pauses cluster around the transition points from pre-narrative conversation to story and from story to post-narrative conversation, thus demarcating the boundaries of the two conversational sub-genres. The boundary hypothesis was tested using a fairly wide positional range (*viz.* 15 utterances before and, respectively, after the story proper). Within this range, the hypothesis was confirmed for post-narrative (CPO) components but not for pre-narrative (CPR) components. However, within a narrower range (*viz.* 6 utterances before and, respectively, after the story), the correlations were much stronger. A more nuanced analysis of long pauses is warranted, for here we might be looking at empirical evidence to verify Chafe's (1992) theory of pauses as demarcating paragraphs in narrative performance.

In the main part of this paper, we focused on the three types of pauses our analyses had shown to be more frequent in narrative: *er*, *erm*, and short silent pauses. The shorthand form we used to refer to these types of pauses was PAUSES. We showed that PAUSES are more frequent in narrative-initial utterances, the component tagged CNI, and argued that this is because incipient narrators face difficult tasks requiring planning and, hence, pausing. Among these tasks, we identified not only the need for incipient narrators to secure the right to occupy the “third slot” for an extended series of turns but also, maybe more importantly, to launch the build-up of orientation to the anterior situation, which often requires that specific information, for instance about story participants and story locations, be recalled from memory.

With regard to lexical and discursual association patterns, we observed three major lexical association patterns for PAUSES: one centered around the node *and*, one with *said*, and one with *he* and *she*. The lexical association with *and* suggested an association of PAUSES with clause-coordination. Based on the lexical association of PAUSES with *said* we hypothesized an association of PAUSES with the onset of direct-mode discourse presentation. The lexical association of PAUSES with *he* and *she*, finally, led us to assume that these pronouns too entered into the larger association of PAUSES with discourse presentation.

The vast majority of the occurrences of *and* surrounded by PAUSES turned out to act as clause coordinators (rather than phrase-level coordinators). We interpreted this finding in the light of Labov & Waletzky’s (1967/1997) definition of narrative as a sequence of narrative clauses, whose production poses a number of demanding cognitive tasks. Pausing was seen as indexing the cognitive efforts underlying these tasks. Further, the commonness of PAUSES in the vicinity of *he* and *she* could be related to the commonness of PAUSES in the vicinity of the quotative verbs *said*, *thought*, *says*, and *goes*. Finally, the clear preference for direct-mode discourse presentation in narrative was found to be at the heart of the close association between PAUSES and quotatives. We argued that the onset of direct mode attracts more PAUSES than indirect mode because it entails the need to ‘shuttle’ between different reference systems.

In sum, the findings belie the myth of pauses as dysfluencies. In actual fact, pauses offer an immense potential for the study of speech and cognition: they open up a window on the mind. It is in this sense that conversational narrative “can tell us most directly about inherent properties of language and the human mind” (Chafe 1992: 89).

## Notes

1. Biber et al. (1999:28), for example, refer to the BNC-C subcorpus as “natural, everyday conversation from a representative sample of the British population”. For an excellent description of the composition of the BNC and its subcorpora, see Chapter 3 in Hoffmann et al. (2008).
2. To identify narratives in the BNC-C files, two criteria were critical: ‘exosituational orientation’ and the ‘a-then-b relation’. By ‘exosituational’ we mean linguistic evidence, such as (switch into) past tense, reference to locations and people removed from the present situation. The ‘a-then-b relation’, seen by Labov & Waletzky (1967/1997:15) as the “defining characteristic of narrative”, refers to the use of at least two temporally junctured narrative clauses.
3. The component CNI-CNF is a label we used for the small number of narratives in which the story is told in a single utterance (that is, without any contribution from recipients).
4. The full list of reporting mode types additionally includes: free direct (MDF), free indirect (MIF), representation of speech act (MSS), representation of voice with (MVT) and without topic (MVV), representation of use (MUU), and reference to discourse presentation (MRR).
5. That the differences are indeed ‘significant’ in statistical terms is suggested by a chi-square analysis:  $\chi^2 = 92.9809$ ,  $df = 6$ ,  $p < 2.2e-16$ . Interestingly, the particular cells which ‘fuel’ the significance are the ones for long pauses:

	er	erm	<pause/>	<pause dur=x/>
CPR	-2.03	-0.85	0.49	2.96
CNN	1.36	1.08	0.58	-5.89
CPO	-0.15	-0.85	-1.36	6.2

6. Not all texts in the NC are preceded and followed by 15 pre- or post-narrative utterances each. This is mainly for two reasons: (i) the narrative proper started just a few utterances after a <div>-segment, which indicates the beginning of the speech event or sampling of the event in the original BNC file from which the text was extracted and (ii) narrative chains, in which one story leads to another, were cut off after three narratives, with the first three stories assigned to texts marked by the N1 suffix and the next three stories assigned to texts marked N2.
7. According to chi-squared tests, for all types of pauses taken together the differences are very highly significant in CNI vs. CNM ( $p < 2.2e-16$ ) and significant in CNI vs. CNF ( $p = 0.015$ ).
8. In a sample of 300 instances extracted from BNC-C, *said* turned out to precede direct mode in 215 occurrences, representing 71.67 per cent, while it launched indirect discourse presentation in only 26 occurrences, representing 8.67 per cent (Rühlemann 2007: 124).
9. Conclusive evidence to support this claim comes from an analysis of the key items not in CNN, which includes utterances not only by narrators but also recipients, but in a subcorpus of utterances by different types of narrators in CNN, tagged PN\*, compared to utterances by recipients, tagged PR\*. This analysis returned *erm* ranked 12th (LL = 19.634) and *er* ranked 38th (LL = 7.264) among the words positively key in PN\*.

10. In a sample analysis of 300 instances of the past tense form *thought*, the proportion obtained for use of *thought* as direct-mode quotative (32 per cent) was more than twice that for use as an indirect-mode quotative (14 per cent) (Rühlemann 2007: 138). Further, there is broad agreement that quotative GO “unambiguously cues the listener to the onset of a direct quotation” (Schourup 1982: 148).

11. *I says* and *I goes* occur preferably in presentations of extended dialogue with frequent turn-taking, thus typically alternating with the forms *he/she says* and *he/she goes*, respectively. That is, the shift from first person to third person and vice versa is not marked both morphologically (by use or drop of the -s morpheme) and lexically (by use of *he/she* and *I* respectively) but only lexically. *I says* and *I goes* thus reduce processing cost by reducing complexity and can be seen as ‘economy devices’.

12. The tasks incipient narrators face story-initially are in fact more numerous and more daunting. Overall, it seems that recipient-design is crucial: forthcoming narratives need to be tailor-made to meet the cognitive needs of listeners. See Sacks’s (1992: 237) notion of course-of-action organization, that is, the process of imposing a temporal sequence on the events to be reported, Labov’s notion of pre-construction, that is, a recursive cognitive process whereby would-be narrators first decide on a reportable event and then proceed “backwards in time to locate events that are linked causally each to the following one” (Labov 2006: 37), and finally Ochs and Capps’s notion of foreshadowing, whereby the “narrator knows what will follow and casts characters and events in terms of this future trajectory” (Ochs & Capps 2001: 5), a process closely linked with the “massive economy” Sacks (1992: 236) observed for storytelling (for a more detailed discussion of the cognitive demands of storytelling, see Rühlemann forthcoming).

13. Cf. endnote 3.

14. We speak here of the direct and indirect modes (plural) because variants are the free categories, that is, direct or indirect presentations *not* introduced by a quotative (see, for instance, example [11]).

15. As noted by an anonymous reviewer, it may be well worth investigating whether shifts in time reference might also contribute to the cognitive load of direct quotation. Cf. *and they said* (past) *well what you gonna do* (present) (KBL-N1). Further, only the direct mode enables narrators to imitate “the emotive affective aspects of speech. Insofar as these are expressed not in the content, but in the form of the message, they are not preserved in indirect reporting” (Romaine & Lange 1991: 240). The processing costs incurred by the switch into the presentee’s referential system may hence be augmented by the switch into the presentee’s affective system.

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