English comment clauses: position, prosody, and scope

Gunther Kaltenböck

This paper offers a study of the use and communicative functions of comment clauses (CCs) such as *I think* or *it seems* in spoken English. Based on an analysis of 830 instances retrieved from the spoken section of the British component of the *International Corpus of English*, it is shown that the scope of CCs may not only be over an entire host clause, as is commonly assumed, but may also single out a phrasal constituent. Such phrasal scope is signalled by means of prosodic binding of the CC to the left or right and/or positioning in the Host Construction. In contrast to clausal scope CCs, which function as epistemic shields (Prince et al. 1982), phrasal scope CCs function like approximators (ibid.). A third possible function identified is that of pleonastic uses of CCs. This structural or ‘filler’ function can be observed especially with high-frequency CCs which are prosodically integrated into the Host. The three different functions can be explained as different stages in an ongoing process of grammaticalisation of CCs away from epistemic markers to pleonastic structuring devices, with concomitant semantic bleaching and prosodic integration.

1. Introduction

This paper investigates the use of English comment clauses in a corpus of modern British English, viz. the spoken section of ICE-GB, the British component of the *International Corpus of English* (cf. Nelson et al. 2002). This 600,000 word corpus comprises various different text types and yields a total of 830 instances of comment clauses (henceforth CCs), some illustrative examples of which are given in (1).

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1 I would like to thank Henry Widdowson, Nikolaus Ritt, Herbert Schendl, Christiane Dalton-Puffer, Julia Hüttner, Ute Smit and the VIEWS team for their constructive feedback.
CCs are defined here as main clause supplements to another construction, the Host Construction (HC), to which they are related by linear adjacency but not syntactically, i.e. they are not constituents of the host (cf. Section 2 for details).

The aim of the paper is to highlight the close link between the parameters position, scope and prosody, which so far has not received any attention in the literature. More specifically, I will show that the (semantic-pragmatic) scope of a CC may not only be clausal, i.e. covering the entire host clause, but also phrasal, e.g. over parts of the HC. These two scopes also differ in their communicative functions with clausal scope CCs functioning as “shields” (Prince et al. 1982) and phrasal scope CCs being similar to “approximators” (in Prince et al.’s 1982 terms). One of the factors contributing to such a narrowing of scope is that of the position of the CC in the HC. Another factor is that of the prosodic realisation of the CC. It is also possible to detect preferred prosodic patterns for certain positions as well as for certain lexical items, with high-frequency CCs being more prone to prosodic integration. This, in turn, can be taken as an indication of increasing grammaticalisation (or pragmaticalisation) of CCs away from epistemic comments to discourse markers with a predominantly structural function.

The paper consists of two main parts. After a delimitation of the class in question (Section 2) and a brief discussion of data retrieval and frequencies of occurrence (Section 3), Section 4 explores the link between scope and position. Taking into account various factors influencing the scope of a CC (Section 4.1), it focuses on attested and preferred insertion points in the HC as well as links between position and phrasal or clausal scope (Section 4.2). The second part, Section 5, takes a closer look at the other conditioning factor of scope, the prosodic realisation of the CC. It identifies four different prosodic patterns (Section 5.1) and investigates possible correlations with position and lexical types (Section 5.2). The conclusion in Section 6 offers a brief conspectus.

2. Delimiting the class

Following Quirk et al. (1972: 778–780, 1985: 1112–1118) and Leech and Svartvik (1975: 216–217) I define comment clause as a parenthetical clause which occurs initially, medially, or finally in a host construction and takes the
form of a main clause (e.g. *I believe*). More precisely, I include only asyndetic clauses (i.e. without formal link) which are linked to the host in that they contain a syntactic gap (typically the complement of the verb) filled conceptually by the host clause. This restrictive definition is equivalent to Quirk et al.’s (1985) class I comment clauses, Peterson’s (1999) gap-containing parenthetical clause, or Schneider’s (2007) reduced parenthetical clauses and is illustrated by the examples in (1).

CCs are closely related to other categories, especially reporting clauses, matrix clauses and discourse markers. For an operational definition, needed for corpus retrieval, it is necessary to delimit CCs from these with clear, i.e. formal, criteria (cf. Kaltenböck 2007 for details).

CCs differ from *reporting clauses*, as in (2), semantically, as CCs typically make use of some verbs of thinking, as illustrated in example (1), while reporting clauses make use of message conveying verbs (reporting verbs, *verba dicendi*). Another difference is the preference of CCs for present tense, while reporting clauses typically relate to a past event.³

(2) Britain *he said* could compete and win (s2b-005-129)

Most importantly, however, reporting clauses can be identified by their choice of subject, which is typically third person as a result of their reporting function. In the present study I have adopted a restrictive view of reporting clauses which includes only cases of explicit third person source identification of the type ‘source = X’ (X ≠ 1st or 2nd person) and classifies all references to some unspecified source, such as the hearsay evidentials *they say* or *it is reported*, as commenting clauses.

A particular problem for delimitation are CCs in clause-initial position, as in (3), where they are difficult to distinguish from *matrix clauses*, especially if the *that*-complementizer has been omitted.

(3) *I suppose* (that) John has come back from London

Various different views have been expressed on the status of such initial clauses with and without *that* complementizer. They are either taken to be parenthetical (e.g. Kärkkäinen 2003, Kruisinga 1932: 486, Ross 1973, Thompson 2002, Thompson & Mulac 1991), matrix clauses (e.g. Peterson 1999: 236, Stenström 1995: e.g. 293, 296, Svensson 1976: 375), or ambigu-

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2 The term *comment clause* also figures in other studies, but often with different definitions (e.g. Petola 1983, Biber et al. 1999: 197). Various other terms have also been used, such as *parenthetical* (e.g. Huddleston & Pullum 2002: 895) or *parenthetical verbs* (e.g. Urmson 1952). For an overview of pertinent definitions cf. Kaltenböck (2005, 2007).

3 For a detailed discussion of the lexical predicates and semantic patterns of the CCs found in the corpus cf. Kaltenböck (2006b).
ous, i.e. allowing interpretation as both matrix clause and parenthetical clause depending on context and type of ‘matrix’ predicate (e.g. Aijmer 1972: 46, Biber et al. 1999: 197, Huddleston & Pullum 2002: 896, Quirk et al. 1985: 1113, Urmson 1952: 481). 4

The present study takes a cautious approach and excludes all instances of initial clauses with a that-complementizer from the class of CCs. Initial clauses without that are only taken into account if they are clearly separated from the complement/host clause by means of a pause or some intervening material such as hesitation sounds (uh, uhm) or other fillers (you know, I mean).

CCs also need to be distinguished from clausal discourse markers. This concerns a small set of clausal (i.e. verbal) elements such as I mean, I see, I think, you know, (you) see. All of these have previously been discussed under the heading of discourse marker (e.g. inter alia Erman 1987, Schiffrin 1987, Schourup 1985) as well as under the heading of CC (e.g. Petola 1983, Quirk et al. 1985, Biber et al. 1999). In the present study I include only I think in the class of CCs. First, I think is less formulaic, which is evidenced by its much greater variation in form (e.g. I don’t think, I thought, I certainly/just think, we think, I would/should think). Such variations are excluded from typical discourse markers such as I mean, you know (only in their uses as matrix clause is some variation possible). Second, I think differs from typical discourse markers in terms of distribution and possible syntactic functions, as shown by Stenström (1995: 293, 296).

3. Corpus retrieval and frequencies

Delimiting the class of CCs as in Section 2 provides us with an operational definition for corpus retrieval. Extracting data from ICE-GB is greatly facilitated by its syntactic annotation (cf. Nelson et al. 2002 for details) and was effected in three steps. First, a nodal search for ‘detached function’, ‘clausal category’ and the feature ‘comment’ was carried out. In a second step these results were filtered manually to exclude other types of parenthetical clauses, such as reporting clauses, self-contained parenthetical clauses, and semantic-gap-fill or placeholder parenthetical clauses (for a description of each of these cf. Kaltenböck 2005, 2007). This yielded a total of 626 instances of CCs. Corpus annotation, however, turned out to be inconsistent (owing in part to classification as separate text units and therefore as independent main clauses rather than CCs), which made it necessary to run separate searches for each of the tokens found (e.g. I think, I’d have

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thought) and analyse them manually. This yielded another 204 instances and increased the total number of CCs in the spoken part of ICE-GB to 830.

The distribution of these 830 instances in the four spoken text categories of ICE-GB shows that there is a clear preference for the dialogic text types, as illustrated in Table 1. This can be taken as an indication of a strong interactive character of CCs (cf. Kaltenböck 2006b: 77–78 for further details).

Table 1: Distribution of comment clauses in the ICE-GB text categories (normalised per 10,000 words)

<table>
<thead>
<tr>
<th>Text Category</th>
<th>n</th>
<th>10,000 W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private dialogue (s1a)</td>
<td>327</td>
<td>16.35</td>
</tr>
<tr>
<td>Public dialogue (s1b)</td>
<td>281</td>
<td>17.56</td>
</tr>
<tr>
<td>Unscripted monologue (s2a)</td>
<td>157</td>
<td>11.21</td>
</tr>
<tr>
<td>Scripted monologue (s2b)</td>
<td>65</td>
<td>6.50</td>
</tr>
<tr>
<td>TOTAL</td>
<td>830</td>
<td>13.83</td>
</tr>
</tbody>
</table>

4. Position and scope

One of the characteristics of CCs, and parenthetical clauses in general, is their positional flexibility. The view generally expressed in the literature is that they may take clause-initial, clause-medial, and clause-final position. The aim of this section is to investigate this distribution in more detail and highlight possible insertion points (niches) as well as positional preferences. This is particularly interesting in view of some constraints that have been stipulated, mainly within generative frameworks, on which position within the host can serve as a ‘niche’. These alleged constraints, however, have not so far been tested against larger corpus data.

Identification of position is generally much less straightforward than some more theoretical discussions of parentheticals suggest. A case in point is the spoken example in (4).

(4) [radio commentary] and those doors <,> are immediately before me in my high triforium position but far away it seems beyond the high altar which is immediately beneath me then the sacrarium the choir and after that the nave (s2a-020-10)

Example (4) illustrates a number of important points. First, identification of position is closely linked to the question of scope, in other words the elements over which the CC operates (here either far away or beyond the high...
Second, the scope of a CC cannot be determined by its position alone. For proper analysis we also need to take into account prosody, which in the present example clearly identifies *far away* as being within the scope of the CC. Third, contrary to the generally held view, not all CCs have clausal scope, i.e. over a host clause, but phrasal scope is also possible.

I will discuss these issues in more detail in the following. Section 4.1 identifies different factors influencing scope. Section 4.2 takes up the question of phrasal vs. clausal scope and how it correlates with position.

### 4.1 Factors influencing scope

The scope of a CC is of course not to be understood as syntactic scope (in terms of c-command) but in semantic-pragmatic terms, i.e. the topic to which the comment of the CC applies. To distinguish between the syntactic level of linear insertion in another construction and the semantic-pragmatic level of elements within the scope of a CC, I use the term *HC* for the former and *Anchor* for the latter. These two do not necessarily coincide such as when a CC is inserted in a clausal HC but has scope only over one of its constituents, e.g. an NP.

As a semantic-pragmatic concept the exact scope of a CC results from the interaction of several factors (cf. also Schneider 2007: 195), the most important of which are the prosodic realisation of the CC, and the syntactic position of the CC in relation to the HC.

(a) Prosodic features may be crucial in determining the scope of a CC. More precisely, what matters is whether the CC is intonationally linked to the previous or following material, i.e. whether it is integrated into the intonation domain (tone unit) on the left or right. The terminology employed here is right-bound and left-bound (cf. Section 5 for a detailed discussion). Left- or right-binding may be crucial in deciding whether the CC is, in fact, in initial or in final position, as illustrated by the examples in (5) (brackets indicate type of binding).

(5a) Uhmm <,> yeah I wasn’t doing very much *I remember* I wasn’t there (s1a-002-165)

(5b) but these features and they’ll be familiar to you (*I think* they include such things as uh a certain distrust of fact (s2a-021-99)

In their written form, attachment of the CCs in these examples is unclear. It is only their prosodic realisation that indicates their scope: (5a) is left-bound and therefore clause-final, whereas (5b) is right-bound and therefore in initial position.

Prosodic realisation may also decide whether the scope is clausal or phrasal, as in the examples in (6), which are right-bound and therefore
phrasal, viz. over the NP *an interesting document which [...] and the PP at Brave* respectively. Note that left-binding would change the scope to clausal in both.

(6a) Nine is report too (*I think* an interesting document which uhm Professor Greenbaum initiated and which I hope everybody uh will have had a chance to digest) (s1b-075-128)

(6b) We’re going to have a very small set (*I think* at Brave for Edward) (s1b-045-110)

(b) In addition to prosodic binding the position of the CC in the HC may have an impact on its scope. A useful tool for establishing the scope of a CC is the movement test, i.e. moving the CC to a different position in the Host and checking whether its scope changes (cf. also Schneider 2007: 195). Thus it is possible to distinguish two types of CCs: those which have scope over an entire host clause, i.e. clausal scope, and those which have scope over a non-clausal construction, i.e. phrasal scope. For the latter we can distinguish two possibilities: either the scope extends only over part of an otherwise clausal HC, singling out, as it were, a particular constituent of this clause, the so-called Anchor, or the HC itself is non-clausal, i.e. an incomplete or elliptical clause. The different types of phrasal scope are illustrated by the examples in (7), where the CC in (7a) has scope over part of a clausal HC, viz. *garages*, and in (7b) it has scope over an elliptical HC (scope indicated by square brackets).

(7a) and uhm you know a a flat space it’s got tents and well not tents but [just garages] *I suppose* (s1a-056-175)

(7b) Well *I suppose* uhm [the <,> the standard kind of physiotherapy] <,> when you asked for it <,> uhm <,> and well sports I guess (s1a-003-3)

There are also cases where the scope of a CC is to a certain extent ambiguous between phrasal and clausal scope. Take, for instance, example (8), where the scope of *I think*, which is prosodically a separate intonation unit, is ambiguous between covering the entire clause or simply the NP *schizophrenia*.

(8) Uh or <,> you could have depressive illness <,> or schizophrenia *I think* <,> (s1b-016-18)

The general practice for such cases of ambiguity has been to classify them as clausal. Phrasal scope is reserved for cases which are beyond doubt, either for prosodic reasons or because of the results of the movement test or both.
Delimitation of scope also requires taking into account the possibility of a semantic-pragmatic incompatibility of the CC and its Host, as in (9).

(9) Uh in the subsequent peaceful settlement of the problems of the area the problem *we hope* of Saddam and his military machine will really be removed (s1b-027-82)

Here the scope of the CC is clausal, i.e. over the entire HC. Phrasal scope over the NP into which the CC is embedded is excluded for semantic-pragmatic reasons: the mismatch of *hope* with *problem*. The semantics of *hope* is such that it requires the association with a desirable state of affairs, i.e. a situation where a problem has been removed.

To conclude, although there is intrinsically no independent evidence for pragmatic scope, it can be identified with reasonable accuracy by the formal signs that are used to indicate it, viz. prosody and position. Each of these factors will be analysed in detail in the subsequent sections.

### 4.2 Corpus results

After this brief discussion of factors influencing the scope of a CC, let us now turn to the analysis of the corpus data. The aim of this analysis is, first of all, a stocktaking of attested and preferred positions of CCs in the HC as well as an exploration of the link between scope and position.

In fact, the corpus data show a clear correlation between scope and position, with some insertion points showing a propensity for either clausal or phrasal scope. The overview in Tables 2 and 3 takes into account this basic distinction by separating the syntactic environments with predominantly phrasal scope (Table 3) from those with predominantly clausal scope (Table 2). Let us first of all look at the attested positions of predominantly clausal CCs in Table 2, each of which is illustrated by an example in (10).

(10) (Ai) *I think* <,> I’d like to answer that in a slightly different way (s1a-001-117)
    (Aii) So sometimes *I suppose* it happens to everybody (s1b-023-117)
    (Bi) And the Labour Party *I believe* want sanctions to work (s1b-35-28)
    (Bii) Uh Mr Sigroni <,> had *i it would appear* employed the debtor to do extensive uh electrical work (s2a-069-14)
    (Biii) The LSE would be doing that principally and you need *I argue* an a rule-based knowledge system before you can […] (s1a-024-87)
    (Biv) So I think from today’s session you’ve realised *I hope* that you shouldn’t start somebody on lifelong anti-hypertensive therapy based upon one single blood pressure measurement (s1b-004-273)
    (Bv) Uhm <,> the other thing is *I guess* <,,> to ask whether you’ve also considered the sort of occupational psychology areas (s1a-035-144)
Yeah but there’s another trilogy which I believe is supposed to be very good (s1a-016-206)

He’s called Basil in the stables and I’m told likes a pint of MacEwan’s with his feed (s2a-011-64)

Now if you open it up where you are very familiar uh page a hundred and uh eight I think it is in mine […] (s2a-061-97)

I’ve got to go I’m afraid in an hour (s1a-045-216)

and she uhm uh was quite high up I think cos she had a degree (s1a-019-248)

and that’s one of the main things that that prevents that I’m sure (s1a-002-72)

Table 2: Syntactic position of CCs with predominantly clausal scope

<table>
<thead>
<tr>
<th>Clause scope</th>
<th>Phrasal scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Prenuclear Position</td>
<td></td>
</tr>
<tr>
<td>(i) Initial</td>
<td>69</td>
</tr>
<tr>
<td>(ii) Adjunct # Subject: – Clausal Adjunct</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>– Non-clausal Adjunct</td>
</tr>
<tr>
<td>B. Middle Position</td>
<td></td>
</tr>
<tr>
<td>(i) Subject # Verb:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– Subject # MV</td>
</tr>
<tr>
<td></td>
<td>– Subject # Copula</td>
</tr>
<tr>
<td></td>
<td>– Subject # Aux + MV</td>
</tr>
<tr>
<td>(ii) Aux # MV</td>
<td>27</td>
</tr>
<tr>
<td>(iii) MV # Non-clausal complementation:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– MV # Object</td>
</tr>
<tr>
<td></td>
<td>– MV # Subject complement</td>
</tr>
<tr>
<td></td>
<td>– MV # Other complements</td>
</tr>
<tr>
<td>(iv) MV # Finite clausal complementation:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– MV # Object clause</td>
</tr>
<tr>
<td></td>
<td>– MV # Subject complement clause</td>
</tr>
<tr>
<td></td>
<td>– MV # Complement clause</td>
</tr>
<tr>
<td>(v) MV # Non-finite clausal complementation:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– MV # Subject complement clause</td>
</tr>
<tr>
<td></td>
<td>– MV # Extrapolated complement clause</td>
</tr>
<tr>
<td></td>
<td>– MV # Complement clause</td>
</tr>
</tbody>
</table>
The overview in Table 2 shows that there are certain preferred positions for CCs. To bring out the distribution pattern more clearly, a schematic and somewhat simplified version of Table 1 is provided in Figure 1, representing the distribution of a total of 582 predominantly clausal CCs.

![Figure 1: Schematic and simplified representation of CC positions of 582 mainly clausal CCs](image)

We can see that CCs occur at all major constituent boundaries. This confirms Peterson’s (1999: 239) constraint I (based on Emonds 1973), which

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5 This category captures only CCs following the subordinator in adverbial clauses. Those preceding it are grouped under (Cii).

6 In all these cases of coordination the CC comes immediately after the coordinator. Cases of clausal coordination where the CC comes before the coordinator have been classified as final, i.e. (Ciii).
stipulates that what follows a medial parenthetical must be a constituent of
the Host. The most frequent place of insertion is clearly the final position,
accounting for about one third of all clausal CCs (34.7%, 202 instances).
The least frequent patterns are between clause-initial adjunct and subject
and between auxiliary and main verb.

The corpus data also show that some of the constraints stipulated for the
insertion of parentheticals are not borne out by CCs. Compare for instance
Jackendoff’s (1972: 98) claim that “[o]ne totally aberrant position for […]
parenthesis is between the verb and the direct object” and Peterson’s (1999:
239) constraint II, which posits that a “parenthetical cannot (usually) inter-
vene between a verb and its object” (cf. also Emonds 1973: 335–336). With
a total of 29 CCs followed by (clausal and non-clausal) objects, this position
is rare but clearly attested (cf. Biii and Biv above).

Let us now turn to the insertion points with predominantly phrasal scope
in Table 3, illustrated with examples in (11). We can see that phrasal scope
is typically found with CCs occurring within an NP and is the only possibility
in pre-head position in an NP or between a preposition and its NP com-
plement. It is also, not surprisingly, the only scope possible with elliptical (i.e.
non-verbal) HCs.

(11) (a) I mean most pagan marriages like I think ninety per cent that’s what
happens (s1a-071-243)
(b) Father McDade d’you remember in I think lecture three uh Rabbi Sacks
said at one point faith is not measured by acts of worship alone (s1b-
028-88)
(ci) Uh in the uhm <,> I think October issue of Computational uh Linguistics
there’s an attempt to do something of this type (s1a-024-105)
(cii) W w we can only accomplish a cut in intrates rates interest rates however
against the background I believe of a genuine a general realignment of
European currencies (s2b-002-58)
(d) But uh sort of in my teens and twenties (I suppose every Saturday one of
my pleasures was to go to the local bookshop and buy another volume in
the Everyman Library <,> or whatever (s1a-013-107)
(e) Very good that I’m sure (s1a-003-40)
(f) And Greg Lemond I would think having to now reconstruct himself after that
terrible bashing her took yesterday in the mountains (s2a-016-40)
Table 3: Syntactic position of CCs with predominantly phrasal scope

<table>
<thead>
<tr>
<th>Position</th>
<th>Clausal scope</th>
<th>Phrasal scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Initial (elliptical/non-clausal Host)</td>
<td>-</td>
<td>14</td>
</tr>
<tr>
<td>(b) Within PP: P # NP</td>
<td>-</td>
<td>25</td>
</tr>
<tr>
<td>(c) Within NP:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Prehead position</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>- Posthead position</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d) Between adjuncts: A # A</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>(e) Final (elliptical/non-clausal Host)</td>
<td>-</td>
<td>52</td>
</tr>
<tr>
<td>(f) Other (elliptical HC, phrase internal)</td>
<td>-</td>
<td>8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>10</td>
<td>124</td>
</tr>
</tbody>
</table>

The investigation of phrasal scope in the corpus data shows that there is a clear link to position. It is possible to distinguish the following three different groups.

First, there are some positions that are exclusively linked to phrasal scope: between a preposition and its NP complement, between an NP head and its prehead dependent (determiner or adjective), and between two non-clausal adjuncts. The position between a preposition and its NP complement is not usually referred to in the literature but with 25 instances clearly attested in the corpus. This position attracts a certain type of CC. Almost half of the occurrences (10 out of 25) are made up by *I don’t know*. The remainder are *I think*, *I suppose*, *I reckon* or involve the predicate *say*, e.g. *I say*, *let’s say*. As for NP-internal position, insertion between the determiner and nondeterminer constituent of an NP is mentioned by Espinal (1991: 752, note 17) as a rare possibility. According to Taglicht (1998: 205), however, insertion of parentheticals between head and specifier is not possible in English. Again, this position is clearly attested in the corpus, as is insertion in post-head position in an NP.

Second, there are positions in clausal HCs where phrasal scope may occur. Thus it is attested as a genuine alternative to clausal scope for the positions (Biii) between main verb and non-clausal complementation, (Bvii) in coordinate structures, (Ciii) in clause-final position, and especially (Ci) preceding a clause-final non-clausal adjunct. Phrasal scope is also possible but less likely in (Aii) between an initial adjunct and the subject, (Bi) between subject and verb, and (Bii) between auxiliary and main verb. In all these positions phrasal scope depends either on prosodic binding to the left or the right, or the presence of certain CC predicates (such as *I don’t know*, *I’d say*, *let’s say*), and, more generally speaking, on the availability of a phrasal constituent in the immediate vicinity of the CC.
Phrasal scope is also attested with non-clausal (i.e. incomplete or elliptical) HCs, where the CC occurs typically in final position but also initially and, rarely, internally (cf. Table 3: (a), (e), (f)).

Third, there are also positions where phrasal scope is not attested. These are (Ai) initial position, (Bvi) both initially in matrix clauses and initially in subordinate clauses (typically following the subordinator), as well as (Biv, Bv) between main verb and clausal complementation. In the latter case phrasal scope seems to be ruled out simply by the lack of a non-clausal complement that could act as scope attractor (unlike Biii, where phrasal scope is relatively frequent).

Generally, what emerges from the figures in Table 2 and 3 is that clausal scope is clearly the most frequent and therefore unmarked option. As indicated in Table 4, phrasal scope accounts for 22.9 percent of all CCs and is therefore the marked variant.

| Table 4: Clausal and phrasal scope of CCs |
|-------------------|----------|---|
|                   | n.       | %  |
| Clausal scope     | 640      | 77.1% |
| Phrasal scope     | 190      | 22.9% |
| TOTAL             | 830      | 100% |

The different scopes are also indicative of different communicative functions of the CCs. From the examples given above it can be seen that CCs with clausal scope express a degree of speaker commitment with regard to the proposition expressed. As such, they represent a particular type of hedge referred to by Prince et al. (1982) as shield, which in the terminology of Hare (1970) mitigates the neustic (cf. also Schneider 2007). Most cases of phrasal CC, on the other hand, have a different function. As can be seen from examples (11a), (11b), (11c) above, for instance, the phrasal CC operates proposition-internally, i.e. on the phrastic (Hare 1970). In this function they qualify for classification as approximators (Prince at al. 1982) or what Caffi (1999) calls bushes. They still reduce speaker commitment but more indirectly by indicating that certain terms (e.g. 90%, lecture three, October issue) lack in precision. Approximative uses of CCs differ somewhat from prototypical approximators (e.g. sort of) since examples such as (11a), (11b), (11c) cannot be judged semantically false in contexts where the

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7 These are typically CCs within PPs, within NPs (in pre-head position), and between Adjuncts and less typically CCs with elliptical/incomplete HCs, whose missing parts are generally recoverable from the co(n)text and thus allow reconstruction of a complete host clause.
factual content lies clearly outside a plausible categorical range, say, 10 per cent, *lecture 51, February issue.* However, in such contexts examples (11a), (11b) and (11c) would be regarded as infelicitous or at least uncooperative. The approximative function thus derives via conversational implicature in accordance with conversational maxims. As such, they still reduce speaker commitment but more indirectly than epistemic shields.

Apart from the functions of shield and approximator it is possible to identify a further pragmatic use of CCs, which can be linked to their prosodic realisation and will be discussed in Section 5.3. Section 5.3 also provides a possible explanation for the approximative uses of CCs in terms of grammaticalisation and concomitant semantic bleaching of high-frequency CCs, which results in increased diffusion of their scope so that they can operate also over non-clausal Anchors, i.e. have phrasal scope.

5. Position and prosody


The aim of the present section is not to provide a detailed analysis of all prosodic aspects of CCs, but only those where prosody impinges on questions of scope and position of the CC.10 As outlined in Section 4.1, prosodic

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8 Cf. however Sadock (1972), who argues that even ordinary approximations have to be treated as almost unfalsifiable.
9 Bolinger (1989: 188) and Wichmann (2001: 188) also note the opposite possibility, viz. higher pitch.
binding to the left or right may decide whether a CC has to be classified as initial or final, or as having clausal or phrasal scope. Prosody, in other words, plays an important role for securing correct processing of the CC together with the intended Anchor (the HC or parts of it). As syntactically unattached, essentially ‘free-floating’ units, their insertion point alone often provides only insufficient information in that respect.

Identifying a CC as left- or right-bound depends on the presence of a tone unit boundary immediately following or preceding it. What exactly constitutes a tone unit boundary is, of course, not always easy to determine (cf. e.g. Cruttenden 1997: 29–37). Phonetic cues such as pauses, anacrusis, final syllable lengthening or change of pitch level/direction of unaccented syllables may provide some ‘external’ indication of a prosodic boundary but they are by no means conclusive. They may just as well simply be markers of hesitation. As noted by Cruttenden (1997: 32), for instance, “pause does not always mark intonation boundaries, nor are intonation boundaries always marked by pause” (cf. also Fagyal 2002: 94). These ‘external’ phonetic criteria therefore have to be complemented by ‘internal’ ones, i.e. whether the suspected tone unit in fact has the internal structure of one. By definition a tone unit must contain a pitch accent or nucleus (tonic). Analysis of the phonetic cues was carried out with the help of an acoustical analysis programme (PRAAT 4.4.33) and by listening to the stimuli, i.e. impressionistic listener perception (as suggested for instance by Wichmann 2001: 187, cf. also Peters 2006). Impressionistic analysis is not at all undesirable here since this is precisely what a speaker has to rely on in actual verbal interaction: correct processing of the prosodic signals by the listener. It lies in the nature of the speech material, however, that there are many indeterminate cases where a boundary cannot be unambiguously identified as such. These cases were generally classified as lacking an extra prosodic boundary.

5.1 Types of prosodic patterns

All in all, it is possible to distinguish four different prosodic patterns of CCs. Apart from left-binding and right-binding we also find left-right binding and prosodic independence. These four will be discussed in turn below.

In the case of left-binding the CC is integrated into the overall pitch contour of the preceding tone unit, i.e. completes it as (part of) its tail. This implies that the CC itself does not carry pitch accent (i.e. a nuclear tone). There is, however, a small subgroup (of 17 instances) where the CC is prosodically linked to material on its immediate left but itself carries pitch accent. This prosodic pattern is very much restricted to CCs in clause-second position, typically following a subordinator of some sort. Because of the low number of occurrences, such cases were included under left-binding rather than as a separate category.
The terminology of head, pre-head, tone unit, nucleus (or tonic), and tail referred to here is that of the British tradition of intonational analysis as discussed e.g. in Cruttenden (1997), Crystal (1969), Wichmann (2000).

Potentially ambiguous examples such as this one have been included as initial CCs despite the lack of intervening material between CC and HC (as specified in Section 2).

In the case of right-binding the CC is integrated into the overall pitch contour of the following tone unit, forming (part of) its head (or pre-head). This is illustrated in (13), repeated from (5b), where the CC I think has to be classified as initial as it is part of the following tone unit. This is indicated by the considerable step up in pitch (from around 100 Hz on you to around 180 Hz on think) as well as the anacrustic nature, i.e. greater speed, of the CC.
English comment clauses: position, prosody, and scope

(13) but these features and they'll be familiar to you (I think they include such things as uh a certain distrust of fact (s2a-021-99)

CCs may also take the form of **left-right binding**, in which case the CC is integrated in the middle of a larger pitch contour. This form corresponds roughly with Wichmann’s (2001: 185) strategy of “prosodic integration”. Like left-bound or right-bound CCs, left-right bound CCs are integrated in a larger pitch contour, and as such, they do not contain an accented syllable, i.e. one that initiates a new pitch trend. Unlike left-bound or right-bound CCs, however, they are not in the immediate vicinity of a tone unit boundary. It is possible for a left-right bound CC to be separated from the HC by pauses (or some filler) since pauses are not necessarily boundary markers (as noted above). A typical example of a left-right bound CC is given in (14).

(14) blinkered *I think* is a nice word if you’re describing someone that you don’t like (s1a-037-217)

Unlike left-right bound CCs, **independent** CCs are prosodically unintegrated in the sense that they form a tone unit of their own. This implies that they
contain at least one accented syllable and are marked off from the HC by prosodic boundaries.\textsuperscript{14} These boundaries may be indicated by pauses, but not necessarily so. Other boundary markers are, as noted above, anacrusis, final syllable lengthening, change of pitch level/direction of unaccented syllables (cf. Cruttenden 1997: 35). A typical example of a prosodically independent CC is given in (15).

(15) The LSE would be doing that principally and you need (\textit{I argue}) an a rule-based knowledge system before you can articulate what a text grammar should be (s1a-024-87)

A particular problem for identification of prosodic independence are CCs in final position (cf. Cruttenden 1997: 36–37 for final reporting clauses). The difficulty lies in establishing whether the final CC has its own nuclear tone, i.e. its own tone unit, or whether it is the continuation (Tail) of a nuclear tone preceding the CC and as such is part of that tone unit. A case in point is example (16), where there is only a slight rise in pitch on the CC after an immediately preceding nuclear fall. Unclear instances such as this one have been analysed as a continuation (Tail) of a preceding fall-rising tone and therefore coded as left-bound. Only where there is a distinct pitch change in the CC has it been classified as prosodically independent.

\textsuperscript{14} The present framework does not take into account what are sometimes called \textit{compound tones} (cf. e.g. Crystal & Davy 1975: 26, Stenström 1999: 292), i.e. fall-rise (as opposed to a fall-rising tone).
English comment clauses: position, prosody, and scope

(16) They’d have to sell one I think) (s1a-017-142)

A further problem for classification are instances of pitch continuation preceded by a pause, such as in example (17).

(17) I was programming in Pascal which really wasn’t very exciting <,> I’m afraid) (s1a-008-1)

This particular example of a CC, in principle, allows two different analyses, depending on one’s recognition of level tones and on how much weight is given to pauses as boundary markers. It could either be classified as prosodically independent with a level tone on afraid or as left-bound CC functioning as Tail of the preceding nuclear tone on exciting. In the present framework I follow Cruttenden (1997: e.g. 35; cf. also Fagyal 2002: 94) in taking the presence of pitch accent on the CC to be crucial and have therefore opted for the latter analysis. The same procedure applies, mutatis mutandis, for initial CCs.
5.2 Corpus results

Let us now look at the frequencies of the four different prosodic types in the corpus and investigate possible correlations of prosody with position and lexical items. Table 5 gives the distribution of the four prosodic patterns according to text types.

Table 5: Frequency of CCs according to prosodic binding and text types

<table>
<thead>
<tr>
<th></th>
<th>Private dialogue s1a</th>
<th>Public dialogue s1b</th>
<th>Unscripted monologue s2a</th>
<th>Scripted monologue s2b</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>L-bound</td>
<td>117 36.0%</td>
<td>73 26.1%</td>
<td>48 30.6%</td>
<td>25 38.5%</td>
<td>263 31.8%</td>
</tr>
<tr>
<td>R-bound</td>
<td>55 16.9%</td>
<td>56 19.9%</td>
<td>26 16.6%</td>
<td>8 12.3%</td>
<td>145 17.6%</td>
</tr>
<tr>
<td>L-R bd.</td>
<td>41 12.6%</td>
<td>92 32.7%</td>
<td>52 33.1%</td>
<td>13 20.0%</td>
<td>198 24.0%</td>
</tr>
<tr>
<td>Independ.</td>
<td>112 34.5%</td>
<td>59 21.0%</td>
<td>30 19.1%</td>
<td>19 29.2%</td>
<td>220 26.6%</td>
</tr>
<tr>
<td>Total</td>
<td>325 100%</td>
<td>280 100%</td>
<td>156 100%</td>
<td>65 100%</td>
<td>826 100%</td>
</tr>
</tbody>
</table>

The figures show that all four prosodic types are substantially represented in the corpus, with left-binding being most frequent, followed by prosodic independence, left-right binding, and right-binding. The high frequency of left-bound CCs provides some support for Taglicht’s (1998: 196–197) principle of ‘Leftward Grouping of parentheticals’ based on introspective data. At the same time, however, the high frequencies of the other types demonstrate that ‘Leftward Grouping of parentheticals’ is no more than a general tendency when it comes to naturally occurring data. The results also contradict Quirk et al.’s (1985: 1112) claim that comment clauses “generally have a separate tone unit”. Only 26.6 percent of all CCs were prosodically independent, i.e. had a separate tone unit.

To investigate possible correlations between prosody and position, Tables 6 and 7 break down the figures according to the position of CCs identified in Section 4.

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15 Four soundfiles are missing in ICE-GB, viz. s1a-095-11, s1a-090-220, s1ab-063-192, s2a-058-53.
Table 6: Prosodic patterns of CCs with predominantly clausal scope according to position
(# = point of insertion, MV = main verb)

<table>
<thead>
<tr>
<th></th>
<th>L-bound</th>
<th>R-bound</th>
<th>L-R bound</th>
<th>Indep.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. PRENUCLEAR POSITION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Initial</td>
<td>0</td>
<td>28</td>
<td>0</td>
<td>40</td>
<td>68</td>
</tr>
<tr>
<td>(ii) Adjunct # Subject:</td>
<td>6</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td><strong>B. MIDDLE POSITION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Subject # Verb</td>
<td>12</td>
<td>18</td>
<td>38</td>
<td>19</td>
<td>87</td>
</tr>
<tr>
<td>(ii) Aux # MV</td>
<td>2</td>
<td>5</td>
<td>11</td>
<td>11</td>
<td>29</td>
</tr>
<tr>
<td>(iii) MV # Non-clausal complem.</td>
<td>11</td>
<td>18</td>
<td>18</td>
<td>14</td>
<td>61</td>
</tr>
<tr>
<td>(iv) MV # Finite clausal complem.</td>
<td>8</td>
<td>0</td>
<td>7</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>(v) MV # Non-finite clausal compl.</td>
<td>6</td>
<td>0</td>
<td>3</td>
<td>7</td>
<td>16</td>
</tr>
<tr>
<td>(vi) Subordinate clauses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Subordinator # Adverbl/N-cl.</td>
<td>5</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>– Relative el./zero # Rel. clause</td>
<td>13</td>
<td>4</td>
<td>51</td>
<td>3</td>
<td>71</td>
</tr>
<tr>
<td>– Noun # Relative element</td>
<td>3</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>(vii) Coordinator # Clause/Phrase</td>
<td>2</td>
<td>1</td>
<td>9</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>(viii) Other</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td><strong>C. POSTNUCLEAR POSITION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) VP # non-clausal Adjunct</td>
<td>11</td>
<td>20</td>
<td>18</td>
<td>13</td>
<td>62</td>
</tr>
<tr>
<td>(ii) VP # clausal Adjunct</td>
<td>9</td>
<td>6</td>
<td>3</td>
<td>5</td>
<td>23</td>
</tr>
<tr>
<td>(iii) Final</td>
<td>132</td>
<td>0</td>
<td>0</td>
<td>67</td>
<td>199</td>
</tr>
<tr>
<td><strong>Total</strong>16</td>
<td>220</td>
<td>107</td>
<td>175</td>
<td>190</td>
<td>692</td>
</tr>
</tbody>
</table>

---

16 Four soundfiles are missing in ICE-GB
Table 7: Prosodic patterns of CCs with predominantly phrasal scope according to position

<table>
<thead>
<tr>
<th>Position Type</th>
<th>L-bound</th>
<th>R-bound</th>
<th>L-R bound</th>
<th>Indep.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Initial (ellip./non-clausal HC)</td>
<td>0</td>
<td>11</td>
<td>0</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>(b) Within PP: P # NP</td>
<td>2</td>
<td>12</td>
<td>5</td>
<td>6</td>
<td>25</td>
</tr>
<tr>
<td>(c) Within NP</td>
<td>5</td>
<td>11</td>
<td>11</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>(d) Between adjuncts: A # A</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>(e) Final (ellip./non-clausal Host)</td>
<td>34</td>
<td>0</td>
<td>0</td>
<td>18</td>
<td>52</td>
</tr>
<tr>
<td>(f) Other</td>
<td>1</td>
<td>0</td>
<td>7</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>43</td>
<td>38</td>
<td>23</td>
<td>30</td>
<td>134</td>
</tr>
</tbody>
</table>

The corpus results show that non-clausal constituents attract prosodic scope (i.e. R- or L-binding) more than clausal ones. This is particularly obvious when we compare (Biii), ‘MV # non-clausal complementation’, with (Biv) and (Bv), ‘MV # clausal complementation’. In the former there is a clear preference for R-bound over L-bound, whereas in the latter two the reverse is true, with R-binding not occurring at all. The same pattern is noticeable when we compare (Ci), ‘VP # non-clausal Adjunct’, with (Cii), ‘clausal Adjunct’. The reason for this strong attractive force of non-clausal (phrasal) constituents seems to lie in their greater compactness and hence ability to function cognitively as ‘figure’ against the ‘ground’ provided by the clause as a whole. In the case of CCs inserted between MV and complement the choice between L-bound and R-bound prosody is even statistically highly significantly affected by the independent variables clausal and non-clausal complements ($\chi^2 = 18.01 > 6.64, df = 1$).

The results also confirm Wichmann’s (2001: 185) assumption that medial CCs tend to be prosodically integrated, provided that we interpret “prosodically integrated” as including not only L-R bound, but also L-bound and R-bound: of a total of 493 CCs in non-peripheral position (i.e. excluding initial and final), only 18.7 percent (92 instances) are prosodically independent, the rest are either L-bound (19.7%, 97), R-bound (21.5%, 106), or, with a clear majority, L-R bound (40.1%, 198).

Overall, the overwhelming majority of CCs is prosodically integrated in some form, i.e. either L-R bound, L-bound, or R-bound. This is especially true for CCs with high frequency such as I think, I suppose, which together account for 56 percent of all CCs in the corpus. The strong preference of short and high frequency CCs for prosodic integration lends support to the view that CCs are being grammaticalised (or pragmaticalised) into discourse
markers (cf. e.g. Traugott 1995: 38–39, Aijmer 1997: 3–10, Thompson & Mulac 1991, Mindt 2003), which are often fully integrated prosodically (e.g. Erman 1987: 57 for *I mean*, He & Lindsay 1998: 139 for *you know*). This grammaticalisation process involves bleaching of the epistemic meaning of the CC and increased use of the CC as a mainly textual device for linking purposes and the structuring of information flow (cf. e.g. Taglicht 1984: 22–28, Ziv 2002). The narrowing of scope from clausal to phrasal, discussed in Section 4, can be taken as an intermediary step in this development away from an epistemic comment to a pleonastic structuring device: although far from being purely structural devices, phrasal scope CCs have already moved away from a purely epistemic function (Prince et al.’s shield) acting more like approximators (as discussed in Section 4.2).

Evidence for a structural or filler function of CCs also comes from cooccurrence facts. Thus, a substantial number of CCs occur together with disfluency phenomena such as fillers (e.g. *you know*, *I mean*), hesitation sounds (*uhm*, *uh*), word repetitions, pauses (<,> short, <,,> long), and backtracking/restarts, as in (18).

(18) I mean *I think* really *uhm* <,,> it’s very difficult to to to produce any form of art unless you are driven <,> (s1a-015-145)

Disfluency features as these in the immediate environment of CCs are by no means rare, as illustrated in Table 8, and suggest a similar ‘filler’ function for CCs.

**Table 8: Disfluencies in the immediate co-text of CCs**

<table>
<thead>
<tr>
<th></th>
<th>Preceding CC</th>
<th>Following CC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filler (<em>you know, I mean, like, oh</em>)</td>
<td>54</td>
<td>51</td>
</tr>
<tr>
<td>Hesitation sound (<em>uh, uhm</em>), repetition</td>
<td>64</td>
<td>87</td>
</tr>
<tr>
<td>Pause</td>
<td>59</td>
<td>116</td>
</tr>
<tr>
<td>Backtracking/restarts</td>
<td>-</td>
<td>28</td>
</tr>
</tbody>
</table>

If we analyse the data according to the number of disfluency features irrespective of exact position (i.e. preceding or following the CC), we get the following overall results (Table 9).
Table 9: Number of disfluency features immediately preceding or following CC

<table>
<thead>
<tr>
<th>Disfluency Features</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>198</td>
</tr>
<tr>
<td>2</td>
<td>78</td>
</tr>
<tr>
<td>3</td>
<td>25</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>309</td>
</tr>
</tbody>
</table>

Thus, in 309 cases (of a total of 830 CCs) we find at least one disfluency feature in its immediate co-text (with a maximum of four, as in example 18). This seems to suggest that the use of CCs is often linked to online production difficulties with the CC playing more of a structural/filling role rather than a commenting one.

6. Conclusion

This paper has focussed on the complex interaction of the parameters of scope, position, and prosody in the case of naturally occurring instances of spoken CCs. It was shown that the (semantic-pragmatic) scope of a CC is influenced by two main factors, position and prosody. This interaction results in two types of scope: clausal, covering the entire Host Clause, or phrasal, i.e. singling out individual constituents (Anchors) or covering elliptical HCs. These two types of scope also differ in their communicative functions. While CCs with clausal scope represent epistemic shields (Prince et al. 1982) and as such express degree of speaker commitment with regard to the proposition expressed, CCs with phrasal scope qualify for classification as approximators (in Prince at al.’s 1982 terms) and as such operate proposition-internally.

The prosodic analysis, which has identified four main patterns, has shown that the prosodic realisation of CCs in terms of left- or right-binding has an impact on their scope, but is also influenced by position and lexical type of CC. Generally speaking, there is a strong preference of CCs, especially high-frequency ones, for prosodic integration in some form. This can be seen as part of a grammaticalisation (or pragmaticalisation) process of CCs into prosodically more integrated discourse markers. A concomitant feature of this pragmaticalisation process is the bleaching of their epistemic meaning and the development into pleonastic structuring devices for textual organisation. Evidence for such a development can also be found in phrasal scope CCs, which have already lost some of their epistemic commenting
function and operate not so much as epistemic shields but as approximators.

References


Gunther Kaltenböck
Department of English
University of Vienna