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CHAPTER THIRTEEN

CLASSROOM DISCOURSE: THE PROMISE AND COMPLEXITY OF DIALOGIC PRACTICE[1]

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We estimate that the average English primary teacher poses over 60,000 questions and follows up pupil responses with over 30,000 evaluations in every year of classroom lessons. This talk is shaped by deeply ingrained habits, resulting in part from an estimated 13,000 hours spent as a pupil watching others' teaching practice (Lortie, 1975). However, a recent resurgence of interest in classroom discourse among educational researchers and policy-makers is focussing attention on patterns of teacher talk. This attention, in turn, is placing demands upon teachers that they transform their talk, making conscious and informed choices about what had heretofore normally been second nature.

How should teachers and teacher educators respond to these demands? What do they need to know and understand about classroom discourse? In addressing these questions we review a broad consensus emerging from three decades of research on the topic, according to which (i) the way teachers and pupils talk in the classroom is crucially important, but (ii) the dominant pattern of classroom discourse is problematically monologic, so (iii) it should be replaced with more dialogic models. While we find much merit in this conventional wisdom, in this chapter we also show its limitations, arguing that teaching and classroom interaction are far more complicated and problematic than is typically captured by descriptions of and prescriptions for dialogue.

One note about the scope of our discussion: Pupils and teachers talk in multiple classroom settings and configurations, including, for example, whole class lecture or discussion, pupils talking in pairs, one-on-one teacher-pupil conferencing, and small group work (with and without teacher guidance). Here we focus primarily on discourse in the whole class setting, partly on account of space limitations, but also because the complexities we examine are most pronounced in this configuration. We caution, however, that this focus should not be interpreted as in any way detracting from the importance of alternative settings; indeed, good pedagogy draws upon a broad repertoire of teacher and pupil discourse and interactive forms (Alexander, 2005).

Classroom talk matters

Intuitively, how teachers and pupils communicate must be important: after all, talk is central to most of what happens in classrooms. Through talk, for example, concepts are explained, tasks demonstrated, questions posed, and ideas discussed; indeed, one is hard-pressed to think of any significant school activities that do not involve talk in some way. But talk's ubiquity in classrooms is a rather weak argument for its importance. Perhaps children would be better served by lessons with less talk, thereby allowing each to get on with their own work, individually, without the distractions of teacher guidance, pupil chatter and other noise. However, a strong argument ties talk and language to pupil thinking, learning and development. In a famous passage, Vygotsky asserts the primacy of social interaction in human development:

> Every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first, between people (interpsychological) and then inside the child (intrapsychological)... All the higher mental functions originate as actual relations between people. (Vygotsky, 1978, p. 57)

Vygotsky argues that thinking originates in social interaction – that discourse between people is internalised as individual cognition. There are at least three ways in which internalised talk can advance thinking. First, language is a cognitive resource: by being exposed to and participating in certain ways of using language, one becomes a "fluent speaker" of that language, able to use and understand its key concepts and expressions (cf. Lemke, 1990). Second, through talk participants are exposed to alternative voices and perspectives that challenge or elaborate their own world-view. Third, habitual interactional patterns – e.g. providing all participants opportunity to voice their views, demanding and providing justification for arguments, questioning assumptions, clarifying concepts, and so on – are internalised as habitual ways of thinking. Indeed, Sfard (2008) argues that the similarities between interpersonal communication and individual cognition are such that they can usefully be thought of as different manifestations of the same processes.

In short, the ways of talking into which we are socialised shape both the cognitive tools at our disposal and the habits of mind whereby we put those tools to use. This idea is supported by numerous studies of the relationship between classroom talk and pupil learning (see Mercer [2008] for a succinct review). This raises the question: What ways of talking do children most commonly encounter in classrooms?

Conventional patterns of classroom talk

It is difficult to generalise about classroom talk, since different classroom cultures have developed in different national contexts (cf. Alexander, 2001); schools, teachers and pupils differ within contexts; and indeed patterns of talk in the same class may vary with changing topics, aims and activities. Nevertheless, over three decades of research in a wide variety of Anglo-American schools have found relatively consistent patterns in the whole class teaching observed (e.g. Cazden 2001; Edwards & Westgate 1994; Galton, Hargreaves, Comber and Pell, 1999; Mehan, 1979; Sinclair & Coulthard, 1975; Smith, Hardman, Wall & Mroz, 2004). Teachers dominate classroom interaction, talking most of the time, controlling topics and allocation of turns, judging the acceptability of pupil contributions, and policing inappropriate behaviour. Pupils talk much less than the teacher, for shorter durations and in most cases only in response to teacher prompts. Whole class discourse is typically structured in Initiation-Response-Evaluation (IRE) cycles: teachers initiate topics, primarily by asking predictable, closed questions that test pupils' recall of previously transmitted information; pupils respond with brief answers; and teachers evaluate pupil responses, praising correct answers ("well done!") and/or censuring error ("you haven't been paying attention!"). (Some researchers prefer IRF [Initiation-Response-Feedback] to IRE, thereby signalling the multiple functions that can be performed in the third move [Wells, 1993]. However, given the actual frequency of evaluation, we find IRE to be a more fitting description.)

To illustrate these patterns, consider the segment in Extract #1, which was recorded during a Year 5 lesson (pupils aged 9 to 10 years) on apostrophes in Southern England in April 2004 (for details about the study from which this episode was extracted see Lefstein, 2005, 2008). Prior to this segment the pupils completed a worksheet of exercises involving placement of missing apostrophes. The teacher, Ms. Goodwin, then orally reviewed their answers sentence-by-sentence.

Extract #1 – *"Hundreds of animals bones"*

```
1    Ms. Goodwin:    next sentence
2                    sh:h (2)
3                    "Its made (.) of hundreds (.) of animals (.) bones" (.)
4                    lots of "s"-es in there (.)
5                    Drew
6    Drew:           bones
7                    (2)
8    Ms. Goodwin:    is it just telling you
9                    there's more than one bone
10                   or is it telling you that
11                   something belongs to those bones?
12                   (7)
13   Ms. Goodwin:    does anything belong to those bones?
14   Drew:           no
15   Ms. Goodwin:    no (.)
16                   it's not one
17                   that's just an "s" to show
18                   that it's more than one (.)
19                   Beatrice
20   Beatrice:       its
21   Ms. Goodwin:    its is the first one
22                   which is short for (.)
23   Pupil:          it is
24   Ms. Goodwin:    it is made (.) of hundreds (.) of animals (.) bones
25                   Keith
26   Keith:          hundreds
27                   (1)
28   Keith:          no
29   Ms. Goodwin:    what belongs to the hundreds?
30   Keith:          no (.) animals
31   Ms. Goodwin:    animals (.) good
```

Ms. Goodwin introduces the problem by restating the sentence, "Its made of hundreds of animals bones" (line 3). Since the class have already reviewed a number of similar exercises, this restatement of the problem is understood by the pupils as a prompt to provide the answer. This initiation elicits three responses, each of which is further probed by Ms. Goodwin. See Figure 16.1 for a schematic summary of the segment's structure.

Response #1: Drew responds with "bones", which is incorrect. Ms. Goodwin does not explicitly evaluate this response, though her rejection of his answer is palpable in the two second pause in line 7 – correct responses in Ms. Goodwin's classroom are immediately accepted – and in her probing of his answer (in lines 8-13). In following up Drew's response, Ms. Goodwin questions whether the "s" in bones signifies the plural form or possession (lines 8-11). This initiation is met with seven seconds of silence, after which she reformulates her question with the more straightforward "does anything belong to those bones?" (line 13). Drew responds, "no", which Ms. Goodwin confirms by repeating it (line 15). She then draws out the implication – "[bones] is not one [of the correct answers]" (line 16) – and then elaborates upon his one-word answer by explaining the function of the "s" that presumably confused him (lines 17-18).

Response #2: Since Drew's response has been rejected, the floor is now open to other guesses. Beatrice responds with "it's", which is positively evaluated by her teacher (in line 21). Ms. Goodwin then follows up with a new initiation, asking what "it's" is short for (line 22). An unidentified pupil offers the correct response, which is also positively evaluated through repetition of the sentence with the contraction spelled out.
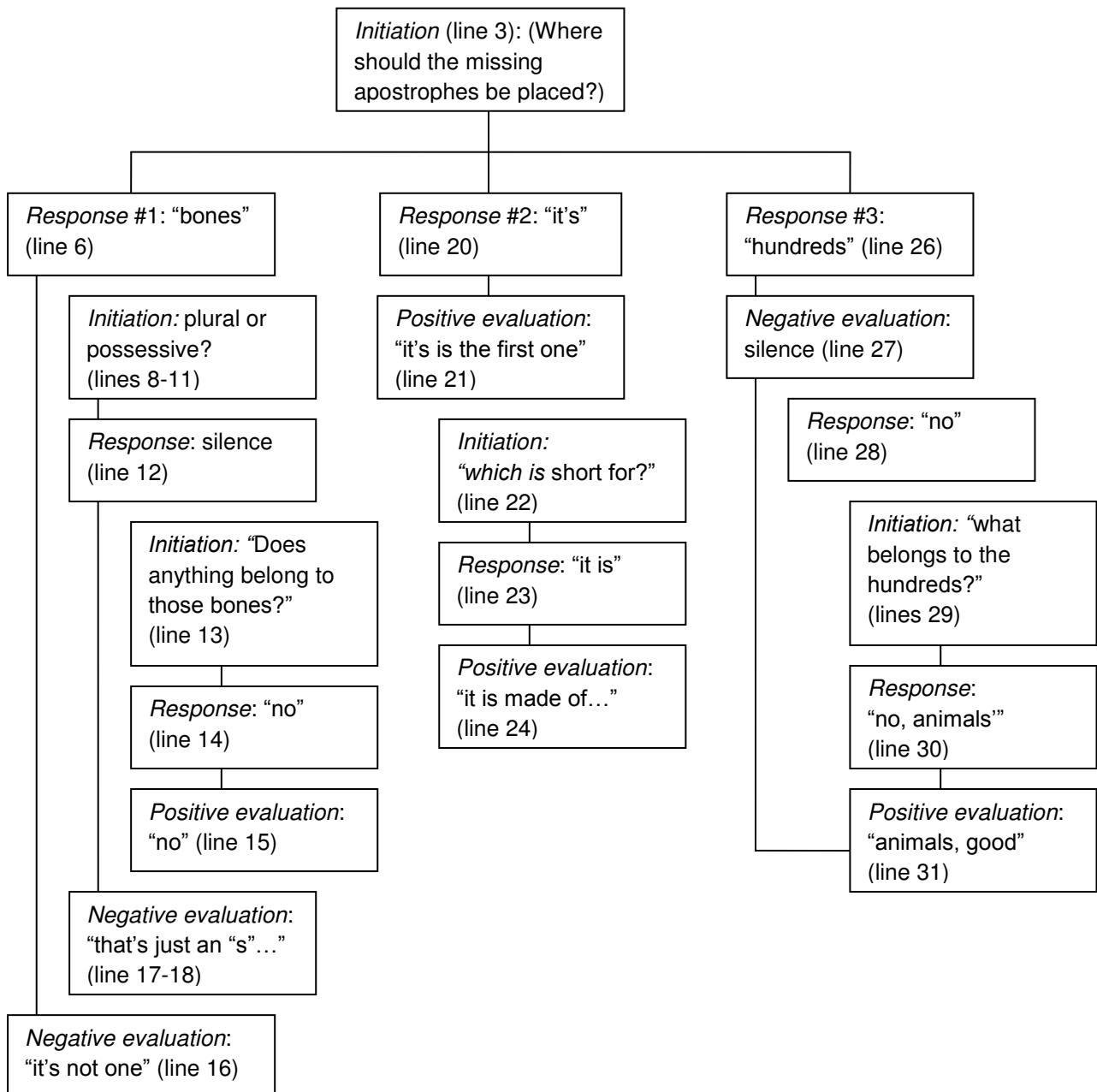
Figure 16.1: Schematic structure of Extract #1

Response #3: For each of these problems two apostrophes were missing, so, now that the first one has been located, the (unstated) question is where the second apostrophe should be placed. In line 26 Keith offers "hundreds", but then retracts this answer one second later, after it was not ratified as correct. Ms. Goodwin begins to probe his response (in line 29) – an additional sign that it is incorrect – and Keith changes his response to "animals" (line 30), which is indeed praised as correct (in line 31).

In addition to the IRE structure, the segment exhibits the other discourse features reviewed above: the teacher controls the topic, allocates turns, and talks more often and for longer durations than the pupils, who respond with one or two word answers. Ms. Goodwin poses "closed questions", i.e. questions for which the teacher has one correct answer in mind. Repeated investigations have found a much higher rate of closed than open questions in teacher discourse. For example, in a major study of classroom interaction in English classrooms, Galton and colleagues (1999) found

that 59.3% of all teacher questions were closed questions, either requiring a factual answer or one correct solution to a problem, while only 9.9% were open questions, in which more than one response was acceptable; the remaining 30.8% of questions posed were concerned with task supervision and classroom routine (see Galton, Croll & Simon [1980], Alexander [1995] and Smith and colleagues [2004] for other studies yielding very similar results with different groups of English primary teachers and at different historical moments).

This high rate of closed questioning, and the IRE structure of which it is a part, have been widely criticised as detrimental to pupil independent thinking and learning. First, the structure positions teachers (and textbooks) as the sole legitimate sources of knowledge; the pupils' role is to recall and recite for evaluation what they have previously read or been told. Second, the structure tends to produce a rather disjointed lesson overall, with teachers moving from topic to topic with little or no clear line of reasoning. A third criticism is that, to the extent that participants do engage in more demanding cognitive activities (e.g. explaining concepts, relating ideas to one another, challenging and/or justifying positions), the bulk of the work is performed by the teacher.

With regard to extract #1, while the activity is not highly demanding, the division of labour is noteworthy: Ms. Goodwin does most of the academic work, posing the problems, judging responses, and elaborating the justifications for pupil answers (both right and wrong). Pupils' efforts are focused on figuring out what their teacher wants to hear, and many of them employ ingenious strategies to accomplish this task without necessarily attending to the substantive issues raised by the problems posed. Consider, for example, Keith's responses in lines 26-30. He first guesses "hundreds", but when this response is not immediately accepted, he takes back his response (line 28), and changes it to "animals" (line 30). How did he divine this new answer? The pupils have already been cued (in line 4) that the right answers will be words that end with an "s", so by process of elimination – "bones", "it's", and "hundreds" having already been considered – the remaining correct answer must be and indeed is "animals". Throughout the lesson, a number of pupils employed this strategy of guessing one answer and switching if it was not immediately accepted. The strategy is enabled by Ms. Goodwin, of course, by the nature of the questions she asks and by the very predictable ways in which she evaluates responses (see Street, Lefstein and Pahl [2007] for further examples and discussion of this phenomenon).

To summarise our argument up to this point: language and interaction play crucial roles in learning and development, but the structures of classroom discourse in which most pupils regularly participate are not well-suited for mediating pupil learning or for shaping postitive habits of mind. Such talk focuses pupils on divining what is in the teacher's mind, rather than thinking for themselves; promotes uncritical acceptance of teacher and textual authority; and limits the potential range of perspectives pupils encounter. What are the possible alternatives to this state of affairs? In the next section we look at recent efforts to make classroom discourse more dialogic.

Dialogic alternatives
Researchers and educators from a range of disciplinary and practical contexts have sought to transform conventional classroom discourse patterns, recommending in their stead alternative models of talk and interaction. "Dialogue" is often invoked in discussions of preferred modes of classroom talk: for example, relevant book titles include Dialogue in teaching (Burbules, 1993) Opening Dialogue (Nystrand, Gamoran, Kachur & Prendergast, 1997), Dialogic Inquiry (Wells, 1999), Towards Dialogic Teaching (Alexander, 2005) and Educational Dialogues (Howe & Littleton, in press). Likewise, the UK government has recently begun to champion "dialogic" practice (DfES, 2003; QCA, 2005), though this official adoption of the term has been severely criticised. In this regard, Alexander (2004) warns of the danger "that a powerful idea will be

jargonised before it is even understood, let alone implemented, and that practice claiming to be 'dialogic' will be little more than re-branded chalk and talk or ill-focused discussion."

A wide variety of ideas are attached to dialogue, owing to the concept's rich and long history, which includes uses across a broad range of disciplines, including philosophy (e.g. Plato, Buber), literary theory (e.g. Bakhtin), critical pedagogy (e.g. Freire) and psychology (e.g. Rommetveit). The various dialogic approaches differ in many respects, depending on their educational and social aims, and the dimensions of talk and social interaction upon which they focus. In what follows we briefly review five of the key dimensions addressed, noting with regard to each dimension the relevant critique of traditional classroom practice and examples of alternative, dialogic practices proposed.

Structural dimension: many dialogic models seek to replace teacher-dominated IRE with more equitable interactional structures, in which participants freely exchange ideas (rather than all communication being mediated by the teacher), discursive rights and responsibilities are more evenly distributed, and all voices are given an opportunity to be heard. Approaches that emphasise this structural dimension often enumerate rules for teachers to follow. For example, the "Teacher Talk" section in a government handbook (DfES, 2003: 22) includes a list of dos and don'ts, excerpts of which are reproduced in Figure 16.2:

DO	**DON'T**
• choose questions and topics that are likely to challenge children cognitively	• merely ask children to guess what you are thinking or to recall simple and predictable facts
• expect children to provide extended answers which will interest others in the class	• tolerate limited, short answers which are of little interest to other children
• expect children to speak for all to hear	• routinely repeat or reformulate what children have said
• signal whether you want children to **offer** to answer (hands up) or to **prepare** an answer in case you invite them to speak	• habitually use the competitive 'hands up' model of question and answer work
• when children give wrong answers ask them to explain their thinking and then resolve misunderstandings	• praise every answer whether it is right or wrong

Figure 16.2: Excerpts from the DfES 2003 advice on Teacher Talk

Epistemic dimension: many dialogic models seek to replace traditional reliance on teacher and textbook with a more critical stance toward knowledge. In such a stance, pupils and teachers take an active role in meaning-making, are authorised to contribute perspectives (and their perspectives are deemed worthy of being taken seriously), and focus on questions that are open to genuine inquiry. Scott, Mortimer and Aguiar (2006) capture this idea well in their contrast of authoritative and dialogic facets of discourse: in the former "the teacher's purpose is to focus the students' full attention on just one meaning", while in the latter "the teacher recognizes and attempts to take into account a range of students', and others', ideas" (p. 610).

Interpersonal dimension: many dialogic models seek to develop a collaborative and supportive learning community instead of the individualistic, competitive and impersonal environment commonly found in contemporary classrooms. Relationships are seen as key to building and maintaining such a community:

> [D]ialogue is not fundamentally a specific communicative form of question and response, but at heart a kind of social relation that engages its participants. A successful dialogue involves a willing partnership and cooperation in the face of likely disagreements, confusions, failures, and misunderstandings. Persisting in this process requires a relation of mutual respect, trust, and concern – and part of the dialogical interchange often must relate to the establishment and maintenance of these bonds. (Burbules, 1993: 19-20).

This interpersonal dimension is also emphasised, for example, in Alexander's (2005) notion of dialogue as supportive: "children articulate their ideas freely, without fear of embarrassment over 'wrong' answers; and they help each other to reach common understandings" (p. 34). Similarly, interpersonal concerns are central to Mercer's (2000) distinction between disputational, cumulative and exploratory forms of talk. Disputational talk is characterised by high levels of competitiveness and criticality as participants defend their own positions; cumulative talk is characterised by high levels of solidarity as participants desist from criticising one another; only in exploratory talk are relationships conducive to participants' critical yet constructive engagement with each other's ideas.

Substantive dimension: dialogic models seek to replace the often disjointed nature of classroom discourse, in which the teacher leads the class through a series of unrelated IRE cycles, to discussions characterised by what Alexander (2005) refers to as dialogic teaching's cumulative feature: "teachers and children build on their own and each others' ideas and chain them into coherent lines of thinking and enquiry" (p. 34). Similarly, this dimension is central to Michaels, O'Connor and Resnick's (2008) Accountable Talk framework, which guides pupils and teachers to talk in ways that are accountable to the learning community ("attending seriously to and building on the ideas of others"), to standards of reasoning ("emphasizing logical connections and the drawing of reasonable conclusions") and to knowledge ("making an effort to get their facts right and making explicit the evidence behind their claims or explanations").

Political dimension: underlying many dialogic models are political concerns, including, for example, seeking ways of giving pupils greater agency and voice in the conduct of classroom life, empowering traditionally disenfranchised groups, and transforming schools into "places where students learn the knowledge and skills necessary to live in a critical democracy" (Giroux & McLaren, 1986: 224). Dialogue is promoted as a means of subverting often authoritarian and alienating classroom power relations, granting pupils greater freedom and self-determination.

How do these different dimensions play out in actual classroom discourse? We spent two terms last year exploring possibilities for whole-class dialogue with a group of primary teachers in an East London school as part of the ESRC-funded, "Towards Dialogue: A Linguistic Ethnographic Study of Classroom Interaction and Change" project (RES-061-25-0363). As part of this study we facilitated teacher group discussions of video-recorded lesson excerpts, including the following extract which was recorded during a Year 6 literacy lesson (pupils aged 10 to 11 years) in late November 2008. We invite the reader to consider this extract in relation to the dimensions outlined above. The class have been reading and discussing C.S. Lewis' The Lion, The Witch and the Wardrobe. In this particular lesson, they look at Chapter 14, in which Aslan (the Lion) surrenders himself to the White Witch. Extract #2 occurs about 40 minutes into the lesson. The pupils had been working in groups, each group addressing a different question arising from the text. In the segment captured below, the teacher, Ms. James, leads the class in discussion of one of these questions, regarding why the gateway to Narnia was not always open.

Extract #2 – Getting in to Narnia

```
1   Ms James:     when they went in there again
2                 it was all blocked up wasn't it
3                 they [couldn't get through
4   Sean:              [((nods emphatically))
5   Ms James:     why is that
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6                why- why did that happen (.)
7                this group why do you think that happens
8   Sean:        becau:[s:e
9   Ben:               [erm
10  Ms James:    right Sean was just about to say something then
11               (3)
12  Sean:        I don't know
13  Ms James:    you're not sure
14               o:ka:y
15               maybe you can add something in a moment
16               Ben
17  Ben:         I think
18               maybe it's because erm
19               they only let people in at certain times (1)
20               like (1)
21               like when they- Aslan was back
22               they let Peter and Susan in
23  Ms James:    okay
24               do you think that maybe the wardrobe only lets in
25               good people
26  Anon:        (nope)
27  Anon:        why did (they)
28  Julie:       but she let in Edmund- they let in Edmund
29  Ms James:    so we're not saying it-
30               we- we're disagreeing with that then
31  Sean:        they only let certain people in
32  Ms James:    only let certain people in
33               bu:t if there's some-
34               we're saying they only let good people in
35               why do they let Edmund in
36               what do you think Brian
37  Brian:       I think it's if they believe in it
38  Vanessa:     yeah that's what I think
39               because (.)
40               erm Lucy-
41               Lucy wou- didn't know about it and then she (.)
42               went in Narnia and then she found out that it was there
43               and she believed in it
44  Ms James:    but can I just disagree with Brian-
45               do you mind if I disagree with you Brian
46               right
47               the rest of the children
48               they didn't really believe in it did they
49               Peter and Susan
50               they thought that Lucy was ju:st
51               being silly be- because of her age
52               and they all rushed into the wardrobe didn't they
53               when Mrs McCreedy was showing these people
54               around the house
55  Julie:       ((whispering)) they were with Lucy ((this pupil has her
56               hand up and appears eager to contribute))
57  Ms James:    and they suddenly went in
58  Julie:       because they were [with Lucy
59  Ms James:                      [but they didn't believe in it (.)
60               what do you think about that
61  Julie:       because they were with Lucy
62  Ms James:    sorry
63  Julie:       because they were with Lucy
64  Ms James:    so they were with somebody that did believe (1)
65               ah so you think you've got to have a belief in Narnia
66  Pupils:      yeah
67  Ms James:    to be able to get in
68  Deborah:     ((nods))
69  Pupils:      yeah
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8

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70   Ms James:      okay
71                  ((shrugs her shoulders))
72   Deborah:       yeah but what about Edmund
73   Ms James:      but what about Edmund
74                  ah Deborah just said
75   Deborah:       because he went in after Lucy (.)
76                  not while-
77                  he didn't go in with Lucy
78                  (2)
79   Ms James:      so what do we think about that now (1)
80   Pupils:        yeah
81   Anon:          (okay maybe you were wrong)
82   Ms James:      okay maybe you're wrong
83                  so you have to sort of back down on that argument
84                  okay that's- that could be an interesting one to discuss
85                  in more detail later but (.)
86                  I want to go onto your question now
```

What's happening in this episode? To what extent and in what ways might it be considered dialogic? In discussing this episode we begin with a brief overview and then analyse it according to four of the five dimensions of dialogue outlined above. (We have not included the political dimension in this discussion, due to its limited salience to this strip of interaction.) In the final section, we conclude with some comments on the limitations of our analysis, the complexities of dialogue in the whole class setting and implications for changing practice.

At the beginning of the extract the teacher, Ms. James, reviews the question that has been previously posed – 'Why is it that sometimes the children couldn't get through to Narnia?' – and asks the group to which the question had been assigned to respond (lines 1-7). Following some uncertainty about which individual group member should answer (lines 8-16, to be discussed in detail below), Ben offers an idea: "maybe it's because they only let certain people in at certain times" (lines 18-19). This idea forms the first of five conjectures that are discussed throughout the episode (see figure 16.3 below). These conjectures are ignored, contested, elaborated, supported and/or refuted such that at the end of the episode the class remain without an answer to the question, but with the sense, perhaps, that this issue "could be an interesting one to discuss in more detail" (lines 84-85). We have ended the extract at line 86, in which Ms. James closes the discussion of this question by moving on to the next group's question.

Structural dimension: While talk in this episode is largely mediated (and dominated) by the teacher, this is not exclusively the case. Pupils give extended responses – longer, at least, than the 1-2 words typical in whole-class discussion – for example in lines 17-22, 38-43, and 75-77. Pupils participate in the discussion outside of the accepted IRE slots: for example, Vanessa follows on from Brian's response (lines 38-43); Julie repeatedly interjects, "because they were with Lucy" during Ms. James' turns; and Deborah challenges, "Yeah, what about Edmund?" after Ms. James appears to have concluded the topic (line 72). Likewise, Ms. James deviates from IRE conventions: her questions tend to be more authentically open than is conventional in IRE (the question with which she opened the episode is a prime example), and her use of the feedback move is more probing and challenging than strictly evaluative as right-or-wrong. Finally, multiple voices are brought to bear on the topic, with four pupils and Ms. James contributing conjectures, and another three pupils and Ms. James elaborating, supporting and/or refuting those conjectures.
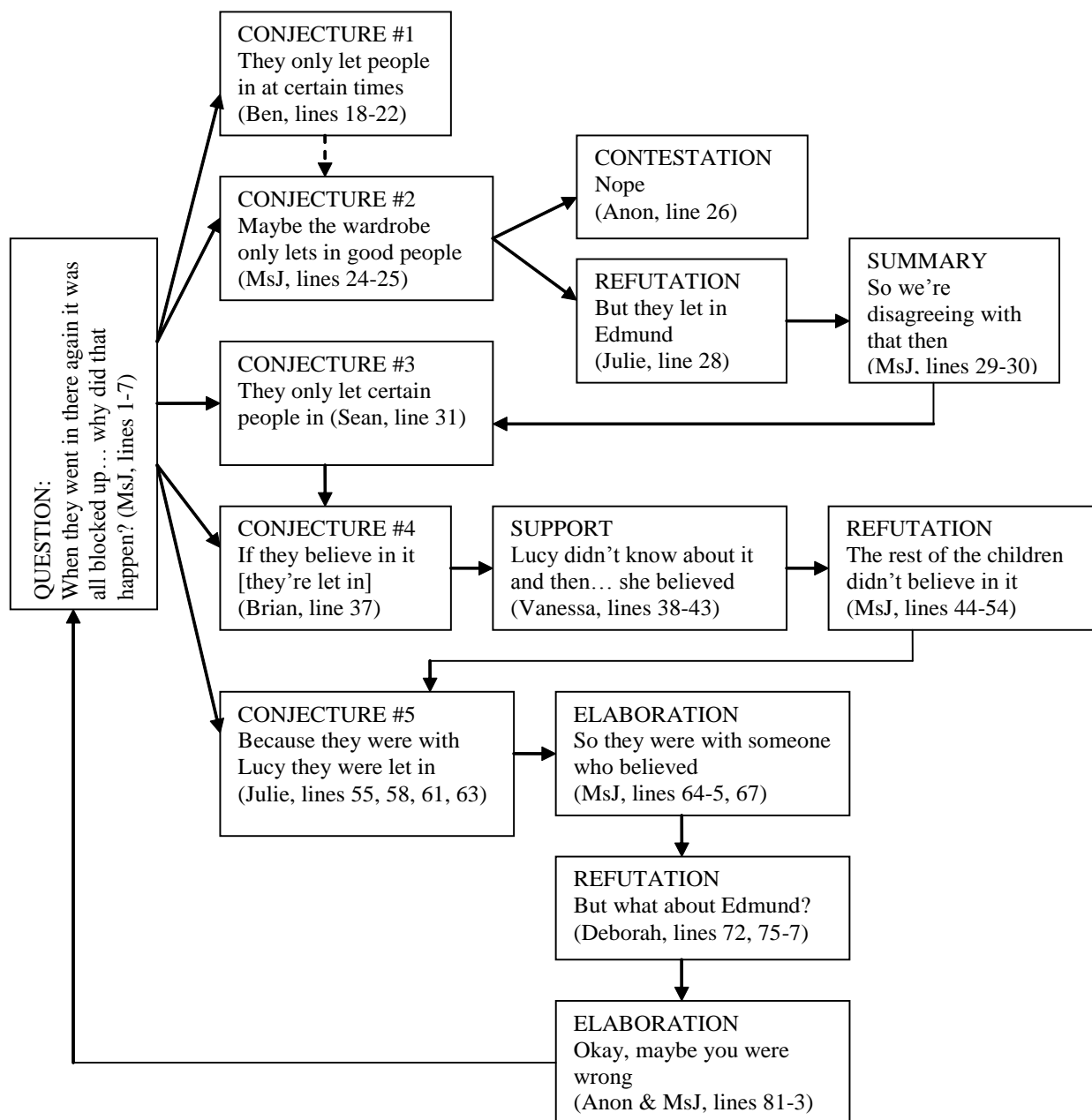
Figure 16.3 Schematic structure of Extract #2

Epistemic dimension: There are at least five ways in which this episode is dialogic in its approach to knowledge. First, the question discussed is authentically open in the sense that, based on Ms. James' responses to pupil contributions, she does not appear to have an answer in mind. Indeed, and this is the second point, it would seem that the question is also open in the sense that it does not allow for a definitive answer – it is in principle unknowable (cf. Harpaz & Lefstein, 2000). Thus, the class do not resolve the problem, and Ms. James concludes the discussion by saying that they need to think and discuss further. Third, while Ms. James plays a central role in managing the interaction, she does not assume a privileged role with regard to knowing the answer to the question she has posed. She offers a conjecture (in the form of a question, in lines 24-25), but then backs off of this five lines later when presented with evidence refuting it. Likewise, note how she respectfully disagrees with Brian, as a peer, rather than evaluating his comment in an authoritative,

teacherly manner (lines 44-54). Fourth, as noted above, multiple pupil and teacher perspectives are voiced in the extract, and the participants critically engage with most of the ideas brought forward.

Interpersonal dimension: While it is difficult to comment on classroom relationships, which take shape over long durations, on the basis of a short segment, we offer the following tentative remarks about dialogic relations in the extract (which draw also on other recordings and observations of this class). First, as noted above, Ms. James models respectful disagreement with Brian (in lines 44-45), posing her ideas as a question and offering Brian the opportunity to respond to her refutation with "what do you think about that?" (line 60). It is perhaps no coincidence, then, that pupils themselves start to question ideas that arise during the discussion. Deborah, for instance, appears at first to agree with conjecture #5 (line 68), but after giving it further thought engages more critically: "But what about Edmund?". Second, Ms James attempts to draw in pupils, such as Sean (line 10), who are normally on the periphery of classroom discussion (see below for further discussion of this interaction), thus fostering a supportive, inclusive classroom environment.

Substantive dimension: The cumulative nature of the episode is graphically represented in figure 16.3, which demonstrates its underlying logic of inquiry – of conjectures and refutations – and how most of the participants' contributions are attended to and treated seriously. Participants build upon one another's ideas: conjectures #3 and #5, for example, appear to emerge out of ideas that immediately preceded them. For the most part, the episode also adheres to the criteria of accountable talk: participants respond to one another's ideas (accountability to the community), bring in evidence from the story (accountability to knowledge) and appeal to standards of logical consistency when refuting and/or supporting one another's ideas (accountability to reason). It is worth noting, however, some exceptions to these generalisations. For example, it is not entirely clear to us whether Ms. James' question, "Do you think the wardrobe only lets in good people?" (lines 24-25) is a probe of Ben's conjecture or an attempt to replace it with a different idea (hence the broken arrow connecting conjectures #1 and #2). Either way, Ben's idea that the wardrobe only opened at certain times fell out of the conversation, which subsequently focused on the possibility that the wardrobe only opened for certain people.

Problematising classroom dialogue
In light of the preceding section, we feel relatively secure in our judgement that extract #2 exhibits a number of desirable, dialogic features (that is, after all, why we chose it), but less comfortable about concluding our analysis on that note. In this final section we draw attention to the limitations of our perspective, data and interpretations. We problematise some of the assumptions underlying our previous analysis – not necessarily arguing that they are wrong, rather inserting question marks where we had previously placed full stops. In particular, we explore the partial and bounded nature of the data considered, the resulting analytic foci, and the complexities and problematic nature of dialogue in the whole class setting. We conclude the chapter by returning to the question of what teachers need to understand about classroom discourse.

Data limitations. What we call "data" – the recordings, notes, artefacts and impressions we bring with us from the field – are necessarily partial, a particular slice of experience, cut at a particular angle, and at a particular moment in time. Consider the partialness (and partiality) of the data we have discussed above: it is less than 2 minutes of an hour-long lesson, occurring about three months

into the school year, 10 years into Ms. James' teaching career, and in the 11th year of the pupils' lives. It was shot at a certain angle: from the back corner of the room, opposite where the teacher stood, thereby capturing the teacher's face but mostly the sides or backs of the children's heads. The audio catches loud and well-projected voices, but misses comments pupils mumble or whisper under their breath. Participants experienced the episode through all five senses; in transcribing it we have reduced the sounds, sights and smells to a relatively flat record of the audible words spoken, with minimal indication of pauses and non-verbal communication. Finally, we have not supplemented the video record and our fieldnotes with interviews or other materials that might help us fill in gaps in our knowledge about the participants, their past experiences, present intentions, future hopes and so forth.

Analytic foci and perspectives. The nature of the data collected shapes what we can and cannot readily perceive to be happening. In what follows we outline some of the key ways in which the data, along with our theoretical perspectives and assumptions about dialogue, have shaped our gaze:

a) Focus on discourse moves. The very brief duration of the extract makes it easier to appreciate discourse moves – e.g. questions and responses – than processes that happen over longer periods: a curricular unit or even pupil task; learning a concept; development of relationships and identities; or evolution of classroom culture. All of these longer processes bear upon the way participants make sense of the shorter events that in turn contribute to them. So, for example, how we (and the participants) make sense of Ms. James' question, "Do you mind if I disagree with you, Brian?" depends upon our assessment of Ms. James' tone, which in turn depends on an implicit understanding of her character, which is based on our previous experiences with her.

Furthermore, the focus on discourse moves is problematically narrow if one's aim is to change the nature of talk. Discourse moves are embedded in activities and institutions, which crucially constrain possibilities for what can legitimately be said, in what ways and how it will be understood (Levinson, 1979). Examples of relevant activities include pupil tasks, assessment frameworks and the curricular unit as a whole. Relevant school institutions include the national tests, performance management and Ofsted inspections. Changing activity and institutions exerts pressure on talk; any attempt to change talk without accounting for the way it is shaped by activities and institutions is likely to encounter enormous difficulties.

b) Focus on the linguistic mode. Representing interaction by means of a written transcript privileges the spoken word over the nonverbal gesture and silent glare. As such, it can obscure the facts that the quiet participants tend to outnumber the vocal ones, and that there is a lot more communication and other social activity going on off-stage than is captured by a running account of the centre-stage teacher-pupil talk. Viewing the video without audio, or listening to radio microphone recordings of pupils talking under their breath, provides a very different perspective on "what is happening" in the lesson.

c) Privileging the teacher's perspective. The focus on the linguistic mode, and the way the camera angle places the teacher in the centre of the frame, tend to privilege the teacher's perspective on the lesson. Likewise, due to our relative proximity to the teacher in age and interests we tend to identify more readily with her, and to look at the lesson from her perspective. How might such a perspective differ from those of the pupils? In a major study of classroom discourse, Galton and colleagues' (1980, 1999) found that the average teacher spent most of their class time interacting

with pupils, but the average pupil spent nearly two thirds of their time interacting neither with the teacher nor with other pupils. So, only a small number of pupils are involved in the whole class discourse events that dominate lesson transcripts. When alternative research methods are employed we see that pupils who are relatively "passive" vis-a-vis the whole class discussion (and are thus absent from the transcript) are actively engaged in other pursuits. For example, radio-microphones pinned to individual pupils capture the hushed side-comments that are made in response to official classroom talk; discussions of extra-curricular experiences, popular culture and peer relations; and pupils working hard to manage multiple (and often conflicting) classroom identities (e.g. projecting the image of obedient pupil to the teacher while displaying an anti-school stance to one's peers) (Rampton, 1995, 2006; Maybin, 2006; Snell 2008).

How might the episode examined in extract #2 have been differently experienced by individual pupils? To illustrate how a different set of analytic foci and perspectives can lead to a different account of the episode, we revisit lines 6-16 of the extract. This segment highlights pupil identities, an issue central to dialogic concerns such as relationships, power and voice, but which has heretofore not entered our analysis. Since much of the communication in this segment is non-verbal, we use still images from the video recording to illustrate our analysis.

Ms. James opens this sequence by asking the relevant pupil group to share their response to the question they have been working on (lines 6-7). As she nominates "this group" she turns to face Ben (figure 16.4). Ben is a member of the group that was tasked with answering this question, but he is not the only member; Deborah to his right, and Sean and Rob, who are sitting in front of him, were also part of the group. Based on teacher targets and our observations, we know that Ben is perceived to be an able pupil who often participates positively in class discussions, while Sean and Rob, who are seated at the front row of desks directly in front of the teacher, are viewed as low ability. Even though Ms James verbally addresses the question to the whole group ("this group", line 7), her body language suggests that she expects the answer to come from Ben, the higher ability pupil. Ben acts as if the role of group spokesperson has been allocated to him, and begins to formulate his response, buying time with the filler "erm" (line 9), but in doing so, he overlaps Sean who has already begun what appears to be an answer ("becau:s:e", line 8). At this point Ms James stops Ben's utterance rather abruptly and offers the floor to Sean ("right Sean was just about to say something then") (figure 16.5). Three seconds of silence follows, after which Sean replies, "I don't know". Rob has now raised his hand, but Ms. James reverts back to Ben, who can usually be relied upon to give an answer that will move the discussion forward (figure 16.6).

This short sequence raises a number of questions. Was Sean genuinely beginning to formulate an answer on line 8? Or was he trying to feign participation in this lesson without actually having to take a turn? After all, the teacher had already turned away from Sean and seemed to be directly addressing another pupil (see McDermott and Tylbor [1983] for description of a pupil who adopts a similar strategy). If so, does Ms. James collude with this pseudo-participation by letting him off the hook too easily ("you're not sure...okay") and by keeping alive the possibility that he will be able to participate later: "maybe you can add something in a moment"? Notice also how Ms. James reformulates Sean's "I don't know" to "You're not sure", giving the impression that Sean is still formulating his ideas and thus downgrading the seriousness of Sean's admission (and protecting Sean's 'face' in front of the other pupils) – it is not lack of knowledge but lack of certainty. Further, what roles are played by the other pupils in his group? Consider Ben, for instance, who is ready to step into the role of speaker / group spokesperson at a moment's notice. Sean's identity as a low

ability pupil emerges in an interactive process between his own actions and the way he is identified by others, both teacher and peers (Maybin, 2006; McDermott and Raley 2008).

Finally, what are the implications of this episode for our analysis of classroom discourse and dialogue? In our previous discussion of extract #2 we glossed over this section, treating it as insignificant, momentary noise sandwiched between the substantive question, conjectures and refutations. However, our reanalysis of this episode shows that a more complete understanding of classroom discourse needs to go beyond tracking the exchange of information (and thus focusing on who does or does not have it); that the focus needs to be on the pupils rather than just the teacher, and that 'pupils' shouldn't be treated as an undifferentiated entity but as individuals; that individual pupil identities are often constructed and reinforced in interaction with others; and that this has implications for how pupils see themselves and how they participate in classroom activities.
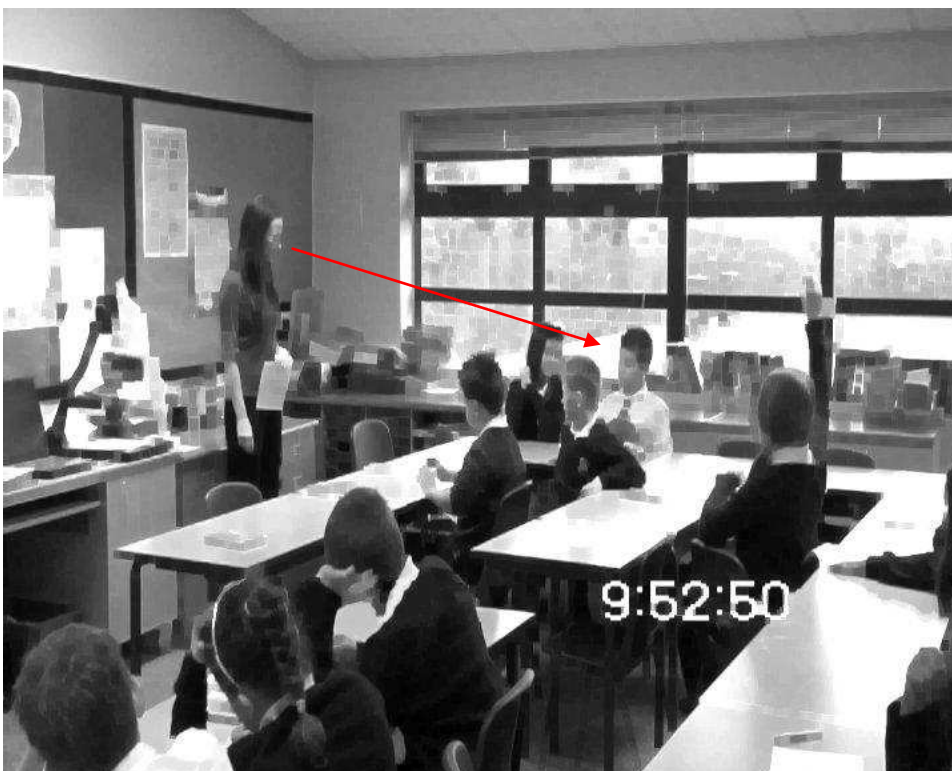

Figure 16.4: Nominating Ben – Ms. James: "This group, why do you think that happens?" (line 7)

Figure 16.5: Giving the floor to Sean – Ms. James: "Right, Sean was just about to say something then." (line 10)

Figure 16.6 Returning to Ben (line 16)

Conclusion: dialogue as a problem… worth confronting

In this chapter we have argued for the importance of classroom discourse as a key mediator of pupil learning, and contrasted conventional classroom patterns with more dialogic approaches. We have presented a multi-dimensional approach to dialogue, which brings together structural, epistemic, interpersonal, substantive and political concerns, and illustrated such an approach in the analysis of a lesson extract. We have problematised this analysis, showing the limitations of our data and analytic perspectives, and demonstrating how the extract might have been experienced by a pupil who was only marginally involved in the episode.

We hope that our discussion of multiple dimensions, perspectives and concerns that are brought into play in classroom discourse has impressed upon readers some of the complexities of conducting dialogue in the whole-class setting. These complexities have important implications for how we think about dialogic classroom practice. According to a common view of teaching (and dialogue), there is a right or wrong answer to every situation: "best practice" can be identified, prescribed and implemented. Acknowledging the complex web of competing concerns and tensions inherent to dialogue, however, gives way to a view of dialogic practice as a set of problems or dilemmas. Confronting these dilemmas is usually not a matter of choosing between dialogue or monologue, but between competing dialogic concerns. Moreover, while a (dialogic) move may encourage, empower and foster growth for some participants, it may also silence and alienate others (Lefstein, in press).

Consider, for example, some of the dilemmas that emerge in extract #2: Should Ms. James have stayed with Sean, insisting that he participate in the discussion and/or heavily "scaffolding" his answer? Or was turning to Ben in order to move the discussion forward the best course of action? Should she have focused more attention on Ben's conjecture (#1), by opening it up for discussion? Or was the injection of a second conjecture the best way to ignite the conversation? What about explicitly disagreeing with Brian? Did that advance the dialogue, as we have suggested, by modelling respectful disagreement and by effacing her teacherly authority, or did it ruin Brian's day?

These and countless other dilemmas arise from the conflicting demands teachers face, which are rooted in the disparate needs of the many individuals in the classroom (think both Sean and Ben) and the different concerns raised by the five dimensions of dialogue (see Lefstein [in press] for elaboration of teacher roles according to different dialogic dimensions).

In conclusion, we return to the question with which we opened the chapter: What do teachers need to understand about classroom discourse? Teachers need to understand the importance of talk in teaching and learning; be sensitive to the ways in which conventional discourse norms can be detrimental to pupil thinking and learning; and appreciate the promise – and complexity – of dialogic practice. Such understanding would go a long way toward improving classroom discourse, but we should emphasise that teacher knowledge is a necessary but insufficient condition, for talk is embedded in activities and institutions, and needs to be considered alongside related facets of pedagogy and educational organisation.

Transcription notations:
(text) - Transcription uncertainty
(.)   - Brief pause (under one second)
(1)   - Longer pause (number indicates length to nearest second)
(( )) - Description of prosody or non-verbal activity
[- Overlapping talk or action
[
text   - Emphasised relative to surrounding talk (underlined words)
te:xt   - Stretched sounds
sh-   - Word cut off

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