This paper, presented at the ‘Philosophy for Children – A Foundation for Pedagogic and Curriculum Change?’ symposium at the BERA 2008 conference, addresses ways in which social interaction within individual Community of Enquiry sessions can be identified as supporting the development of creative thinking. One of the claims made by Matthew Lipman about the Philosophy for Children approach is that it develops pupils’ ability to think creatively (2003). The extent to which this claim can be verified in a Community of Enquiry with children aged 5-7 years of age has been one of my research topics for a number of years (Jones, 2004).

At this stage of the research, I used Conversation Analysis principles to inform the analysis of four Community of Enquiry sessions of which video data was available, in order to investigate to what extent social interaction processes could be seen to support creative thinking. In this paper findings will be presented of this stage in the research, and the following questions will be explored:

- To what extent could Conversation Analysis principles be used to identify particular interactional features characteristic of this Community of Enquiry?
- To what extent could Conversation Analysis principles be used to investigate interaction processes surrounding ‘instances of creative thinking’?
- To what extent could Conversation Analysis principles be used to develop our understanding of creative thinking in the Community of Enquiry?

The findings may be of interest to researchers in the fields of classroom discourse, dialogic teaching and learning methods including Philosophy for Children, and that of the study of creativity.

Introduction

Background

Matthew Lipman has argued extensively that the Philosophy for Children approach encourages the development of creative as well as critical thinking skills (Lipman, 2003). This
paper presents a new part of my on-going project into the evidence of a development in the creative thinking in a Community of Enquiry with children aged 5-7 years of age.

Philosophy for Children is a pedagogical approach introduced and developed by Matthew Lipman (Lipman, 2003) and based on the ideas of Charles Peirce, John Dewey and Lev Vygotsky, which is this country has met with increased popularity since the 1990s (Fisher, 1995; Haynes, 2002; Trickey & Topping, 2004). During Philosophy for Children sessions, participants engage as a Community of Enquiry, which could, for the purpose of this paper, be defined as a group of participants having face-to-face encounters which engages in collaborative enquiry. In sessions shared by a Community of Enquiry in this context, questions based on a presented stimulus are formulated and chosen by the group. The chosen question is then discussed in a process of collaborative Socratic dialogue, which is intended to both deepen the thinking skills and develop the social interaction skills of the participants, rather than as a means to reach a consensus.

The data for this project were collected at a school in a semi-rural part of the North-East of England in a class with eight Year 1 children and eleven Year 2 children, with which I was working as the class teacher. I used the Community of Enquiry format developed by Lipman, but instead of using a pure ‘Philosophy for Children’ approach, in which the questions asked tend to be of a philosophical nature and deconstruction of question and conceptualisation of issues is crucial to ensure the development of a philosophical discussion and philosophical thinking, the discussions were more strongly led by pupils’ own interests (Higgins et al., 2001; Baumfield, 2001), in a sense staying closer to the original ideas of Peirce and Dewey (1966). As most of the stimuli presented to the class were fictional texts and most of the questions discussed referred to imaginative elements within these fictional texts, the sessions could be described as those of a Community of Imaginative Enquiry, rather than a Community of Philosophical Enquiry. Over the course of a school year, twenty-one of such Community of Enquiry sessions were carried out and recorded.

In order to distinguish between the two elements of my dual role as practitioner and researcher in this project I shall, in this paper, use a personal perspective when writing from a research perspective, but I shall refer to my actions as practitioner as ‘the teacher’. The purpose of this is not only to maximise clarity by creating consistency between the transcripts and subsequent analyses, but also to denote the sense of detachment I feel from my role of practitioner, which is a result of the years which have passed since the time of data collection.

Creative thinking and creativity

In order to investigate creative thinking in the Community of Enquiry, it is of course essential to conceptualise creative thinking. Lipman calls it ‘the moving spirit of problem solving’ (2003: 245) and gives the following categories of creative thinking (ibid: 245): originality, productivity, imagination, independence, experimentation, holism, expression, self-transcendence, surprise, generativity, maieuticity and inventiveness. This list, Lipman points out, (ibid: 247) is not exhaustive, but could be said to give an indication of the complex nature
of creative thinking, and pupil contributions showing one or more of these elements could be said to contain an indication of creative thinking. Lipman discusses connections between creative thinking and enquiry as: ‘creative thinking is the fabrication of the problematic’ (ibid: p 254). Creative thinking is described by Fisher (1995: 64) as imaginative, inventive thinking involving the generation of new ideas, and describes the connection between critical and creative thinking as follows: ‘Every creative activity which seeks the solution to a problem requires the use of critical judgement, for creative ideas should not simply be novel but be of value.’ This is consistent with definitions of creativity in its more general sense, such as ‘the ability to produce work that is both novel and appropriate’ (Sternberg, 1999), ‘imaginative activity fashioned so as to produce outcomes that are both original and of value’ (NACCE, 1999: 29); and ‘a core with the elements of novelty, effectiveness, and ethicality’ (Cropley, 2001).

Yet despite this apparent agreement in the literature on a definition of the terms creativity and creative thinking, the application of this term to practical contexts such as classroom dialogue, and the categorisation of data on the basis of it, is highly problematic. Who could or should assess the extent to which any thinking is original? Craft’s notions of ‘little c’ (Craft et al., 2001) and ‘everyday creativity’ (Craft, 2000) are useful in the investigation of the creative thinking of young children, but just how do we assess novelty in the conceptual world of young children who are having new experiences every day? Similarly, how can the ‘value’ or ‘appropriateness’ of other people’s thoughts be judged? And, in the context of this research, how could evidence be found of any development of such creative thinking? It could be suggested that creative thinking can best be judged by the person perceiving the thought. However, it was only possible in a very small number of cases to get an insight into the children’s own awareness of the novelty and value of their thinking, such as K2’s response (line 47) in the following extract (for transcription conventions please see Appendix):

43 FFF2: She could have ehm, she could have just, eh maybe Lion was real and she was ehm (.) sleepwalking but maybe her eyes were just open
44 T: =aha?=
45 FFF2 while she was still sleepwalking.
46 T: aha! Right, I am looking [at my watch=  
47 K2 ((stands up)) [AH! That gave me an idea!

As a result, I had to rely on my own judgment of novelty and value in the analyses carried out. Although this judgement was informed by an understanding of creativity assessment processes (Amabile, 1996; Torrance, 1992; Craft, 2002) and although a level of inter-rater reliability was sought by some analysis in collaboration with colleagues, the complexity and subjectivity of any judgement of creative thinking must be pointed out at this stage.

Previous analysis of the data
As a first analysis a basic transcription of the data was carried out, in which pupils’ verbal contributions in all Community of Enquiry sessions held were identified, but in which other interactional elements such as stammering, tone, silences, stress, interruptions etc. were not recorded, i.e. in ‘words only’ transcripts. Individual children’s contributions in these transcripts were then analysed with a coding and categorisation scheme which contained some elements of creativity identified in the Torrance Test of Creativity (Torrance, 1992). All pupil contributions were coded as either reproductive or non-novel (42%) or productive and novel (57%). Within the contributions categorised as novel, a qualitative distinction was made between contributions which contained a level of tangentiality (1.6% of all contributions), and those which appeared to have a high level of value or appropriateness, coded as ‘reasoning’ (13.7% of all contributions). Across the duration of the year, there was a distinct rise in the number of contributions coded as reasoning, which appeared to be an indication that the quality of the pupils’ creative thinking had indeed risen. (Jones, 2004, 2005). Some interesting Pearson correlations were also found between the individual response categories, such as between disagreement and reasoning (0.70) and reproductive contributions and reasoning (.69).

Pupil contributions were also coded according to a secondary set of categories, such as whether contributions responded to, or were responded to by, other pupils’ contributions. However, the focus of this previous analysis was on the contributions made by individual children, and none of the teacher’s contributions were investigated. Although this provided a valuable picture of some of the creative thinking that had taken place and of how this had changed for individual children as well as for the group as a whole, it gave very little insight into the social interaction processes which had surrounded, or been at the heart of, this creative thinking.

The current analysis

Rationale

The need for a second, interaction-focused analysis became apparent on reflection of a number of notions. Firstly, within the domain of creativity research, Amabile has argued that creativity is heavily influenced by social processes (Amabile, 1996), and social constructivist theory would suggest that the originality of ideas can at best only be relative. Similarities between creative thinking and learning would suggest that Vygotskian socio-cultural theories of learning (Daniels, 2001) could further inform our understanding of creative thinking. This might imply that creative thinking in itself could be seen as a social, rather than an individual, process of construction, in which ‘understanding and knowledge are ‘publicly derived’ but privately internalised’ (Walsh, 2006: 32). Therefore, it seemed important to investigate the social interaction between all participants in the Community of Enquiry, including the teacher, in order to investigate to what extent creative thinking in a setting such as the Community of Enquiry is, in fact, derived socially.
Secondly, it seems crucial that in an investigation into any processes or issues occurring in the Community of Enquiry, a classroom setting in which meaning is quintessentially negotiated through interaction, the analysis is focused, at least in part, on social interaction.

A number of applied Conversation Analysis (hereafter referred to as CA) principles were chosen as the most suitable tool for this analysis of ‘talk-in-interaction’ (Seedhouse, 2004), rather than the quantitative, system-based and product-oriented approaches also discussed by Edwards and Westgate (1994) and Walsh (2006). Conversation Analysis seemed to offer particular advantages as an approach for this analysis as it examines how social contexts are continuously created in and through social interaction. This seemed particularly pertinent to the Community Enquiry context, which can clearly be described as constructed and negotiated through social interaction. Seedhouse (2004: 12,13) lists the main aims of Conversation Analysis as follows: to categorise the organisation of social interaction; to trace how participants develop a shared understanding of the progress of the interaction; and to trace how they repeatedly shape and renew this context. In order to uncover these elements, CA practitioners use a highly detailed transcription system, which allows the analysis to be ‘bottom-up and data-driven’ (ibid: 15). In this ethnomethodological approach, the data is approached ‘without any prior theoretical assumptions or assumptions that any background or contextual details are relevant’ (ibid: 15). However, although CA appeared to be able to give a valuable insight into the social interaction processes taking place within these Community of Enquiry sessions, there were two reasons why a pure CA approach (ten Have, 2007) would not be sufficient or desirable: firstly, the object of this study was not the social interaction in itself, described by Edwards and Westgate (1994) as ‘looking at the window’ of interaction, but rather it was hoped that it would be possible to look ‘through the window’ of social interaction to investigate its role in the creative thinking produced within the interaction. Secondly, I had, as the teacher, been a participant in the Community of Enquiry sessions. This meant that I had context knowledge which would appear to be both impossible and undesirable to ignore, a situation which is rather unusual for pure CA (Seedhouse, 2004: 15; ten Have, 2007: 84). As a result, an eclectic approach (Edwards & Westgate, 1994) was chosen, which bore some of the hallmarks of a variable (Walsh, 2006) or applied (ten Have, 2007) CA approach. The Conversation Analysis principles used were mainly those of the methods of transcription, the principle of data-driven analysis and the desire to investigate talk-in-interaction. It cannot be claimed that the transcript analyses followed further CA methodology, which would have included a much clearer focus on such interactional elements as turn taking, sequence allocation, sequence organisation etc, and which would have led to a deeper examination of the interactional organisation itself.

The transcripts
In the following section we will look at four extracts from transcripts made on the basis of video data. The Community of Enquiry sessions these were based on were spaced relatively evenly over the year – extract 1 was recorded in October, extract 2 in January, extract 3 in April and extract 4 in July. Conversation Analysis was applied to each of the four enquiry transcripts, and the extracts presented in this paper were selected on their representation of typical interactional features of each enquiry, and their inclusion of at least some aspects of creative thinking. Each transcript will be followed by a discussion of both the analysed interaction and the creative thinking which seemed apparent. The transcription conventions used are based on Gail Jefferson’s system, discussed and adapted by ten Have (2007). A key to the transcription conventions can be found in the Appendix. T refers to the class teacher, and the children’s names have been coded by one or more initials, followed by a suffix 1 or 2, referring to the children’s year group. Thus, pupil codes with the suffix 1 refer to children 5-6 years old, whereas pupil codes with the suffix 2 refer to children 6-7 years old.

Extract 1

This is an extract from the third Community of Enquiry session which the class participated in, and took place in October. In the video-recorded story of ‘The wizard of Wallaby Willows’ by Jack Kent which served as the stimulus for this enquiry, a mouse has the wish to change into a different animal, and for this purpose gets given a potion in an unlabelled bottle. Before the mouse opens the bottle however, he realises that other animals have features which he would not like to have, and he decides not to drink the potion. The question chosen by the group was: ‘Why did the bottle not make him feel better but the spell did?’

(For transcription conventions see Appendix)

1 T: Right I am going to ask you another question just sit up to help us understand this a bit better it’s a very hard question to answer. Did: the spell: really: make him feel: better?
2 F2: ↓No!
3 T: Put up your hand if you can tell me about that=
4 F2 ↓=no!
5 T: if you can explain to other people whether or not it did.
6 F2: ↓[No!
7 T: Don’t just shout no, s say yes
8 ( ) : [hhhh
9 T: and tell me why: or say ↓no and [tell me why
10 F2 ↓[I ↓know!
11 T: F2
12  F2  No, because he didn’t take the cork off and used the spell on him so he didn’t use any of the spell: the **bottles** made him feel better.

13  T:  The **bottles** made him feel better, ok?

14  F2  Well think of () ehm been changing in something else where you have more problems but () but () **me** he has the least problems=

15  T:  =Hhmmm

16  F2:  Em cause the things he might turn into might be bigger so he doesn’t want to use the bottle.

17  ():  Or maybe **smaller**=

18  T:  =Right F2 said the spell did not make him feel better, who agrees with that?

Social interaction in extract 1

It is clear that, with the exception of line 17 and possibly line 8, only the Teacher (T) and F2 participate verbally in this extract. Of the teacher’s contributions, most (3,5,7,9,11,1 and 15) are directed only to F2, whereas she directs only her contributions in lines 1 and 18 to the whole class. The extract shows an articulate pupil who is very keen to share his thoughts (1:2,4,6,12,14 and 18), and a teacher who is trying to engage the whole class in the discussion (1:1 and 18) and teach expected behaviour in this relatively new setting, sometimes within the same sentence (1:1), as well as relate to both the style (1:3,5,7,9) and the content (1:13,15) of F2’s contributions. It is not clear who exhales or sighs loudly (1:8), although it is unlikely that this is the teacher as the exhalation takes place in the middle of her statement (1:7 and 9). Due to the loud volume of the exhalation, it is likely that frustration is being expressed, either by F2 or by a different pupil – the video footage showed a number of children at this point who looked far from engaged (F2 and T were not within camera shot). In lines 1 to 10 the interaction between T and F2 shows features of a contest - both seem to want to dominate the conversation at this point, and although T says far more than F2, F2’s interruptions effectively interrupt her moves. F2’s expressions of ‘no!’ seem to have different meanings. In (1:2) this seems to show his answer to T’s question in (1:1), it is unclear whether in (1:4) he expresses the same statement, or whether he means to disagree with T (1:3). In (1:6) it is likely that ‘no seems to refer to ‘not’ in (1:5). T’s ‘no’ in line 9 was expressed with the same tone as F2’s ‘no’s in lines 2, 4 and 6. This stresses the reference to F2, and could perhaps be interpreted as a move of acknowledgement if not reconciliation to F2. Pedagogically, it could be questioned why T gives F2 a turn in line 11, as this could be seen as a reward for his interruptions. In lines 13 and 15 T seems to express a level of uncertainty in the meaning of F2’s response in (1:12 and 14), and to invite him to expand. F2’s statements in line 12 and 16 are far more coherent than in line 14. Interestingly, it is in the far
less syntactically coherent line (1:14) that he describes the mouse's reasoning, which is perhaps a more complex task than to describe the mouse's actions. In line 17 a pupil whose identity was not clear from the data calls out and expresses some creative thinking. Although they had not been given an explicit turn to do so, the timing and the content of this response was appropriate within the conversation, especially compared to F2's lines 6 and 10. However, T ignores this comment (18) and asks a question to which an answer has just been given (17).

Creative thinking in extract 1

In terms of creative thinking, there appear to be two incidents of creative thinking: the idea that 'the bottles' made the mouse feel better (1:12) and the idea that being smaller could be a problem for the mouse (1:17). (It perhaps needs to be pointed out here that being' bigger'(1:16) was not original as this was mentioned in the stimulus.) The social interaction surrounding both of these original contributions reveals some interesting issues related to creative thinking in interaction. The first issue relates to the degree in which originality is acknowledged by others. F2 shows an understanding of the plot of the story, and therefore the answer to the question, which is very similar to that of T's. His stress on ‘the bottles’ (1:12) however, is a different interpretation, which is not taken up by T in her rephrasing of F2’s response in (1:18), although in (1:13) she emphasises ‘the bottles’ in a question asking for clarification. In line (1:18) T omits both F2’s reference to ‘the bottles’ and the ‘smaller’ suggestion made in line (1:17). This could be an indication that a degree of originality can often go unnoticed in interaction, where it seems likely that the participants focus on what they recognise in their own understanding, and use this in their on-going construction of meaning. As Edwards and Westgate mention: (1994: 127) '.. teachers discard answers which they judge to be irrelevant, insufficient or simply wrong..' 

Secondly, the transcript illustrates the issue raised earlier regarding the proximity between learning and creativity: in later extracts from this transcript the children's interpretation of the video clip stimulus transpired to vary widely. It could thus be argued that the processing of new data (i.e. a story), or perhaps all learning, involves a level of creative thinking. The interpretation of new data can, after all, be said to require some original thinking and appropriateness. This is perhaps illustrated by T’s rather slow reaction in line (1:13): ‘The bottles made him feel better, o: k?’, in which she could be said to be processing and assessing this new idea, applying a degree of imaginative thinking herself. The view that all learning involves a degree of creative thinking, however, has further implications for the recognition of creative thinking: as F2’s interpretation of the story plot (1:12-16), and therefore the answer to the question discussed, was very close to my own, his ideas were initially not noticed as novel or creative, in contrast to the ideas of children whose interpretation differed from mine. As discarding such contributions as ‘uncreative’ is as hard to justify as it is unavoidable, we may have to distinguish between the originality of thought needed to process new concepts effectively, and the production of outcomes which differ from that of the
expected (Torrance, 1992; Amabile, 1996). In doing so we have to acknowledge that the proximity between learning and creativity, and the subjectivity of interpretation both add to the complexities involved in the recognition of creativity.

Extract 2

This abstract was taken from the eighth Community of Enquiry session, which took place in January. The stimulus on which the enquiry was based was ‘The Six Suns’, a Chinese myth in which a boy rescues the world from the effects of six suns by shooting their reflections in a pond. The chosen question was: ‘How did the boy shoot the reflection of the suns in the water?’

17 N2: ehm he couldn’t shoot the suns because it was just a reflection in the water
18 T: Right, who disagrees with N2, ((various pupils both put up hands)) E2?
19 E2: Because he couldn’t ehm couldn’t be ehm,
20 T: Now is that an agree or a disagree?
21 E2: Ehm..
22 T Now I think I really wanted somebody to disagree with N2 about that.
23 L2: hhh((puts up hand)) [hhh! ((puts up hand))]
24 B2: [hhh! ((puts up hand))]
25
26 T: L2
27 L2: I disagree with N2 because eh
28 ()
29 T: [Shh, listen to each other (.) K1.
30 L2: because it said in the story that (. ) there was some water there=
31 B1 = and ehm it might be the bow and arrow might shoot down to the bottom and come flying back up and <hit the sun> ((makes moving gesture up to indicate arrow))
32 T: Right,? , who would like to say they agree or disagree with B2’s idea then? U1?
33 U1 I agree with B2.
34 T: Aha,? and can you tell us why U1?
35 U1: Because it could have w went down through the water and went back up and hit the sun ((demonstrates with hand, N2 folds arms across chest))=
36 E2: =It couldn’t (puts up hand)
Social interaction in extract 2

There was a marked difference in the group’s interaction between this session and the session on which extract 1 was based: the children seemed far more engaged and far more pupils participated actively in the discussion - in this extract five children engage in the discussion, and interact with T and each other, mostly according to the Community of Enquiry rules which had been mediated (Daniels, 2001), such as speaking one at a time, listening to each other and using the words ‘agree’ and ‘disagree’ to express how their ideas differ from those of others. However, in lines 36 and 38 T still feels she has to remind pupils of her expectations of their behaviour. Generally T appears more relaxed in this session than in the session from extract 1. There appear to be two pupil alliances in this episode: N2 and E2 who believe that what is told in the story could not have happened (2:17,19,35) and L2, B2 and U1, a Year 1 pupil who is incidentally a friend of N2’s. (2:23,24,26,29,30,32,34). The duality in this discussion has been invited by T’s lines 18,20 and 22, whereas in line 31, T invites either agreement or disagreement. Whereas N2 explains his thoughts clearly, E2 seems to have trouble expressing himself, and is not helped by T’s question: ‘Now is that an agree or a disagree?’ (2:20), which for E2 may have felt rather beside the point. L2 and B2, who are friends, are sitting next to each other, and have had an exciting discussion about the topic in an earlier part of the session. They are clearly both keen to make a contribution (2:23, 24) . Interestingly, L2 makes a start at explaining their thoughts (2:26, 29), but her sentence is completed by B2 (2:30), who puts forward a much stronger argument. This shift was so seamless than in the previous transcript analysis, both lines 29 and 30 had been allocated to L2. U1 enters the discussion with some confidence, although at that time of the year most Community of Enquiry sessions were still very much dominated by Year 2 children. N2’s folding of his arms seems to indicate his disagreement with what his friend U1 (2:34) is saying. U1’s sentence is followed by E2’s disagreement ‘It couldn’t’ (2:35) who put up his hand after speaking by way of legitimising his response. Sadly, FF2 has her hand up throughout most of this extract but is neither given, nor takes, the opportunity to speak.

Creative thinking in extract 2
A large part of the creative thinking which is apparent in this transcript is inherent in the topic of the discussion, which is clearly fictional. It needs to be acknowledged that listening to, and discussing the plot of a fictional text as if it is real, requires a ‘leap of the imagination’ which in itself could be classified as creative thinking (Lipman, 2003). During much of this enquiry the group applied their understanding of science concepts to the fictional idea of someone shooting the sun by directing his arrows down a pond. This raises the question of how many children actually realised that this is an impossibility, and were thus willing to ‘buy into’ the story (or not, in the case of N2 - 2:17), and how many believed that the story could have been true. Especially in the perception of young children, imagination and reality are clearly closely-linked concepts (Egan, 1997; Craft, 2002) and this clearly has implications for the assessment of creativity. N2 expresses his disbelief in the possibility of someone shooting a sun in a pond directly in his matter-of-fact ‘he couldn’t’. N2’s North-Eastern intonation seems to stress the point he makes. In response, L2 seems to indicate the fact that the events take place in a fictional world ‘in the story’ (29) is expressed with some emphasis, and although she perhaps does not explain the content of her and B2’s argument as strongly, she thus makes a clear bridging move between N2’s argument and her and B2’s. G1 quietly enters the discussion in line 37 and 39 with an explicit piece of creative thinking. She has clearly reflected on the problem of how the arrow could possibly veer up from the bottom of a pond and solved it by the realisation that it ought to be ‘bouncy in the bottom’ (38). However, this idea can be traced back via U1’s line 34 to B1’s line 30, which G1’s creative thinking is clearly built on. Furthermore, G1 seems to offer her solution as the next ‘building block’ in this example of meaning being constructed. U1’s comment (34) is important in this context too, although it seems to be an almost literal repetition of what B1 said in line 30, he is co-constructing and co-creating meaning, making small changes. An important issue in the Community of Enquiry is that some participants, such as FF2 between line 25 and for the remainder of the extract, are willing to take part in the discussion, but are not given the opportunity to do so. FF2 may of course have had a highly creative thought which could have changed the course of the entire discussion, and it is perhaps not surprising that she is ‘not listening’ and ‘not sitting properly’ (38)

Extract 3

This Community of Enquiry was the fourteenth session held by the group and took place in April. The stimulus preceding this enquiry was ‘Catherine and the Lion’, a story by Clare Jarrett about a girl who is accompanied for the day by a lion. The question chosen was: ‘Was Lion real?’ In the preceding section of this transcript, B1 had suggested that the girl could be sleepwalking, which was itself an original thought, and which had created a certain amount of hilarity in the class.
But if she was sleepwalking with the lion, [mmm?

did she sleepwalk all the way to school?

ehm well ()

=but how would she know where she was going?=

((to K1)) she wouldn't watch where she was going? It would be hard to get to school! B2 I'm interested in knowing if she sleepwalked all the way to school was Lion walking with her while she was sleepwalking?

Yes (sounds hesitant))

Ahh!=

Ahh!=

So if that was true would that make Lion real or not B2?

Well she might have been dreaming about the lion and in sleepwalking.

Right, OK, FFF2?

She could have ehm, she could have just, eh maybe Lion was real and she was ehm (.) sleepwalking but maybe her eyes were just open

=aha?=

while she was still sleepwalking.

aha! Right, I am looking at my watch=

((stands up)) AH! That gave me an idea!

=and it is getting late. Can we have KK2 and U1? KK2 can you lock you idea in your head because U1’s had his hand up for a long time. U1 what did you want to say?

wha if she was sleepwalking how would she get dressed?

Aha?

That was what I was thinking.

That's what you were thinking? It gets very complicated doesn't it?

=Ah! Ah

Can we KK2' last idea?

[her mum could have ()

[She could have,

Shsh, listen to KK2.

She could have been=

[hhhhhh

=open () with her eyes, eh eh her eyes were just like fainting a little bit and she was drea eh felt like she saw a lion?

Right : I see and that would that make Lion real or not KK2?

No!

Not real.

Cause she thinks like, she saw a picture in her head of a ↓lion.
Social interaction in extract 3

The class are, at least in this extract, now using the format of the Community of the Enquiry without needing to be reminded explicitly about the rules of behaviour. The words ‘agree’ and ‘disagree’ are not explicitly mentioned in this extract, but different points of view appear to be expressed relatively freely and T can focus on the line of enquiry (e.g. in line 3:55) or pay attention to the needs of individual children (3:63) as part of the discussion, without interrupting the enquiry as was seen in some parts of extracts 1:7 and 2:38. There is a distinct pattern of T/pupil/T/pupil, which will be looked at in more detail in the discussion and conclusions section of this paper.

This episode can be split up in three parts: lines 3:38-48, in which T tries to make B2 draw the logical conclusion from her argument (i.e. if the lion walked to school with a sleep walking girl, that would make lion ‘real’), lines 3:47-57 in which FFF2 and U1 make two interesting suggestions, neither of which is developed further, and lines 3:60-71, in which KK2 explains his idea (3:54). However, each of these three parts is interrupted by some comments referring to earlier comments. In line 3:43 T has an ‘aside’ with K1, a rather shy Year 1 pupil, who is seated next to T and who in line 3:42 makes one of his first and few contributions to any Community of Enquiry sessions. T responds with some suppressed laughter (hhh) and an incidentally misheard word (know/watch), at K1’s comment. At this time there is some laughter going on and it was felt that it was important to acknowledge K’s comment with a degree of humour. B2, a very confident Year 2 pupil, seems rather confused by T’s questioning (3:40,43,47), and in line 58 makes a reappearance with ‘That was what I was thinking’, perhaps as an explanation of her earlier uncertainty. T’s ‘Right, OK’ in line 49 seems to end B2’s turn, even though B2’s argument has not become any more logical. In lines 50 and 52, FFF2, a friend of B2’s seems to offer some help and clarification- while she stresses B2’s notion of the girl sleepwalking, she offers the explanation that her eyes may be open, probably in response to K1 and T’s in lines 42 and 43. This clearly leads KK2 to his idea in line 54: ‘AH! That gave me an idea!’. U1’s comment in line 56: ‘wha if she was sleepwalking how would she get dressed?’ is clearly a critical and creative thought, which, if developed, could have had more impact on the logic in B2’s argument than T’s questions. However, apart from B2’s acknowledgement ‘That was what I was thinking’ (3:58) which seems to be an admission of the lack of logic in her own argument, and two other pupils’ comments in lines 62 and 63, U1’s question is not developed further. The remainder of the extract is taken up by the revelation of KK2’s idea that the lion could have been imagined.

Creative thinking in extract 3

As in the previous extracts, this enquiry was based on a piece of fictional narrative, the discussion of which required a degree of creative thinking in itself. The way the question was dealt with in this Community of Enquiry shows a clear difference between Philosophy for
Children and the Community of Enquiry approach used here. In Philosophy for Children, this would have provided an excellent opportunity to discuss epistemological issues related to reality, whereas in the approach used here, children’s ideas about elements of the story plot were discussed. In terms of explicit creative thinking, KK2’s response in line 54 is classic:

'[((stands up)) AH! That gave me an idea].'

To the adult reader of the story it seems clear from the beginning that ‘Lion’ is an imaginary character. However, to KK2 this idea is clearly original and of great value, and it must therefore be recognised as creative. Interestingly, this idea is generated by the preceding discussion, and FFF2’s comment in line 50 in particular: ‘She could have ehm, she could have just, eh maybe Lion was real and she was ehm (.) sleepwalking but maybe her eyes were just open’. Whereas FFF2’s comment was seen to be offering some support to her friend B2’s thoughts on sleepwalking whilst taking the argument a step further, and thus involved an element of creative thinking in itself, (the girl could be dreaming, and dreaming about the lion, but had her eyes open, which is how she could go to school), it clearly generates in KK2 something of a revelation. This seems to illustrate how in this extract, creative thoughts are constructed together, and how, in fact, it is very difficult to separate ideas as produced by individual children, as was the assumption in the prior analysis (Jones, 2005).

Extract 4
This enquiry was the 21st and last enquiry which was shared by the group, and took place in July. The story which served as a stimulus was ‘The Fish who could wish’, a narrative poem by John Bush and Korky Paul, about a fish whose wishes come true. The question discussed in this abstract was: ‘how could the fish wish?’ A ‘round’ was held, in which each child in the circle was given the opportunity to express their thoughts. This structured format clearly formalises the interaction, but it was felt to be a valid format for this part of the enquiry, despite its restricting impact on more spontaneous interaction. Ideas had been suggested that the fish could have eaten something, such as a magic bean or that it might have been given ‘a drink which had ‘made it silly’. The following extract is taken from the last section of the round.

81 D2 Well he probably well he might have had a date with a magic being and after the dance it might (have put) a magic spell on him
82 T: Is that a magic BEAN?
83 () ((some laughter))
84 C: No, magic being!
T: OH BEING I am so sorry! I have been mishearing it all the time! A magic being
C: [No I don't, no thhhh hat was just his intherpretation
T: Good idea! (To FF2)) did you mean a magic being when you first said it?
FF2: No, I meant a magic bean
T: Oh I thought that but you're (to D2) saying a magic being – I understand it now, that's
a good idea.
() ((talking, laughing))
F2: [A DATE?!
T: NO, WE ARE LISTENING TO D2 shsh, ok, F2, don’t spoil it?. people want their turn,
you have had ↓ yours. D2
D2 And then after the dance he probably came across and put a magic spell on him and
then the fish was just floating away and he could wish
T: Right↑ OK thank you for giving us a whole different idea to think about↓↑ S1?
S1: “Pass”
T: Are you sure? Yeah? T1?
T1: Eh well he must he must have started being human and when he like must’ve like
and when he’s going to drink when he (.) wanted a drink when he was thirsty he must
’ve drank it and he didn’t know that there was magic stuff in it and then he was a fish
and he just ehm went into the water=
T: [ahh? so
T1 and then he could wish
T: so he started off as a human being who then became a magical fish? that’s a different
story again.. hmm good idea!

Social interaction in extract 4
Lines 81- 94 are mainly taken up by D2’s idea, which is interrupted by two elements: T
discovers in line 85 that she misheard D2’s ‘being’ (4:81) for ‘bean’, and has the
embarrassing realisation that she may have misinterpreted all of the previous discussion. Her
colleague, C, who is handling the video camera, interferes whilst laughing (84) and explains
the misunderstanding (86). The interaction is repaired and the misunderstanding is cleared up
by T in lines 87 and 89, but the situation has, understandably, given rise to some hilarity (90).
F2, who is D2’s friend, also finds the idea of the fish having a date humorous (91) and calls
out loudly ‘[A DATE?!’. The interaction is, also rather loudly, brought back under control by T
in line 92. In line 93, D2 articulately resumes his argument without explaining the idea of ‘date’
any further other than by rephrasing it as ‘dance’. In line 97 and 99 T1 shares his creative
thinking with the class. His use of vocabulary and syntax is, in contrast to that of eloquent
D2’s, rather hesitant, but his message is clear, acknowledged by T’s ‘hmm good idea!’ in line
100, and is, from the evidence in the ensuing section, seen by many children as the solution
to the problem they have been discussing.
Creative thinking in extract 4
Apart from T’s mistaken realisation that she may have misinterpreted a whole episode of the children’s discussion, which could also be said to contain a degree of imaginative/creative thinking, there are two main creative ideas apparent in this episode: D2’s idea of the fish meeting a magic creature at a date or dance (4: 81, 93), and T1’s idea of the fish being a human first and turning into a fish (4:07). It is likely that D2’s ideas were less due to his personal creative thinking than the originality of his idea seemed to suggest at first: his words and ideas seemed to be based on elements from existing stories, such as Andersen’s ‘the Little Mermaid’, especially as it was known that D2 had a family background in which reading and imaginative talk was very much stimulated. In addition, D2 offers these highly novel thoughts in a very matter-of-fact manner, despite the fact that his idea has been interrupted by T’s confusion and the ensuing hilarity. These factors seem to indicate that, to him, his idea is not as extraordinary as it appeared to others (see, for example F2’s: ‘A DATE?!’ in line 91). If this were the case however, we still need to acknowledge that it required a degree of creative thinking for D2 to apply pre-existing ideas to the context of this discussion.
Both in content and expression, T1’s thoughts (99 and 97) can be contrasted to D2’s. Interestingly, the elements of a magic drink have been discussed in earlier parts of this round, but T1 uses this concept to give a context to the idea of the fish starting as a human, which is completely new to the discussion. Perhaps this came from D2’s ideas - for example, the mention of a ‘magic being’ may have sparked off the thought of people turning into sea-creatures and vice-versa. The slightly hesitant way in which T1 offers his idea may signify that he is thinking while he is speaking, or that he is aware of the originality of this thought, and thus slightly hesitant about offering it, given the hilarious reaction D2’s idea had been met within the same episode.

Discussion and conclusions

Social interaction in the Community of Enquiry

Much of the interaction in this Community of Enquiry seemed to follow an Initiation/Response/Feedback (IRF) pattern. Many of T’s contributions are initiating questions (e.g. 3:48,51,76), and short comments giving a degree of feedback, such as ‘Ahh!’ in 3 (53) and ‘Right, OK’ in 3 (57). In some respects the dialogue can thus be seen not to be dissimilar from the IRF or ERE structure, which is typical of most classroom communication (Edwards & Westgate, 1994: 125; Walsh, 2006: 46). However, two factors in this teacher’s talk seem to be distinctive from the common IRF structure: Many of T’s initiating contributions consist of general invitations ‘Would anybody like to say anything, agree or disagree with that? (2:36), the allocation of turns, such as in ‘Right, OK, FFF2’ in 3:57 and ‘Can we have KK2 and U1?’
in 3:63, and encouragement to the pupils to listen to each other, such as ‘Shsh, listen to KK2’, in 3:73. Here, the teacher clearly fulfils the role of facilitator or chair. The other distinguishing feature seems to be that the acknowledgements T gives in response to a pupil talking are, in the main, not evaluative: T acknowledges contributions, as ‘Hhmm’ in 1:15, or asks further questions ‘Aha,? and can you tell us why U1?’ in 2:33. In the rare occasions where she comments on the quality of the response, such as in 4:87 ‘Good idea!’, this is a brief comment, without any explanation as to why she judges it to be, in this case, a ‘good’ idea. This is in contrast to ‘Assessment for Learning’ techniques (QCA) where pupils’ contributions are assessed against learning goals and advice for improvement is given immediately.

‘Learning goals’ in the Community of Enquiry relate to the development of skills of a communicative, personal, social and cognitive nature. In order to preserve the integrity of the Community of Enquiry (Baumfield, 2001) and to stimulate an open dialogue, T would therefore aim to avoid making evaluative comments about the content of children’s contributions during the sessions. In the plenary session following each enquiry, however, evaluative comments about the process, both from T and the pupils, were shared, and if clear misconceptions had been expressed during the enquiry, these would be rectified.

Despite this seemingly ‘open’ atmosphere, however, it is clear that the interaction in the Community of Enquiry sessions was strongly structured and institutionalised (Walsh, 2006; ten Have, 2007). T holds the power (although this seems at time, to be contested, see 1:1-11). Her contributions are more frequent and often more lengthy than those of the pupils, and it is T who allocates turns. To a large extent she also determines whose and which contributions are developed as the next line of enquiry, such as in ‘B2 I’m interested in knowing if she sleepwalked all the way to school was Lion wal walking with her whi while she was sleepwalking?’ in 3 (51), or ‘Would anybody like to say anything, agree or disagree with that?’ in 2:36), which ones are acknowledged but not developed further (as in 3:61: aha! Right, I am looking at my watch’), or ignored, such as ‘FF2 will you sit properly please ((FF2 has hand up since line 25))’ in 2:38. Each of these three response modes of T’s could be said to be implicitly indicative of T’s assessment of the value of the comment she was responding to. It can be assumed that, as pupils ‘developed a shared understanding of the progress of the interaction’ (Seedhouse, 2004) the children will have been well aware of these judgements made, and the hypothetical question can be raised if a greater amount of creative thinking could have been developed by changes in T’s response modes.

Within the pupil group, certain power relationships were also apparent. B2, often allied with FFF2 and L2, for example, was a strong player in the Community of Enquiry, as was clear from her contributions in extract 2 and 3. Similarly, F2 would often demand an audience for his ideas (extract 1 and 4). In contrast, other children, for example FF2, could find it hard to ‘break into’ the discussion, as was seen in extract 2.

Some apparent frustration seemed to be felt by some pupils during the Community of Enquiry, which became apparent in the analysis of video data which at times showed children who did not look very engaged (as mentioned under abstract 1), loud exhalations which could
be interpreted as sighs, and evidence of children who wanted to make a contribution but were not given the opportunity to do so (extract 2). Although such incidents took place relatively infrequently, they are an important finding from this analysis which needs to be acknowledged.

The four abstracts show a development within the pupils’ communicative skills which was also found in the earlier analysis of these data (Jones, 2004). Not only do the pupils adhere more to the rules and expectations set by T (compare 1(1-11) to the later discussions), but a greater number of children participate actively in the later discussions, (compare transcript 1 to 2, 3 and 4), and there seems to be some evidence to show that pupils participated making more lengthy and coherent contributions later. T1, for example, who offers the following contribution,

‘Eh well he must he must have started being human and when he like must’ve like and when he’s going to drink when he (.) wanted a drink when he was thirsty he must’ve drank it and he didn’t know that there was magic stuff in it and then he was a fish and he just ehm went into the water’ (4-87),

only started making contributions which were longer than one syllable in the Summer term. Importantly, the CA transcripts and video data also seemed to show some evidence that, in later enquiries, the pupils directed their contributions more to the group as a whole, rather than to T, although this is hard to quantify.

The teacher’s interaction with the pupils in the Community of Enquiry sessions, which was not investigated in the first analysis (Jones, 2004), also seems to change during the year. Not only did she seem to make fewer comments related to expected pupil behaviour in later sessions, such as ‘Just wait a minute because some people aren’t listening’ (2:38) and ‘Would anybody like to say anything, agree or disagree with that?’(2:36), but she also appeared to be more adapt at encouraging children to make clarifying and elaborate contributions (3:76-79). As a participant she was no less prone than the children to misunderstanding aspects of the dialogue (4:82-89), but she seems to generally have a more relaxed attitude in later sessions, using some humour in directing contributions to individual pupils, such as ‘(to K1)) It whould be hard to get to school!’ (3:51),and to make more positive evaluative comments, such as ‘that's a good idea’ (4:89).

Creative thinking in the Community of Enquiry

The analysis of these transcripts has led to a number of findings regarding the creative thinking in this context. Firstly, this study showed the extent to which creative thinking was seen to be co-constructed. Nearly all incidents of creative thinking, for example the possibility of being smaller being a problem (extract 1), the ground being bouncy (extract 2),
somebody imagining a lion (extract 3) or a person turning into a fish (extract 4) were able to be traced back to one or more earlier comments made by other pupils, and, in turn, open to be developed further by others. This process seems to correspond to the Pearson correlation found previously between reasoning and reproductive contributions mentioned in the introductory section of this paper. However, this finding, generated in an approach which was informed by CA principles, was very different to the findings from the previous analysis (Jones, 2004) in which individual children’s comments were analysed. The notion of co-constructed creativity in more general terms seems to be rather novel in the domain of creativity research, which tends to focus on the assessment and development of creativity in the individual, (Torrance, 1992; Csikszentmihalyi, 1996; Sternberg, 1999; Cropley, 2001), even where the importance of social factors has been acknowledged (Amabile, 1996).

However, this is not to say that creative thinking was produced by the group as a whole only, and not related to individual children. As was shown in the first analysis (Jones, 2004) there was a large variety in the types of comments made by the members of this Community of Enquiry, but the comments made by individual children were often of a much narrower range. For example, D2’s suggestions about a fish having a date with a magic being (extract 4), were indicative of the type of ideas which he tended to offer throughout the year. However, the current finding that the ideas generated were, to a very large extent, built on earlier ideas and comments, may show that creative thinking in this context is the product of a large amount of social interaction combined with a degree of personal imagination, resulting in a process of collaborative imagination. The creative thinking of individuals can thus perhaps be described as the ability to make the next ‘twist’ in the chain of ideas generated by the group. On the basis of these findings, the Community of Enquiry can be said to be a setting which lends itself well to the construction of such chains and thus to the process of collaborative creativity.

Interestingly, these chains of ideas were often, but not always, developed by pupils belonging to the same friendship group. For example, B2’s ideas were often in alliance with those of FFF2 (in extract 3) and L2 (extract 2), although sometimes ideas were generated across friendship groups (see extract 2, in which U1 contradicted N2).

Secondly, the transcript analyses showed that a number of ideas which were found to be creative were seen to be put forward rather hesitantly. In fact, a self-assured manner of speaking could be indicative of an idea being less creative than it seemed, such as D2’s ideas in extract 4. It is likely that this is typical for the expression of creative ideas, which are being thought in interaction, tested out for the first time (Craft, 2000) and possibly due to meet with laughter (such as the idea of a girl sleepwalking, extract 3), misunderstanding, (4:82) or a lack of recognition (1:18).
It must, once again, be pointed out that in the approach used, only some Conversation Analysis principles were applied, but that the analyses themselves did not follow CA methodology. However, the CA transcription method has transpired to be an invaluable tool in the mapping of the social interaction typical of this Community of Enquiry, how this related to creative thinking, and how it developed across the year. Compared to the earlier ‘words only’ transcripts and analysis, it has uncovered a plethora of features of interaction which were distinct in this particular Community of Enquiry. Such ‘mapping’ of the interaction in dialogic classroom settings is essential for our understanding of innovative classroom practice and has much potential for the development of Philosophy for Children and other educational approaches based on dialogue (Wells, 1999; Alexander, 2006; Mercer & Littleton, 2007). Ten Have (2007) describes CA by drawing a comparison to a natural historian’s study of birds. The analysis carried out in this study frequently reminded me of another example from the natural world. We could compare the previous ‘words only’ analysis (Jones, 2004) to the observations made by a marine biologist looking at a long stretch of beach water. In comparison, the current analysis is reminiscent of observations made by the same biologist in a small number of columns of seawater of several metres’ depth. In this observation a much wider variety of creatures could be seen, within a context which seemed at once perfectly in order (Seedhouse, 2004) and infinitely intriguing. This application of CA principles was thus found to be of enormous benefit in this study for the uncovering of both the creative thinking and the social interaction in the Community of Enquiry. Edwards and Westgate (1994) have rightly pointed out that this type of analysis can be very time consuming and that the researcher has to be selective in both the transcripts and the depth of analysis. Research in Second Language Acquisition has benefited greatly from the use of Conversation Analysis (Seedhouse, 2004; Walsh, 2006). This study shows that the use of CA principles could also be of great benefit for our understanding of interaction processes in mainstream education classes, particularly those which are based on dialogue. In the contest of this symposium, CA principles can thus be said to be able to support and deepen our understanding of Philosophy for Children as a foundation for pedagogic and curriculum change.

References
Appendix: key to transcript conventions used

The following glossary of transcript symbols used in these transcripts is based on ten Have’s transcription conventions (ten Have, 2007: 215, 216), which he describes as ‘the major conventions for rendering details of the vocal production of utterances in talk-in-interaction as these are used in most current CA publications.’

**Sequencing**

[ indicates the point of overlap onset

= indicates no ‘gap’ between the two lines

**Timed intervals**

(0) indicates elapsed time in silence by seconds

(.) indicates a tiny ‘gap’ within utterances

word indicates some form of stress

: indicates prolongation of the immediately prior sound

- indicates a cut-off

.??, indicate characteristics of speech production, especially intonation.

. indicates a stopping fall in tone

. indicates a continuing intonation, like when reading from a list

? indicates a rising intonation

↑ or ↓ indicate marked shift into higher or lower pitch in the utterance part immediately following the arrow

WORD upper case indicates especially loud sounds relative to the surrounding talk

° utterance bracketed by degree signs are relatively quieter than the surrounding talk

<> right/left carets bracketing an utterance indicate speeding up

.hhh A dot-prefixed row of hs indicates an inbreath. Without the dot, the hs indicate an outbreath

w(h)ord a parenthesised h or a row of hs within a word indicate breathiness as in laugh, crying etc.

**Transcriber’s doubts and comments**

() empty parentheses indicate the transcriber’s inability to hear what was said.

(word) parenthesised words are especially dubious hearings or speaker identifications

(( )) double parentheses contain transcriber’s descriptions rather than, or in addition to, transcriptions.


Baumfield, V. (2001) advice and discussions relating to the 'Integrity of the Community of Enquiry'. Newcastle upon Tyne.


