In Two Minds: cognitive and linguistic skills used by children with normal language and a specific impairment of language to understand and resolve ambivalent emotion.

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PhD Thesis
December 2006
Volume 2
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APPENDIX 1

The Puppy Story and The Kitten Story: Interviewing Procedure.

Written by Donaldson and Westerman 1986, but including minor vocabulary changes for the British subjects (see main thesis).

INTRODUCTION TO THE PROCEDURE

I am going to play two short tape recorded stories about a boy/girl your age. Each story has two parts. I will stop the tape recorder after each part and ask you to tell me that part of the story in your own words. Then I will ask you some questions about how you think the boy/girl in the story is feeling. There aren’t any right or wrong answers to the questions so you shouldn’t worry about making a mistake. I just want to know what you think about the boy/girl in the story. You don’t have to answer a question if you don’t want to. Nobody else will know what answer you or any of the other students (children) give. What you say will be between just you and me. It is important that you understand each story. If I ask you a question and you don’t remember something in the story, please tell me, and I’ll be happy to tell you the story or that part of the story again.

Do you understand what we are going to do?

Good, I’m going to tape record what we say so that it will be easier to remember later OK?
METHODOLOGY

The Puppy Story: Anger-Love

Part 1

Mike/Molly has a dog named Pepper. He/She likes to play with Pepper who follows him/her everywhere. One morning M went outside to look for a ball that he/she has lost. Pepper followed him/her outside as usual. Soon Pepper came over to M wagging his tail. Pepper had found the ball. He brought it over and dropped it at M's feet.

Ask the subject to repeat this part of the story in his own words.

Would you tell me the part of the story you just heard?

If the child has difficulty doing this, ask him/her the following comprehension questions:

Who is Pepper?
What did M lose?
What did Pepper do?

Do not begin the interview until the subject clearly understands Part 1 of the story. Help the child sort out whatever confuses him/her. If necessary, read the story to him/her again.

The Puppy Story: Part 1 Questions

1. How does M feel? Why does M feel ___?

2. How does M feel toward Pepper?

3. (If love not mentioned spontaneously) Does M feel loving toward Pepper?

4. How would M show his loving feelings toward Pepper?
   How would M act toward Pepper?
   How would M look at Pepper?
   How else could you tell that M loved Pepper?
The Puppy Story: Anger-Love

Part 2

For Boys

Later on that afternoon, Mike decided to launch his favourite model airplane. He had spent three days building this plane and liked it very much. He invited his parents to see the plane’s first flight. Mike sent the plane up in the air, it soared over the yard and began to land in the grass. Just then, Pepper rushed in after the plane and chewed it up.

For Girls

Later on that afternoon, Molly decided to show her paintings to her parents. She has spent a long time making these paintings. She liked them very much. She laid them out on her bed and went to get her parents. While she was out of the room, Pepper rushed in and chewed them all up. When Molly came back, she found that all her beautiful pictures had been wrecked.

Ask the subject to repeat the second part of the story in his/her own words.

Would you tell me what happened in this part of the story?

If the child has difficulty doing this, ask him/her the following comprehension questions:

What happened later on that afternoon?
What did M make?
What happened to the plane (pictures) that M made?
Who chewed up the plane (pictures)?

Do not proceed until the subject clearly understands Part 2.
The Puppy Story: Part 2 Questions

1. How does M feel about Pepper now? Why does s/he feel ___?

2. Could M feel anything else along with being (angry) ___?

3. (If child says that M feels sad without mentioning angry feelings, probe:)

   Some children have told me that M was really angry at Pepper for wrecking his plane/her paintings. How could that be? Do you think M would be more angry than sad?

Scenario A: If the child spontaneously mentions that M still loves Pepper even though s/he is angry at him or makes any attempt to coordinate anger with a positive feeling, inquire:

4a. So M still loves Pepper but s/he’s angry at him? Can you tell me more about that?

5a. Why should M still love Pepper after he wrecked his plane/her paintings?

6a. Does M remember his/her loving feelings at the moment that s/he sees his plane/her paintings?

   (If no, the love is not remembered, inquire:) If M doesn’t remember his/her loving feelings when s/he sees the damage, how would s/he know that s/he still loves him?

7a. (If child mentions a love that exists deep down inside inquire:) Does M know about this love that exists deep down inside?

8a. OK, you’ve said that M still loved Pepper even though s/he was angry at him. Would M feel both love and anger at the same time or does s/he first feel one and then the other?

   (If child answers yes to both time questions, probe:) Which would it be? Both anger and love at the same time or first one and then the other?

9a. Do angry feelings mix together with loving feelings or do they stay separate?

10a. Can you tell me a little bit more about what it’s like to feel both anger and love mixed up together?

11a. Is it confusing?
12a. What's going to happen to M's mixed feelings? With they go away?  
    (If confusing) Will M stay confused?

13a. When M is angry, do the loving feelings go away?  
    (If child talks about a mixture of anger and love, inquire:)

14a. (If child mentions a love that exists deep down inside even when angry, probe:) Can you tell me more about this love that doesn’t go away when M is angry? It is different from other loving feelings? How?

The Puppy Story: Part 2 Questions

1. How does M feel about Pepper now? Why does s/he feel ___?

2. Could M feel anything else along with being (angry) ___?

3. (If child says that M feels sad without mentioning angry feelings, probe:)

Some children have told me that M was really angry at Pepper for wrecking his plane/her paintings. How could that be? Do you think M would be more angry than sad?

Scenario B: If the child mentions only anger or other negative feelings (i.e. sadness, not liking Pepper), inquire:

4b. How did M feel toward Pepper in the morning when he found the toy?  
    (Child is reminded of loving feelings if not mentioned spontaneously)

        And now he feels?

5b. What happened to the loving feelings?  
    Did they go away? Are they all gone?

6b. Will they ever come back?  
    (If subject states that the love will never come back, inquire:)

Never? M will never love Pepper again?

7b. (If subject says yes the love comes back, inquire:)

What will make the loving feelings come back?
8b. (If the child says that Pepper has to repair the damage, inquire:) If Pepper does not repair the plane or return the paintings, will M stop loving him?

(If child states that M will love Pepper again even if he doesn’t repair the damage, inquire:) What might bring back M’s loving feelings toward Pepper?

9b. Do you think that M could feel both love and anger toward Pepper? How does that work?

10b. Would M feel both love and anger at the same time or does s/he feel first one and then the other?

(If child answers yes to both time questions, inquire:) Which would it be? Both anger and love at the same time or first one and then the other?

11b. Do angry feelings mix together with loving feelings or do they stay separate?

12b. (If child says that they mix together, inquire:) Can you tell me more about what it’s like to feel both love and anger mixed together?

13b. Is it confusing? What's going to happen to M’s mixed feelings?

14b. When M is angry, do the loving feelings go away?
The Puppy Story: Part 2 Questions cont. (The following questions form Part 3 of The Puppy Story interview as analysed in the British research).

15. You said that M will get over his/her angry feelings? What will happen to them?

   OR

Do you think M will get over his/her angry feelings?

   (If no) If M doesn't get over his/her angry feelings, will s/he stop loving Pepper?

   (If yes) What will happen to the angry feelings?

16. What makes angry feelings go away?

17. Is there anything children can do to make their angry feelings go away?

18. Once they've gone away, do angry feelings come back? What will make them come back?

19. You said that M will get over his angry feelings, will he get over his loving feelings too?

   We've been talking about how M feels angry and loving; now I'd like you to think only about the angry feelings.

20. How could you tell that M was angry at Pepper?

   20a. How would M act toward Pepper?
   20b. How would M look at Pepper?
   20c. How else would M show his angry feelings?

21. (If child can coordinate love and anger as in Scenario A, inquire:)
Is there any way that you could tell that M also loved Pepper when he was angry at him?

22. How do you think M would feel if a neighbour's dog has wrecked his plane/her paintings?

   Would he act differently than he did toward Pepper? How? Why?

23. How would you feel if you were Mike/Molly and your favourite dog wrecked something that you had made and liked a lot?

   Would you feel the same as M or different?
The Kitten Story: Happy-Sad

Part 1

When Bill/Bonnie was ____ years old, s/he was given a kitten for his/her birthday. S/he had wanted a kitten for a long time so s/he was very happy when s/he finally got the kitten. S/he named the kitten Snowball. Bill/Bonnie told his/her friends that Snowball was the best kitten in the whole world. One morning s/he was in a big rush. Bill/Bonnie left Snowball in his/her bedroom and forgot to close the window. His/Her mother also forgot to shut the window. That afternoon Snowball jumped out the window and ran away. Bill/Bonnie looked for Snowball day after day, week after week.

Ask the subject to repeat this part of the story in his own words.

Would you tell me the part of the story you just heard?

If the child has difficulty doing this, ask him/her the following comprehension questions:

Who is Snowball?
Does B love Snowball?
What happened to Snowball?
How did she get away?
Who forgot to shut the window?
What did B do after SB ran away?

Do not begin the interview until the subject clearly understands Part 1 of the story. Help the child sort out whatever confuses him/her. If necessary, read the story again.
The Kitten Story: Part 1 Questions

1. How does B feel? Why does B feel (sad) ____?

2. How could you tell that B feels sad?
   - How would B act when sad?
   - How would B look when sad?
   - How else could you tell that B was sad?

3. (Children 4 – 5 years old receive questions 3 – 4 and 5 and omit question 10 on Part 2. Children 7 – 8 years and 10 – 11 years omit questions 3 – 4 and 5 in Part 1 and go straight to question 6). Do you think that B will get over his/her sad feelings?
   - (If yes, inquire:) What will happen to them?
     - Will B forget all about SB?
   - (If no, inquire:) Will she always be sad?
     - (If child says that the sad feelings will go away when B finds SB, inquire:) If B does not find the cat, will his/her sad feelings go away?

4. (If child states that the sad feelings will go away, inquire:)
   - What makes sad feelings go away?

5. Will the sad feelings come back?
   - What will make them come back again?

6. Could B feel anything else along with being sad? What?
   - (If child does not spontaneously mention anger, probe:) Some children have told me that along with being sad B also felt angry. Does that make any sense to you?

7. Why would B feel angry?

8. Who is B angry at?
   - So B is angry at ____ because ____ could s/he be angry at anybody else? Who? Why?
9. Who is B most angry at? (mother, self or kitten)

10. Does it feel any different to be angry at yourself than to be angry at your mother?

11. How could you tell that B was angry?
   
   How would B act when angry?
   
   How would B look when angry?

12. (If the subject says that B is both angry and sad because SB ran away and/or gives similar cues for both feeling states, probe further to see if he can differentiate between angry and sad feelings).
   
   Are angry and sad the same?
   
   How are they different?
   
   Do they feel different inside?
   
   Do they look different on somebody's face?

13. Could B feel both angry and sad? How does that work?

14. (If time unspecified, inquire:) Would B feel angry and sad at the same time or first one and then the other?

   (If child says yes to both time questions; probe:) Which would it be? Both angry and sad at the same time or first one and then the other?

15. Do angry feelings mix together with sad feelings or do they stay separate?

16. When B is angry, do the sad feelings go away?
"The Kitten Story: Happy-Sad"

Part 2

Bill/Bonnie looked for Snowball for a long time but s/he did not find her. Finally s/he gave up hope and stopped looking. S/He talked to his/her parents about wanting a new kitten. But s/he also said that a new kitten just wouldn't be the same as Snowball. Bill/Bonnie's birthday is coming up soon. His/her parents decided to give him/her a new kitten as a present. Right now Bill/Bonnie opens the door and sees his/her new kitten.

Ask the subject to repeat the second part of the story in his/her own words.

Would you tell me what happened in this part of the story?

If the child has difficulty doing this, ask him/her the following comprehension questions:

What happened to Snowball?

Was she lost for good?

What did B say to his/her parents?

What did his/her parents decide to do?

What did B get for his/her birthday this year?

Do not proceed until the subject clearly understands Part 2.
The Kitten Story: Part 2 Questions

1. How do you think B feels about the new kitten? Why does s/he feel ____?

2. Could B feel anything else along with being (happy)?

Scenario A: If the child spontaneously coordinates happy and sad feelings or gives positive and negative feelings in response to questions 1 & 2, inquire:

3a. So B is feeling both happy and sad. How could that be?

4a. Does B feel both happy and sad at the same time or does s/he first feel one and then the other?

(If child says yes to both time possibilities, probe:) Which would it be? Both happy and sad at the same time or first one and then the other?

5a. Do the sad feelings over losing Snowball mix together with the happy ones or do they stay separate?

6a. When B is happy, do the sad feelings go away?

7a. (If child states that happy and sad feelings are mixed up together and/or at the same time, inquire:) Can you tell me a little bit more about what it's like to feel both happy and sad mixed up together (at the same time)?

8a. Is it confusing?

9a. What's going to happen to B's mixed feelings? Will they go away?
The Kitten Story: Part 2 Questions

1. How do you think B feels about the new kitten? Why does s/he feel ____?

2. Could B feel anything else along with being (happy)?

Scenario B: If the child mentions only happy feelings and ignores the sad feelings from Part 1, inquire:

3b. Will B think about Snowball when s/he sees the new kitten?

   (If yes) What will B think?

   (If no) Will B forget about SB?

4b. If B thinks about SB, will she stay happy?

   (If no) What will happen when s/he thinks about SB?

5b. (If child still denies the possibility of sad feelings, probe further:)

Do you think that along with feeling happy about the new kitten, B would also feel a little bit sad?

What would B feel sad about?

What would B feel happy about?

6b. (If child coordinates happy and sad after probe; inquire:)

You said that B feels happy about his/her new kitten but that s/he was sad about losing SB (missed) SB. How would that be?

7b. Would B feel both happy and sad at the same time or first one and then the other?

   (If child says yes to both time possibilities; probe:) Which would it be? Both happy and sad at the same time or first one then the other?

8b. Do the sad feelings over losing SB mix together with the happy ones or do they stay separate?

9b. When B is happy, do the sad feelings go away?
The Kitten Story: Part 2 Questions cont. (The following questions form Part 3 of The Kitten Story interview as analysed in the British research).

10. (With children 7 – 8 years and 10 – 11 years and the younger ones who can coordinate happy and sad, inquire: With 4 – 5 year olds go straight to question #14)

Will B eventually get over the sad part of his/her mixed feelings?

(If no) If s/he doesn’t get over the sad feelings, how will B feel about the new kitten?

11. (If the child states that the sad feelings will go away, inquire:)

What makes sad feelings go away?

Is there anything children can do to make their sad feelings go away?

12. Will the sad feelings come back?

What will make the sad feelings come back?

13. You said that B would get over the sad part of his/her mixed feelings, will s/he get over his/her happy feelings?

14. (We’ve been talking about how B feels happy and sad, now I’d like to think only about the happy feelings).

How could you tell that B was happy about getting a new kitten for his/her birthday?

How would B act when s/he was happy?

How would B look when s/he was happy?

15. (If the child can coordinate happy and sad feelings, inquire:)

How could you tell that B felt both happy and sad?

16. Would B feel differently about the new kitten if s/he had never had SB and lost her? How?

17. Will B’s sad feelings about losing SB change her behaviour toward her new kitten? How?

18. How would you feel if you were given a kitten for your birthday after losing one that you loved?

Would you feel the same as B or different?
DEBRIEFING

You have done a very good job helping me understand how Mike/Molly and Bill/Bonnie feel. You have also told me about some of your feelings. Although we have talked about some bad feelings, like feeling very sad or being angry at someone, I don’t think you are a bad or angry person in anyway. In fact, I think you’re a really nice person. Children have lots of feelings. Sometimes they feel angry, sometimes sad, sometimes happy. We all have lots of different feelings. I am interested in how children at different ages think about their feelings. You have helped me to understand this. As I said in the beginning – everything you said is just between you and me. Would you like to ask me some questions before you leave? You can be the teacher and I’ll answer your questions.
APPENDIX 2

Cognitive Profiling System (CoPS)

The Cognitive Profiling System (CoPS) by C.H. Singleton, K.V. Thomas and R.C. Leedale was first published in 1996 and revised in 1997 and 1998. It is a computerised psychometric assessment system standardised for use with children from 4 years 0 months to 8 years 11 months.

CoPS was produced following a five year research project carried out at the Psychology Department of the University of Hull (see Singleton and Thomas, 1994; Singleton, Thomas and Horne, 2000, Singleton 2002). This project demonstrated the validity and effectiveness of the cognitive profiling approach in predicting children’s difficulties in literacy and other areas of learning. An evaluation of the CoPS Cognitive profiling system was carried out by Singleton and Thomas (1997) at the Department of Psychology, University of Hull.

The profile provides direct assessment of the following areas of cognitive ability:

- Visual/spatial sequential memory (spatial/temporal position)
- Visual/verbal sequential memory (symbols)
- Auditory/visual associative memory (shape and colour)
- Auditory/verbal sequential memory (names)
- Visual/verbal associative memory (shape and colour)
- Phonological awareness (rhyming and (older pupils) alliteration)
- Auditory (phoneme) discrimination
- Colour discrimination

In addition, CoPS provides indirect assessment of:

- Information processing speed
- Motor processing speed

The aim of the assessment is to provide a detailed picture of a child’s cognitive strengths and weaknesses. It has particular relevance for the identification of subtypes of dyslexia, and gives information on a child’s individual learning style. The assessment also provides teachers with pointers for curriculum development and for differentiation within the classroom.

The subjects in the two younger research groups (4 – 5 years and 7 – 8 years) attended an Exeter school in which all children are screened on entrance to the Nursery at age 4 years. Subsequent assessment is carried out at transition between curriculum Key stages or as required. All the subjects in these two research groups presented with CoPS scores within the average range for their age in all subtests, and at all ages of testing.
APPENDIX 3

Ambivalence Level Scoring Manual

(Written by Donaldson and Westerman, 1986. See Appendix 1 for stories and interview questions).

Instructions

1. Familiarize yourself with the Ambivalence Levels so that you can distinguish their different inner structures. Reading ahead to the more expanded descriptions that introduce each level may facilitate this process.

2. Read the stories and interview questions carefully. Familiarity with the probe questions is essential because judgment calls are based, in part, on how hard the child has to be pushed before he tries to juxtapose contrasting feelings. For example:

   (a) If a child is asked Scenario B probes on The Kitten Story his/her Ambivalence Level Score (ALS) will probably be either 0 or 1.

   (b) If a child is answering Scenario A questions on The Puppy Story, the rater should be thinking in terms of a Level 3 ALS.

3. Be familiar with the time and space questions and the possible answers to them; because the varying ways that children handle these questions relate to different Ambivalence Levels.

4. However, while these guidelines should be kept in mind, the ALS score is based on the entire statement and not on the answers to any specific set of questions. In assigning a level score, the rater has to balance various indicators that can, at times be contradictory. The final judgment is based on matching the flavour of the entire data section to one of the Ambivalence Levels.

5. Read the data first to get an overall sense of its flavour. Then go back and look more carefully at it’s component parts. For example: see how hard the child has been pushed, how he handles the questions of time and space, and how much he revises his initial, spontaneous answer.

6. Force yourself then to assign a Level score to each piece of data. Please keep track of the judgments where you feel uncertain and note the reasons for this uncertainty.

7. If you cannot decide between two levels, score conservatively in favour of the lower level.

8. Do not equate the length of the data or its verbal sophistication with a high ALS. Very short answers can warrant a Level 3 score while long statements can reflect Levels 0 or 1 thinking.
LEVEL 0: While the child can identify the plausible single affects which occur in the stories, he does not realise that multiple, including contradictory, feelings exist. At this level feelings are conceived as occurring one at a time, in an all or none fashion. One feeling exists per situation. Once B receives a new kitten to replace SB, both the situation and its attendant feeling state have been altered. Whereas before B was only sad, now he is totally happy. The sad feelings over losing SB have been forgotten. Similarly, when Pepper angers M by destroying his plane, he is only angry. The loving feelings from the morning disappear and are "all gone". M's love is restored only if Pepper can repair the damage which he has done. In other words previous feeling states can be resurrected only if the identical situation which originally evoked the feeling occurs again. Feelings are seen as discontinuous, global phenomena. They are experienced as timelessly endless when one had a feeling while also being ephemeral in that the state passes without a trace.

LEVEL 0: THE KITTEN STORY

A child who is thinking at Level 0 states that B is only happy when he receives his new kitten. He does not spontaneously mention anything about SB or possible sad feelings over her loss. The child is then pushed by the probe questions to consider Snowball. He is asked:

Will B think about SB when he sees the new kitten?
What will he think? Will B forget about SB?
If B thinks about SB, will he stay happy?

In answer to these questions, a Level 0 subject may state either that B would not think about SB when he sees the new kitten or that B will stay happy even when he does think about her. Some children will worry about SB in some way but still claim to be only happy. If a subject forgets about SB as a way of dismissing the sad feelings, he is scored at Level 0. Next the child is probed further when he is asked:

Do you think that along with feeling happy about the new kitten, B would also feel a little bit sad?

When children say no, no further questions are asked and the subject is scored at Level 0. For example:

(How does B feel about his new kitten?) Happy. (Why?) Because he got a new kitten. (Could he feel anything else along with being happy?) No. (Will B think about SB when he sees the new kitten?) Yes. (What will B think?) He'll think about where she is. (When he thinks about SB will he stay happy?) Yeah. (Do you think that along
with feeling happy about the new kitten B could feel a little bit sad?)
   No. (No sad feelings at all?) Right.

Some children will claim that B stays happy when he thinks about SB while simultaneously stating, when probed, that B could feel both happy and sad. If the child answers (Could B feel sad, along with happy?) in the affirmative, he is asked to juxtapose happy and sad along a temporal and spatial dimension. He is questioned:

   Does B feel happy and sad at the same time?
   Or first one and then the other?
   Do sad feelings mix together with happy feelings or stay separate?
   When B is happy do the sad feelings go away?

At this level the child assumes that feelings are experienced separately, at different times so that one feeling displaced the next. Unless a child reconsiders his former insistence that thinking about SB has no bearing on his current happiness, the subject is scored at Level 0. For example:

   (How does B feel about the new kitten?) I don't know, but I think he feels happy. (Why?) Because he had a new kitten. (Could he feel anything else along with being happy?) No. (Will he think about SB when he sees the new kitten?) No, I don't think so. (Will he forget about SB?) I think so. Maybe he'll call the new kitten SB. (Do you think that along with feeling happy about the new kitten, B would feel a little bit sad?) Yeah. (Why?) Because, I think that he knows that SB is lost for all those days. He knows that he's gone for good. (How could B feel both happy and sad?) He has a new kitten and he's sad because he doesn't have SB. (Same or different times?) First sad then happy. (Mix up?) No. (Stay separate?) Yes. (When B is happy do the sad feelings go away?) Yeah and when he's sad the happy feelings go away.

This subject receives a score of 0 for the first part of his answer where B stays happy even when thinking about SB. He seems to expect B either to forget about SB or to rename the new kitten SB as a way of circumventing his sad feelings over the loss. His eventual juxtaposition of happy and sad feelings is seen as an artifice of the inquiry and not truly representative of the level of his thinking. Since the child is pushed very hard in the protocol, the distinction between Level 0 and Level 1 should be scored conservatively in favour of Level 0.

If the child tries to rework the story so that SB returns or gives confused and contradictory answers, he is scored at Level 0 by default. Elaborations and confusions are seen as an effort on the child's part to obscure the difficulty he is having coordinating contrasting feeling states. If the child states that B will be happy only if the new kitten stays, he is scored at Level 0 as well. For if he connects sad feelings to the anticipated loss of his new cat and not to the loss of SB, he may be assuming that only a recapitulation of the
initial situation (in which a cat was lost) will evoke sadness. This kind of
cognitive flexibility is characteristic of Level 0 thinking.

LEVEL 0: THE PUPPY STORY

A child at Level 0 states that M is just angry (or sad) when he sees that his
plane/her paintings have been wrecked. He does not mention the loving
feelings from the morning and hence must be encouraged to consider them.
The subject is asked:

How did M feel toward Pepper in the morning?
Did he love him? And now he feels?
So what happened to the loving feelings?
Are they all gone? Will they ever come back?

If the child answers that the loving feelings are “all gone” and that they will
never come back, he is scored at Level 0. For example:

(How does M feel re Pepper now?) Mad. (Why?) Pepper chewed up the
plane and he had worked very hard to make it. (Could M feel anything else
along with being mad?) No. (How did M feel toward Pepper in the morning?)
Happy. (And did he love him?) Yeah. (And now M feels?) Mad. (So what
happened to the loving feelings?) Gone way. (Will they ever come back?)
No. (So will M never love P again?) Yeah. (What would make him love P
again?) He'll forget about it (?) Just forget. (Do you think M could feel both
love and mad toward Pepper?) No. (Mixed up or separate?) Separate. (So
when M is mad do the loving feeling go away?) Yes*

If the subject states that the love has gone away but it will come back, he is
questioned further. He is asked:

What will make the loving feelings come back?

If the child states that Pepper or his parents or M himself has to repair the
damage in order to restore M's love, he is asked:

If the plane/paintings are not fixed, will M stop loving P?

* This subject was over-zealously inquired. He stated earlier in the inquiry that his
love had gone away for good but was pressed unduly to rethink this.
There are a number of responses to these two questions that warrant a Level 0 score.

1) The return of loving is contingent upon the damage being repaired by Pepper or by M.

2) The love comes back only when P stops wrecking M's things. This response is scored Level 0 when there is no further elaboration indicating that sometimes M loves P and sometimes he doesn't depending on how he acts.

3) The love returns when M is happy because he got his plane back or because she made some more paintings.

4) The love is brought back by God or spirits.

5) The love comes back when M forgets about his plane and by the implication he forgot about the angry feelings attached to it. If M forgets about his anger when Pepper plays with him or does something good, a Level 1 is given.

These explanations share the cognitive rigidity characteristic of Level 0 thinking wherein only one possible event can resurrect M's love. The love will return only if M resurrects the original situation in which his plane/her paintings were intact. It is noteworthy that a child will go to considerable lengths to restore M's love by reversing the situation. The subject quoted below exemplifies this rigidity. He further demonstrates how enmeshed feelings at level 0 are with the particular event which evoked them.

(What happened to the loving feelings?) They broke. (How break?) If someone loves a person and the other person doesn't love them then the heart breaks. (All gone?) No, Mike would have to make another one. (How feel then?) Good, because the heart would come again and all the crunches will get fixed up. (What will make them come back?) The love, he'll be smiling and hugging again because he still cares about him... (Could M feel both angry and loving?) No. (What happens to M's angry feelings?) The dog will try to fix it and then he'll be happy. (Can a dog fix it?) No not for real. (If Pepper can't fix it will the angry feelings go away?) No, but he could use his mouth. (Will M stay mad?) No, he'll be happy in a little while when the dog is through finishing his airplane. (Will he love P again if he doesn't fix the plane?) No. (Never?) Never.

A few subjects in the sample give answers that are characteristic of both Level 0 and Level 1 thinking. For example:

(How does M feel re P now?) Mad. (Why?) Because he liked the plane very much. (Could M feel anything else?) Angry. (And along with being angry?) Sad. (What would he feel sad about?) His plane. (How did M feel toward P in the morning when he found his baseball?)
Happy. (He felt happy and he loved him, and now he feels?) He hates him. (So what happened to the loving feelings?) He broke it. (Did they go away?) They did. (Are they all gone?) Yup. (Are they ever going to come back?) No. (Never?) (Nods yes) (So he'll never love Pepper again?) Yup. (How could he do that?) On the day that he did something that was wrong he wouldn't like him and then the next day when he did something that he liked then he would like him. (So the loving feelings will come back when he does something nice?) Yup. (What could P do that would make the loving feelings come back?) He could buy him another plane. (Anything else he could do?) Lick him. (Do you think M could feel both mad and love at the same time?) No. (First one and then the other?) Yes. (Mix up or stay separate?) Both. (What happens when they mix together?) When he was wagging his tail to get something, he hit something that was glass and he didn't want him to and then he felt sorta happy and sorta mad. (When M is mad do the lovings go away?) No.

The above subject is firmly at Level 0 in the first part of his answer. He states that M's loving feelings are all gone and suggests that they will never come back. However, he reconsiders this answer when asked explicitly if M will ever love P again. He demonstrates Level 1 thinking when he claims that M loves his dog when he is nice and hates him when he is bad. Although he claims that M's love will come back when Pepper buys him another plane (i.e., Level 0), he adds that the love will also come back if P licks him (i.e., Level 1). In sum, this subject is scored at Level 1.

The inquiry continues with the following probe: Do you think M would feel both mad and love towards Pepper? Often Level 0 subjects will flatly deny the possibility that M could feel both love and anger towards Pepper. However, occasionally subjects who have shown Level 0 reasoning prior to his question will answer in the affirmative (like the subject quoted above). If they go on to show clear-cut evidence of Level 1 thinking (i.e., describe how sometimes M will be mad and sometimes loving) a Level 1 score is justified. However, if their answers to this probe question are ambiguous, score conservatively at Level 0. In sum, do not give Level 1 score unless the subject substantially reconsiders his previous answer. Subjects who are probed as to time and space state that love and anger are experienced separately at different times. When M is mad, the loving feelings go away.
SUMMARY OF LEVEL 0 CHARACTERISTICS

1. **No spontaneous coordination of contrasting feelings.** For example, in the kitten story there is no mention of SB or of sad feelings. In the Puppy story, the love from the morning is forgotten about.

2. **Even when Scenario B probes are used** to remind the child of the feelings from the first part of the story, he fails to coordinate contrasting feelings. For example, when asked if B will remain happy when he thinks about SB, the Level 0 subject will say yes. When asked if M will stop loving Pepper if the damage cannot be repaired, the Level 0 child will say yes.

3. **Feelings pass away without a trace.** Memories of SB and the sad feelings attendant to her loss are forgotten about when the new kitten arrives. M's loving feelings from the morning disappear and are "all gone" when Pepper wrecks the plane/paintings.

4. **A feeling is attached to the particular situation which gave rise to it.** Hence only one feeling exists per situation. B's sad feelings will return only if he loses SB again, or perhaps if the new kitten gets lost. M's love for Pepper will then return only if the plane/paintings is repaired.

5. **Often children at Level 0 will overtly deny the existence of contradictory feeling states.** They will state that B cannot feel both happy and sad, and that M cannot feel both anger and love.

6. If, under the pressure of considerable probing, they concede the existence of contrasting feelings, they see them as occurring separately and at different times.
LEVEL 1: The child recognizes the existence of contradictory feelings but does not see how feelings interact with and impinge upon one another. While he knows that he has different, at times, contradictory feelings, each feeling is directed at a separate aspect of the situation or person occurring sequentially at different times. Each feeling is embedded in that aspect of the situation which gave rise to it and hence is separate both in time and in space from the one which preceded it. B reports feeling both happy and sad in the kitten story because he remembers having felt sad over the loss of SB. However, the sad feelings exist only when he thinks about SB. They disappear when he turns his attention back to his kitten. Hence the delight at receiving a new kitten is uncontaminated by sad memories. Similarly, while M can feel both love and anger in the Puppy Story, these feelings are directed at different aspects of the dog’s behaviour and not at Pepper himself. At this level love and anger are seen as mutually exclusive reactions to different behavioural events. M loves his dog when he is good and is mad at him when he is bad. Although M can recall having loved P in the morning, the memory of this love does not interact with or modulate the anger in the afternoon. Consequently, M’s anger is uncontaminated by any loving or regretful feelings.

Feelings are more differentiated and less ephemeral than previously. They no longer pass away without a trace but are flexibly related to a variety of situations. Although contradictory feeling exist side by side within the subject and the situation, the contradiction or possible conflict between opposing states is not recognized. Contrasting feelings remain separate and hence do not modify each other and cannot be reconciled.

DISTINCTION BETWEEN LEVEL 0 AND LEVEL 1: At Level 0 the child conceives of feelings in an all or none, discontinuous fashion. Sad feelings are totally forgotten about in the face of B’s happiness. Love disappears and is “all gone” when M is mad. At Level 1 there is a greater sense of continuity between feeling states. The child knows that sometimes he feels one way and sometimes another depending on the situation. Feelings do not disappear but are remembered. B’s sadness returns when he thinks about SB. M remembers his love from the morning. At both levels feelings are seen as embedded in the situations that gave rise to them. However, at Level 0 previous feeling states are resurrected only if the identical situation which gave rise to them occurs again. For example, B will be sad only if a kitten gets lost again. M will feel loving again only if Pepper repairs the damage. At Level 1 feelings are tied to a wider range of situations. For example, M’s loving feeling will return when P does a number of “good” things.
LEVEL 1: THE KITTEN STORY

As with Level 0, a child at Level 1 will often attribute only happy feelings to B and fails to mention the lost cat and the attendant sad feelings. However, when a Level 1 child is pushed to consider SB (with the Scenario B probes), he easily recognizes the existence of sad feelings. He realizes that B will become sad whenever he thinks about SB. For example:

(How dos B feel re new kitten?) Happy. (Why?) Because she gets a new kitten. (Feel anything else along with feeling happy?) No. (Will she think about SB when sees new kitten?) Yeah. (What think?) About SB the cat. (if thinks re SB will she stay happy?) No, she'll get sad and sometimes happy. (Does that mean that she feels both happy and sad?) Yeah. (How does that work?) Sometimes she’s sad and sometimes she isn’t. (Happy and sad same time?) No, sometimes she isn’t. (What makes her happy?) The new kitten. (What makes her sad?) Her cat. (Her new cat makes her sad and happy?) Sometimes you’re sad and sometimes you’re happy. (Sometimes happy and sometimes sad – with B she was happy about new kitten and then sad about SB – is that how it would work?) Yeah. (Separate or mixed?) Stay separate. (Do sad feelings go away when happy?) Yeah.

At Level 0, B can circumvent his sad feelings over the lost cat by naming the new one SB and thereby literally replacing her. Now at Level 1 the name SB carries the sadness along with it. Hence B will feel sad if he names his cat SB. Children at this level begin to talk about remembering SB rather than trying to forget about her. Children at Level 1 concede that B could feel both happy and sad. However, unlike Level 0 concessions where the child is pushed into recognizing that B is sad about the loss of SB and happy about the new kitten, Level 1 subjects juxtapose these feelings in a more subtle manner.

There are two major factors which distinguish Level 1 from Levels 2 and 3. First, usually Level 1 children do not spontaneously coordinate happy and sad feelings in response to the initial interview questions (i.e., How does B feel re the new kitten? Could he feel anything else?) They need to be asked explicitly how B would feel if he thinks about SB before they recognize the potential sad feelings in the story. In contrast children at Levels 2 and 3 coordinate contrasting feelings more readily. Second, Level 1 children attach the happy and sad feelings to different aspects of the situation experienced separately at different times. In response to the time and space question, they state that B will first feel happy and then sad. The sad feelings remain separate from happy ones so that when B feels happy the sad feelings go away.
However, there are exceptions to these distinguishing factors which still warrant a score of Level 1. If a child needs to be probed extensively before considering the sad feelings but then co-ordinates happiness and sadness simultaneously, he is scored at Level 1. For example:

(How does B feel re: new kitten?) Good. (Happy?) Yeah. (Why?) Cause he has a new kitten. (Could he feel anything else along with being happy?) I don’t think so. (Will he think about Snowball when he sees the new kitten?) Yes. (What will he think?) I don’t know. (If he thinks about Snowball, will he stay happy?) No, he might think about what Snowball was doing. (Doing after he got lost?) Yes. (If he thought about that how would he feel?) A little bad. (Sad too?) Yes. (Do you think that along with feeling happy about the new kitten B would also feel a little bit sad?) Yes. (What sad about?) Losing Snowball cause he said Snowball was his best kitten in the world. (You said that B felt sad about losing Snowball and happy about the new kitten, how can he feel both happy and sad?) I don’t know. (Same time or first one and then the other?) He’ll feel it at the same time. (Mix together or stay separate?) Mix together. (When B is happy do the sad feelings go away?) Yes. (I thought you said they mixed together – What’s it like to feel both happy and sad mixed together?) I don’t know. I never did that.

This subject is scored at Level 1 because his simultaneous co-ordination of happy and sad (i.e., as being at the same time and mixed up together) is contradictory and unconvincing given his earlier statements.

LEVEL 1: THE PUPPY STORY

As with Level 0, a child at Level 1 only mentions M’s angry feelings toward Pepper. The subject must be reminded of M’s loving feelings with Scenario B probes. However, at this level children are aware that loving feelings return. At Level 1 subject believes that anger and love toward Pepper come and go depending on how he acts. M loves Pepper when he is good and is mad at him when he is bad. At Level 1 subject understands that sometimes M is mad and sometimes he is loving and happy. Furthermore, the vicissitudes of these feelings can be evoked by a wide range of good and bad situations. At Level 0, the return of M’s love depended on one specific event (i.e., M’s getting his plane back). If the plane was not restored, M’s love would not return. In contrast, at Level 1 the return of the plane/paintings is only one circumstance among many that could rekindle M’s love for Pepper. When asked if M would stop loving Pepper even if he doesn’t get his plane back, Level 1 subjects say no.

The following list represents Level 1 responses to the probe: What will make M’s feelings come back?
1. The love returns when Pepper does something good again where "good" is not further elaborated.

2. The love comes back when the plane is returned but is not contingent upon it. In other words the child acknowledges that he will continue to love Pepper at some other time even if the plane is not fixed.

3. The love is restored when Pepper does something endearing to re-establish the relationship. For example, Pepper may find M's toy again as he did in the morning. However, these acts of restoration do not need to be story related. The love returns when Pepper apologizes, or plays with M and when they do some pleasurable activity together.

4. The love returns when something else in M's life makes him happy (i.e., he forgets about the plane and is given a lollipop).

At level 1 the child will remember how M loved Pepper in the morning when he found the ball even though he is angry at him now. He understands that feelings come and go and struggles to articulate his sense that the love may not be all gone but still exists "inside of him" or "in a different part". The child may still comment that M still loves Pepper from the morning or that he still loves him because he found the toy. However, a Level 1 child does not understand that M could "still love Pepper" because of his ongoing relationship with him. For at this level love and anger are tied to the events which gave rise to them. When asked to co-ordinate love and anger temporally and spatially, a Level 1 subject states the M first feels one and then the other. Love and anger do not mix up together so that when M is angry, the loving feelings go away.

Example of Level 1 thinking:

(What happened to the loving feelings?) When somebody gives something to you, that's great. When somebody destroys something on you, that's awful. (Did the loving feelings go away?) Yes. (All gone?) Yes. (They'll never come back?) If he's good it will. (What would Pepper have to do?) Come back only if he did something for her to prove that he wouldn't do it again. (If he wrecked something again what would happen?) They'd break up again. (Come back again?) Yes.
SUMMARY OF LEVEL 1 CHARACTERISTICS

1. **When probed, the child can co-ordinate contrasting feelings.** For example, when asked if B will stay happy when he thinks about Snowball, the child will remember B’s sad feelings. When asked what happened to M’s loving feelings, the child realises that the love will return sometime in the future.

2. **Feelings do not pass away but come and go depending on the circumstances.** The child recognises that sometimes the story character will feel one way and sometimes another. B’s sad feelings return when he thinks about Snowball. M’s love returns when Pepper does something good.

3. **A feeling can be attached to a variety of situations.** For example, any number of good behaviours on Pepper’s part or changes in mood on M’s part can restore M’s love for his dog.

4. **Feelings do not impinge upon or interact with one another.** Although B will feel sad when he thinks about having lost Snowball, this sadness does not impinge upon his happy feelings with the new kitten. B is sad when he thinks about Snowball and happy when he plays with his new kitten. Similarly M’s anger at Pepper’s previous bad behaviour does not dampen the love he feels when Pepper is good again.

5. **The child recognises the existence of contrasting feeling states.** Children at Level 1 realise that B feels both happy and sad and that M feels both anger and love.

6. **However, contrasting feelings are related to disjointed events occurring separately at different times.** When B is happy the sad feelings go away. Similarly, when M is mad, the loving feelings go away.
Level 2: As the child recognises that contradictory feelings can coexist toward the same situation or person, he/she no longer takes their separate existence for granted. He/she begins to see that feelings can interact and influence one another. However, the child at this level has difficulty understanding and reconciling the mixture of contrasting feeling states. Whereas at Level 1 the gift of a new kitten elicited only happiness, now the gift is seen as a mixed blessing which can evoke both happy and sad feelings. B is aware that the memory of the lost cat can impinge upon his/her delight at getting a new kitten. However, he/she struggles against this impingement by keeping contradictory feelings temporally or spatially separate. First B might feel happy with his/her new kitten and then sometimes later he/she might feel sad about the gift when he/she remembers Snowball. B may also feel his/her happiness in one part of his/her body and his/her sadness in another.

At Level 1 feelings were seen as reactions to separate behavioural events occurring at different times. At Level 2 they become less embedded in events and begin to be related to more enduring abstract qualities. Whereas before love and anger came and went depending on how Pepper acted, now M wonders if his/her love for Pepper might have something to do with the dog himself and not just with his good behaviours. M tries to relate his/her anger to feelings of sympathy and concern for Pepper. However, since the child is in transition between locating feelings in the events which gave rise to them and relating them to more enduring abstract qualities, this effort at co-ordination fails. In spite of his expressed concern or his statement in passing that “M still loves the dog”, the child believes that M’s love will return only when Pepper is good and stops being provocative.

At this level the child does not understand that feelings can be related to enduring memories or qualities that exist independently of the press of one’s current feeling state and outside of the momentary situation. The child cannot accept the idea that the memory of the relationship with Snowball will exert an ongoing influence on B’s feelings about his new kitten such that he/she may not feel so happy as he did with Snowball. Similarly the child cannot conceive that M could have a love for Pepper that exists in spite of his bad behaviours and that modulates his angry feelings toward the dog. When this sense of enduring connection either to the memory of Snowball or to Pepper himself is lacking, each new feeling threatens to ruin (i.e., displace) rather than modulate (i.e., overlap) the preceding one as it did at Level 1. Hence the child struggles to keep contradictory feelings separated temporally, spatially, and/or by maintaining the tie between feelings and events.

Since the separate existence of contradictory feelings is no longer taken for granted, the child has more difficulty. He recognises the existence of the contradiction and its potential conflict and tries to provide some justification for opposing feelings. However, contradictory feelings are not successfully resolved or placed on a wider dimension so that they modify each other.
LEVEL 2: THE KITTEN STORY

Whereas a Level 1 child considers B's sad feelings only when he is encouraged to do so by further probing, Level 2 children spontaneously mention both happy and sad feelings. In response to the first two questions, ("How does B feel about his new kitten? Could he feel anything else?") the child states that B feels "kinda happy and kinda sad because the new kitten would remind him of Snowball." At Level 1 the child connects B's sadness to the actual loss of Snowball. B is sad because he lost his cat or because the new cat is not Snowball. At Level 2, B's sadness is tied to the ongoing memory of Snowball. B is sad because the new cat reminds him of either Snowball or of Snowball's absence. At this point children are aware that in order to feel really happy about the new kitten, they will have to get used to it and perhaps even forget about Snowball. They also know that forgetting is easier said than done. They see the ebb and flow of feelings as part of an ongoing process rather than a series of disjointed events.

However, although the Level 2 subject understands that B can feel both happy and sad about his new kitten, the sad feelings or memories of Snowball are seen as displacing, rather than modulating, his happy ones. Consequently, the child tries to maintain the distinction between the two feeling states in a number of ways. The child's language will be filled with qualifications in an effort to assign relative degrees to B's feelings. For example: B will feel "mostly happy and a little bit sad" or "sorta sad but happy most of the time." Secondly, a child may try to separate the feelings temporally so that first he feels happy and then sometime later he will feel sad. The following is an example of how a child at Level 2 tries to keep feelings temporally separate.

(How does B feel about the new kitten?) Happy. (Does B feel anything else?) Sometimes he thinks about Snowball because he sees the new kitten and he remembers about Snowball. (When he thinks about Snowball, does he stay happy?) A little bit happy. (Anything else?) Kinda sad. (Sad about?) Snowball. (Can B feel both happy and sad?) Yes. (How work?) I don't know. (Does B feel both happy and sad at the same time?) Yes. (Or does he first feel one and then the other?) Yes. (Which is it?) He'd first feel sad and then happy. (Do the sad feelings mix together with happy ones or stay separate?) Stay separate. (When B is happy do the sad feelings go away?) Yes.

However, since Level 2 marks a transition between Level 1 (where feelings are clearly separated) and Level 3 (where feelings overlap) the answers to the time and space questions are rarely as consistent as the one exemplified above. Often the subjects will give contradictory responses that don't make sense. For example, a child may say that happy and sad feelings are separate and experienced at different times and then claim that the sad feelings don't go away when B is happy. Or, conversely, a child may claim that B feels both happy and sad mixed up together at the same time and then state that the sad feelings do go away when he is happy. Although such contradictory responses are not sufficient evidence to score on Level 2, it is
one of its hallmarks. A Level 2 subject will also describe a situation where B begins with mostly happy feelings and then as the sadness emerges or smashes into the happiness a mixture of both ensues. As one child put it:

I'd feel the mixed first and then I'd feel them separated. (Mix up or stay separate?) Kinda mix together a little bit. (When B is happy do the sad feelings go away?) Like the happy feelings begin and then the sad feelings come like a 50 second walk to the finish line (?) They're going like this (smashes his hands together). The happy feelings are ending and the sad feelings begin so they sorta mix up.

Some Level 2 subjects will coordinate happy and sad feelings simultaneously on the temporal dimension (i.e., claim that B feels both at the same time) while using a spatial metaphor to keep them separate. A child will talk in terms of B feeling happy on the inside and sad on the outside and/or locate the different feelings in different parts of the body. One subject located the sad feelings “down”, pointing to her lower abdomen and the happy feelings up (in the middle and upper chest areas). Children who use a spatial metaphor and locate feelings in different parts of the body are scored at Level 2. For example:

(How does B feel re the new kitten?) Good. (Good how?) Good that he got a new kitten but bad that he didn't get his Snowball back. (Does he feel happy?) Kinda and kinda not. (What's he feel happy about?) About the new cat. (So what does he feel kinda sad about?) That his Snowball is not there. (So does that mean he feels both happy and sad?) Yeah. (How does that work?) Some part of his body is happy and some part of his body is sad. (So he feels it in different parts of his body. Same time or first one and then the other?) Same time. (Even though in different parts of the body?) Yeah. (Mix together or separate?) Sometimes they mix together and sometimes they stay separate. (In this story?) In this story his parents gave him a new kitten, so he'll be happy that he got that but when he remembers Snowball, he'll be sad. (When he remembers Snowball and he is sad, do the happy feelings go away?) Yes. (If they are in different parts of the body do they mix together or stay separate?) Half is happy and half is sad and a quarter is both.
LEVEL 2: THE PUPPY STORY

A child who thinks at Level 2 is in transition between Level 1, where M's feelings are seen as reactions to variations in P's behaviour, and Level 3 where M's anger at P is modified by the enduring love that grows out of his ongoing relationship with his dog. Since he is in transition, the Level 2 subject will combine Levels 1 and 3 reasoning in a somewhat arbitrary fashion. As with Level 1, the Level 2 child will emphasise the connection between deeds and feelings. M's love has disappeared because Pepper has wrecked his plane and will return only when he does something good. However, unlike the Level 1 child who accepts this at face value, the Level 2 child struggles harder to recapture and maintain the loving feelings. When asked what happened to the loving feelings, a Level 2 subject will claim that they went away because P did something bad. But he will hasten to add that M will forgive Pepper or that he feels sorry for him or that he "still loves P" anyway. When children claim that M's love returns when he realises that P wrecked the plane by mistake and hence it was not "his fault," they are showing signs of Level 3 reasoning. Similarly when angry feelings are diminished by M's sympathy for P (i.e., feeling sorry that he hit him so hard), the child is showing a Level 3 capacity for empathy. However, if forgiveness and sympathy are embedded in a protocol that relies heavily on Level 1 explanations, a Level 2 score is given. An emphasis on forgiveness and sympathy as a primary means of restoring M's love is characteristic of Level 2. At Level 3 considerations of Pepper's current feeling state and/or recognising the accidental nature of his transgression is secondary to the acknowledgment that M loves Pepper because he is his dog.

Children at both Level 2 and 3 will comment that M "still loves Pepper" even though he is mad at him. However, the context in which they make this claim differs. A child at Level 3 realises that M still loves Pepper deep down inside because he is his dog. In contrast, children at Level 2 tend to make the assertion of "still loving" without explaining it further. It has a tacked on quality that sounds more like a wish than a conviction. Children at Level 2 claim that M still loves Pepper because (1) he does nice things as well as bad, (2) he didn't wreck the plane on purpose, and (3) because you can't hate someone just because he did something wrong. These explanations miss the idea that M still loves his dog because he has an ongoing relationship with Pepper that transcends and modifies the press of his current feeling state. Two examples demonstrate this distinction between Levels 2 and 3.

Level 2

(How does M feel re P now?) Mad because he chewed up all her paintings. (Could she feel anything else?) No. (How did she feel about P in the morning?) Happy. (And loving. What happened to the loving feelings?) They became mad and went away. (Is the love all gone?) M still loves him but he (P) made a mistake. (Why should she still love P after he wrecked her paintings?) Because he didn't know what he was doing. He didn't know that he was wrong.
Level 3

(How does M feel re P now?) Mad. (Why?) Because P chewed up his plane. (Could he feel anything else?) Ashamed of P because he ripped up the model airplane. (What happened to the loving feelings?) They went away because M got mad but he still loved P deep down inside. (Why should he still love him after he wrecked the plane?) Because Pepper is M’s pet and M loves P very much. M doesn’t want P to do bad things.

Although Level 2 children do not see the relationship between M and Pepper as a central, modulating filter through which M’s angry feelings are seen, they do allude to it. They will comment that “M would still love Pepper because he is her only pet” (and hence she might not get another one). Furthermore they realise that “Pepper still lives with you even though you’re mad” and that “you don’t want to unlove him” and that “You wouldn’t put him to sleep just because he wrecked your plane.” They will also talk about how either “friendliness” and “realising how much you love Pepper” will restore M’s love. Children at Level 2 recognise that the relationship exists and that it exerts some influence over M’s angry feelings. However, they don’t know how to assess its relative importance because much of their thinking remains embedded in a Level 1 equation between deeds and feelings.

Children at this level are beginning to be aware that anger and love are not simply reactions to different, disjointed events but are part of a more complex interaction that involves an ongoing process. However, since they do not, as yet, understand that love and anger can modify each other, or that the relationship is central, there is a strained quality to their answers. For example:

(Feel re P now?) Feels like hating him; really mad...He felt like breaking P apart like he did to his plane. (Anything else?) Sad. (Why?) That he should have kept Pepper on a leash so he wouldn’t go after the plane. (What happened to his loving feelings?) They left him. Pepper done a bad thing so now he doesn’t like Pepper...Be very mad for a week then love would come back and M would forgive Pepper. (Could M feel both love and anger toward P?) Yes. (Same time?) Sometimes. (How work?) When mad at him he doesn’t give him any rewards like for a day but when he’s happy he gives him more food, plays with him, but when it’s altogether he’s mad when he thinks about the plane and happy – ok – maybe happy that he fixes the plane again. (Would he feel the love for P at the moment that he sees the plane wrecked?) No. Sometimes later he could feel both the love and anger. (At the same time?) Yeah. (How work?) Like he sees his plane all wrecked up, he feels like crushing the dog but when he notices that it wasn’t his fault and he shouldn’t be hitting him, he might be happy that he could fix it. This time he would tie the dog on the leash. (Do you think angry feelings mix together with loving feelings or do they stay separate?) Mix together sometimes. (Why?) Like after he got the plane done - he might fly it and P might go after it and break it again.
He might feel loving mad and sad. (All at the same time? What would he be feeling loving about?) He’d feel loving that he fixed the plane. He’d feel mad that he broke it and then he’d feel sad that he didn’t tie the leash. (Would he feel love towards Pepper then?) I think he’d love him a little. (When M is angry, do the loving feelings go away?) No, they stay mixed up with the angry feeling because I think he wants to keep it. He doesn’t want to give it away because the dog is friendly and nice.

A few children give answers that have characteristics of Level 1, 2 and 3 thinking. When this occurs, a Level 2 score is given. For example:

(How does M feel re P now?) He’d feel a little mad because it was his plane. He wouldn’t do anything bad to P but he’d get really mad. (Anything else?) Sad. (What happened to the loving feelings?) They went way. (All gone?) They can come back. He can forgive him. (What will make them come back?) P finding something again like a baseball or just being good dog in general. (Could M feel both love and anger toward P?) Well he would feel mad that he broke his plane but still love him because he’s his dog and his best friend. (Why would he still love him if he wrecked his plane?) Because, you know, forgive and forget, everybody makes mistakes.

(How does M feel re P now?) Sad and mad at him. (Anything else?) No. (What happened to the loving feelings?) They disappeared. (All gone?) No, she still loves him. (Why should she love him after he wrecked her paintings?) Because it’s her dog. She loves him. (Will M remember that she loves P when she sees that her paintings are wrecked?) No. (If M doesn’t remember her loving feelings, how would she know that she still loves her dog?) Because her dog does some nice things too.

While these subjects demonstrate an appreciation of the fact that M still loves P because he’s “his dog”, they do so within the context of Level 1 thinking. M loves his dog because he does nice things rather than because of P’s own unique qualities. Further more, they do not mention a love that exists “deep down inside” in spite of the press of M’s current feeling state.

Children at Level 1 usually claim that M feels love and anger separately and at different times. When M is mad, the loving feelings go away. While some children at Level 2 agree with this formulation, others do not. At Levels 2 and 3 the love is less apt to disappear in the face of the anger. At Level 2 there is a dawning awareness that “it is hard to forget love.” When asked if the loving feelings go away when M’s angry, they claim that “some of it stays, some of it goes away,” “it’s still in there but he forgets about it” or “one side loves and one side is angry.” The tentativeness of these answers contrasts with the Level 3 conviction that here is a kind of love that endures “deep down inside” and that “is always in there,” and hence never goes away. Furthermore, at Level 3, children can make a distinction between love as a state which is
transitory and wedded to the events that elicit it and love as a trait which is more enduring and tied to ongoing relationships.

**SUMMARY OF LEVEL 2 CHARACTERISTICS**

1. **The child spontaneously coordinates contrasting feeling states.** In *The Kitten Story* the subject recognizes that B will feel both happy and sad without Scenario B probes. However, in *The Puppy Story*, probes may still be needed to remind the subject of M’s loving feelings.

2. **The child in transition between Levels 1 and 3.** The subject will combine Level 1 and Level 3 reasoning in a somewhat arbitrary and strained fashion. For example, on the one hand feelings are seen as tied to the events which gave rise to them (i.e., love returns when P does something good) while on the other hand feelings are related to more enduring, abstract qualities (i.e., the love returns because M feels sorry for Pepper). These two explanations coexist uncomfortably.

3. **The child recognizes that contrasting feelings impinge upon one another but he struggles to keep them separate.** The subject recognizes that the gift of a new kitten is a mixed blessing which can evoke both happy and sad feelings. However, he struggles to keep these feelings either temporally (i.e., experienced at different times) or spatially (i.e., located in different parts of the body) separate. Similarly, while the child wonders if M’s anger might be modified somewhat by the love he felt previously, he does not know how to reconcile this potential overlap. Hence, he retreats and maintains the tie between feelings and events which provoked them as a way of keeping them temporally and spatially separate.

4. **Contrasting feelings begin to be seen as part of an ongoing process rather than related simply to disjointed events.** The children will give contradictory answers to the time and space questions. For example, some children will see opposing feelings as occurring separately and at different times while stating that the feelings do not displace each other. In contrast other children state that feelings do displace each other.
LEVEL 3: The child understands ambivalence. He realises that two contradictory feeling states can coexist at the same time toward the same person or situation. As contrasting feelings lose their tie to immediate situations, they can be placed in a wider context within which they overlap and modify each other. Feelings can now be coordinated with enduring memories, traits, and other abstract qualities. B simultaneously feels both happy and sad when he receives the new kitten. The sad feelings do not go away when B is happy. Instead, they persist, tending to dampen his happy feelings. At this level the child relates the press of his immediate feelings (i.e., the happiness at seeing the new kitten) to his own unique characteristics and general life situation (which include his enduring memories of Snowball and of that relationship). At this level the memory of the relationship with Snowball will exert an ongoing influence on B’s feelings toward the new kitten because it isn’t the same as Snowball. The gift may also produce a confusing conflict of loyalties between Snowball and the new kitten.

At this level the child makes an implicit distinction between feelings that are experienced as transitory states and those that are embedded in an ongoing relationship and hence have trait-like qualities. He recognises that M can still love Pepper even when he is mad at him for doing something bad. Whereas previously P’s bad behaviour led directly to anger in M, now such behaviour is seen within the context of his relationship to Pepper. This relationship and its concomitant love tempers and modulates the intensity of M’s angry reactions. Even at Level 3 the anger and love are sometimes construed as states which are seen as temporally and spatially separate. For example, when a child is asked if M remembers that he still loves Pepper at the moment that he sees the damaged plane, he will say no. However, anger will occur simultaneously and mix together with the love which exists deep down inside of M. Whereas previously anger and love were experienced sequentially toward different aspects of P’s behaviour, now they are experienced sequentially toward Pepper himself. These variations in angry and loving feelings occur against a backdrop of a love which endures in spite of these transitions. Children at this level may comment on the conflictual nature of M’s feelings toward Pepper. They will also show a sophisticated grasp of the complex variables that influence the coordination of mixed feelings. For example, children recognise that interaction between love and anger is a function of the child’s age, level of maturity, and of the quality of M’s prior relationship to Pepper.
LEVEL 3: THE KITTEN STORY

As with Level 2, a child at Level 3 can spontaneously coordinate happy and sad feelings. He needs no probing to see that the gift of a new kitten is a mixed blessing that will elicit mixed feelings. However, whereas at Level 2 happiness and sadness were understood to be related but not distinct, now they are seen as inextricably bound up together. Happy and sad feelings occur simultaneously and mix together in such a way that the sadness modulates rather than displaces the happiness. When feelings modify one another in this way, B’s sadness influences both how happy B is about the new kitten and how much he likes it. At Level 1 the sadness was related to the actual loss of Snowball. At Level 2 it was attached to the memory of Snowball. Consequently at Levels 1 and 2 B can get over his/her sadness by forgetting about the loss or ignoring the memories. Now, at Level 3, the sadness is lived in the relationship with the new kitten in that B is less happy than he was with Snowball and may like the new cat less. Whereas before B was sad because the new kitten reminded him of Snowball now B is sad because the new kitten might not be as good as Snowball.

Some children at Level 3 take the interaction between contradictory feeling states for granted and consequently do not state explicitly that B feels both happy and sad. (It is noteworthy that at Level 2 the components “happy and sad” are almost always noted.) Instead these children comment on the end product of the interaction between the two feelings. When asked, “How does B feel about the new kitten?” they answer:

"Happy but not as happy as with her first kitten."
"Glad but she thinks that it wasn’t as good as Snowball."
"He thinks that this kitten is not the same as Snowball so I’m not going to like it as much."

Here they are describing how the sadness over losing Snowball and the fidelity to that relationship impinges upon B’s reaction to the new kitten. They expect that it will both dampen B’s potential happiness and influence his perception of his gift. Because the new kitten is not the same as Snowball, it is not as good. If a child gives an answer in this vein, a Level 3 score should be considered no matter how the child handles the questions about time and space. However, one would anticipate a simultaneous time frame. For example:

(How does B feel re the new kitten?) Probably glad but she thinks it won’t be as good as Snowball. (Could she feel anything else?) Well she’s kinda missing Snowball. (Is she also sad about Snowball?) Yes. (Could she feel both happy and sad?) Yes. (How does that work?) Well she’s glad to get the new kitten but she’s sad that it isn’t Snowball. (Both happy and sad at the same time?) She can. (Mix together or stay separate?) Well sometimes she might feel glad that she got a new kitten and sometimes she would be missing Snowball. (Mix up or separate?) Well one time they might be mixed and another time they might be separate. (When B is happy do the sad feelings go away?) If she’s very happy, she might try to make them go away and
maybe they won't. (Which is it?) If she’s determined to get them away, they'll go away. (Are you suggesting that there is a period of time when she’d feel happy and sad at the same time mixed up together?) Well, maybe when she first opened the door she’d be really, really happy but then she’d be in between – She’d be glad to have a new kitten but sad a little. (What’s the moment like when she feels both happy and sad? What’s that feel like inside?) Well you don’t know how you feel really, you’re not really sure. (Is it confusing?) Yes.

Children at Level 3, like the subject quoted above, will often note that sometimes feelings are mixed up and sometimes they are separate. When they are not hedging their bets, they are recognising that sometimes ambivalence exists and sometimes it doesn’t. The subject is scored according to how he thinks B feels in this story.

Subjects at Level 3 will comment on how “horrible”, “weird”, or “confusing” it is to feel both happy and sad at the same time, mixed up together. B is seen as confused by his inner state and by his feelings toward the new kitten so that he doesn’t know how to react to his gift. This sense of inner confusion is one of the hallmarks of Level 3 thinking.

However, not all Level 3 subjects express themselves with the sophistication previously described. Children who spontaneously coordinate happy and sad feelings and answer the time and space questions in a consistent manner (i.e., state that happy and sad feelings occur mixed up together at the same time and that B’s sad feelings don’t go away when he is happy) are scored at Level 3. For example:

(How does B feel about the new kitten?) Good. (Why?) She has another kitten. (What is that good feeling?) Happy. (Could she feel anything else along with happy?) Sad. (About what?) It isn’t the same kitten. (Could B feel both happy and sad?) Yes. (How does that work?) She was happy when she got the kitten but she was sad when it wasn’t the same one. (Does she feel happy and sad at the same time?) Yes. (Or first one and then the other?) No. (Do sad feelings mix together with happy ones or say separate?) Mix together. (When M is happy do the sad feelings go away?) No. (What’s it like to feel both happy and sad at the same time mixed up together?) Horrible, I guess. (Is it confusing?) Yes.
LEVEL 3: THE PUPPY STORY

At Level 3 children begin to make a distinction between love as a transitory state which disappears in the face of M’s anger and love as a trait which endures in spite of it. When asked how M feels about Pepper, children at Level 3 will answer: “He’s mad at him but he still loves him deep down inside,” while at Level 2 children alluded to the idea that “it’s hard to forget love,” children at Level 3 speak with more assurance about a love that “is always in there” and which doesn’t go away in spite of fluctuations in feeling states. The love which M feels for Pepper “deep down inside” is embedded in their relationship. When asked why M should still love Pepper after he wrecked his things, Level 3 children answer matter of factly: “because Pepper is his dog” or “Because they’re still friends.” At this level the relationship and its accompanying love is the central organizing filter through which M’s anger is seen. The intensity of M’s angry reactions will depend, in part, on how much M loved Pepper before he did something bad.

Children at Level 3 try to empathise with Pepper’s feelings. They believe that Pepper wrecked the plane by mistake because he didn’t know any better. After claiming that M hit Pepper in anger, some children mention feeling sorry for the dog. They talk about feeling guilty or having his conscience tell M that it’s time to make up to Pepper. One child believed that Pepper would be confused by M’s mixed reactions to his behaviour. Another subject thought that M might question Pepper’s motives and ask, “Why is he acting like this?” However, while empathy, guilt, sympathy and forgiveness are important at Level 3, they grow out of the ongoing relationship between M and his dog. M feels guilty and wants to forgive Pepper because he is his dog. In contrast, at Level 2 M wants to forgive his dog because it wasn’t his fault. Furthermore Level 3 children understand that the relationship carries with it certain unpleasant obligations. For example, M will have to punish his dog for wrecking his plane because he is responsible for his behaviour. For example:

(How feel re Pepper now?) Her feelings have obviously changed. She is very mad at Pepper. She’d have to punish him because he’s her pet even if she loved him very much. (Other feelings?) Sad because her paintings are gone. (Does M remember that she loves Pepper when she sees the paintings wrecked?) No, afterwards she’ll feel sorry that she punished him. (Same time?) No, not at the beginning when she sees the paintings but maybe a second later she’d remember that he was so nice to me this morning. (First anger then love?) She’d first feel the anger and then the love and then sort of both and then the love again. (Mixed up or stay separate?) She feels a mixture of things. Right now her paintings that she loved are ripped up and before that he’d found a toy for her and she’d felt so happy and the dog might feel confused too. (How?) If first he was being petted and then the next moment he was being punished. (What’s that moment like when you feel the love and anger mixed together?) You don’t know whether you love the dog or hate the dog. You don’t know what you think.
At Level 3 anger and love interact and modify one another. The love tempers and modulates the intensity of M’s reactions. For example:

(Feel re Pepper?) He would still love him but he would be mad. He would not show that he loves him but would be mad by saying you shouldn’t do that. (Does M remember that he still loves Pepper when he is angry?) Yes. (How does he remember?) He wouldn’t want to hit him or anything because he’d know that he still loved him. He’d keep his anger in instead of showing it and being really angry. (Would he feel love and anger at the same time?) Yes. (Do angry feelings mix together with loving feelings or stay separate?) They stay separate. (When M is mad, do the loving feelings go away?) No. (Not even for a moment) No, he’d know that he still loved him.

Or conversely, the anger will dampen M’s loving feelings so that he doesn’t love Pepper as much as he did before. Furthermore, the interaction between love and anger will engender ambivalent feelings in M. He will be confused and conflicted about how he really feels toward Pepper. As with the subject quoted above, M will not know whether he loves or hates his dog. The interaction between feeling states and the ambivalence toward Pepper are hallmarks of Level 3 thinking. Level 3 children also show a sophisticated grasp of the complex variables which influence this interaction of mixed feelings. For example, one subject recognised that if M was immature, he might want to get rid of Pepper when he was mad at him but that if M was mature, he would forgive Pepper and get over his anger.

Since the distinction between Levels 2 and 3 is a matter of degree, rather than of kind, children at Level 3 will still relate feelings to the events which provoked them. If a child talks about how M will love Pepper again when he does something good while also recognising that feelings modify each other and that M would feel ambivalently toward Pepper, a Level 3 score is given.

At both Levels 2 and 3 the answers to the time and space questions are contradictory. However, at Level 3 the distinction between love as a trait and love as a state influence the child’s understanding of these questions. Children at this level may conclude that anger can occur at the same time as the love which exists deep down inside because anger is conscious while love as an enduring trait is often unconscious. However, when children are asked if M remembers that he still loves Pepper at the moment when he sees the damaged plane, they usually say no. Anger and love as conscious feeling states are ordered sequentially (i.e., first M is mad and then he remembers his loving feelings). While some children claim that love and anger do not mix up together, others believe that they do. Children’s answers to the question of whether or not love goes away in the face of the anger are often contradictory because the protocol did not question them further as to which kind of love (trait versus state) went away.

The subject quoted below claims that love and anger as conscious feeling states are separate, sequentially ordered experiences. However, he also acknowledges the existence of a love that endures in spite of M’s anger.
Although conscious awareness of this love is inaccessible to M when he is mad, it stays in there, "in the back of his mind," anyway.

(Feel re Pepper?) Pretty mad at him. (Anything else?) Just before that happened and the plane hit, he would feel proud of himself because he actually got something to fly and his parents saw it. (What happened to the loving feelings?) They stayed there but he didn't really feel them – they went to the back of his mind. You can't really be angry at someone if you don't like him. (You say that it's in the back of the mind, but does he know that he loves him?) No, not anymore. (Does M remember that he loves Pepper at the moment that he sees his plane wrecked?) He doesn't know that he does but he probably does. (So there is a kinda love that you don't know about that is in there someplace?) Yeah. (Could M feel both love and anger at the same time?) No. (Why?) When he launched the plane he would love Pepper, then when he wrecked it, he would be mad at him but then in about an hour and a half he would like him again. (Mix together or separate?) Stay separate. (When M is angry, do the loving feelings go away? Yeah – well they do to what he can think but they're still there, he's just not thinking about them.
SUMMARY OF LEVEL 3 CHARACTERISTICS

1. **The child understands ambivalence.** He recognises that two contradicting feelings can coexist at the same time toward the same person or situation.

2. **Contrasting feelings impinge upon and modify one another and hence are inextricably bound together.** The sadness modulates rather than displace the happiness so that B is less happy with his new kitten because it's not the same as Snowball. M's love tempers and modulates the intensity of his angry reaction and/or the anger dampens the love so he doesn't love Pepper as much as he did before.

3. **Feelings are less tied to immediate situations.** They are related instead to enduring memories, traits, and other abstract qualities. B is not sad just because he lost his cat (i.e., the initial event which provoked his sadness). He is sad because the memory of Snowball continues to influence his relationship with his new kitten by dampening his pleasure. M does not love Pepper just when he is good. M loves Pepper because he has an enduring, ongoing relationship with his dog which can withstand periodic bursts of anger.

4. **The interaction of contrasting feelings is often experienced as confusing and conflictual.** B doesn't know how he really feels about his new kitten. Similarly M feels ambivalently towards Pepper. Momentarily he doesn't know if he loves him or hates him.

5. **The child makes a distinction between love as a transitory state which disappears and love as a trait which endures in the face of M's anger.**

6. **Contrasting feelings interact simultaneously and mixed up together.** In response to the time and space questions in the kitten story, children state that B feels both happy and sad about getting a new kitten at the same time, mixed together. When B is happy, the sad feelings don't go away. Similarly, M can be angry at Pepper but still love him at the same time deep down inside. Although anger and love as conscious feeling states are experienced separately, anger can mix together with this love that exists deep down inside. When love is construed as a transitory state, it disappears in the face of M's anger. Love as a trait does not go away when M is mad.
Changes in Feeling States

How does a child explain what makes negative feelings, (i.e. sad and angry) come and go?) To explore this issue the children in the sample were asked:

**Kitten Story:** Will B get over his sad feelings?
What makes sad feelings go away?
What makes sad feelings come back?

**Puppy Story:** Will M get over his angry feelings?
What makes angry feelings go away?
What makes angry feelings come back?

In scoring this data the following questions should be kept in mind:

Does the child believe that feelings come and go as a result of changes in external events or circumstances over which he has no control?

Or, conversely, does the child relate shifts in feeling state to changes in his own thoughts and attitudes over which he can exert some conscious control?

How much control does the child feel someone has over the fluctuations in his feeling states? In other words, does he believe that there is anything that children can do to make their sad and angry feelings go away?

If the child believes that someone can exert some control over his feelings, what strategies does he use to dispel sad and angry feelings? The following is a list of strategies found in the data.

**Willed Forgetting:** M/B consciously tries to push his sad or angry feelings out of his mind. For example, he explains that he tries to forget about it or he doesn’t want to think about it. This is an active, effortful process. It should not be confused with simple, he forgets about them statements which suggest a passive, unreflective process.

**Distractions:** M/B does something active to get his mind off his sad or angry feelings. For example, he will go play with his friends or go be by himself in his room. Again, this form of distraction is actively sought or willed by the child. It should not be confused with the distractions provided by an outside person or event without the child’s request. For example, although sad feelings undoubtedly diminish when mommy gives me a kiss, this is not scored as distraction.
**Catharsis:** M/B does something to express and thereby release the pent-up feelings of anger or sadness. For example he screams, hits the wall, or cries for a long time. There is some recognition that an intense expression of feeling can help *get it out of your system*.

**Rumination/Forgiveness/Resignation:** Unlike willed forgetting or distraction which seeks to avoid the painful feelings or catharsis which expresses it, rumination involves a direct confrontation with the feelings in one's own mind. Here M/B tries to think his way out of the bad feeling either by resignation or forgiveness. For example, M resigns himself to the loss of the plane/paintings because *there is nothing he can do about it*. Or he may forgive Pepper because he didn't do it on purpose. All internalised thought process which try to cope directly with the feeling are scored here.

- i.e. *be alone and think about it; I sit down and try to figure out why I am mad; she'll get over the fact that maybe the cat just wanted to be freer than it was.*

**Talking It Out:** M/B talks over the sad or angry feelings with another person. Talking it out can be both cathartic (i.e. it feels better just to share the bad feelings with someone) and/or oriented toward problem solving.

- i.e. *(what helps kids forget about mad feelings?)* I go to my parents. They try to calm me down and say that *there is nothing you can do about it*. Could tell B not to have the paintings out.

- i.e. Sometimes I get over my feelings by talking to someone.
Changes in Feeling States: Scoring Categories

Instructions

Categories 0 – 3 are mutually exclusive for each feeling so that each subject gets one score (0 – 3) for what makes sad feelings come and go and another score for anger. Force yourself to assign a score even when the data is limited but keep track of those judgments where you feel uncertain. When a sense of personal control over feelings states is apparent, note the number and kind of strategies mentioned. (a. willed forgetting b. distraction c. catharsis d. rumination e. talking f. other).

(0) = I don't know, Unscorable answer because of limited or unclear data.

(1) Negative feelings come and go in response to external events and circumstances. In so far as feelings are wedded to events, the child is in a passive receptive position in relationship to his own feelings. He must wait for a change in events in order to effect a shift in his feeling state. Often his understanding of what would make the sad or angry feelings go way is limited to a reversal of the situation which gave rise to the feelings in the first place. For example B's sad feelings will go away only if Snowball returns or if he gets an immediate replacement. M's anger will go away only if Pepper makes reparation for his bad deeds. While bad feelings can also be dispelled by the appearance of a soothing person or a distracting event, the child himself does nothing to facilitate this change in circumstances. Such changes occur unsolicited, as if by magic, to make him feel better. At this point the child believes that he has no control over his changing feeling sates.

(1). Kitten Story: In answer to the probes about what makes sad feelings come and go there are several constellations which are scored 1.

a) The sad feelings go away only if Snowball returns or if B gets a new kitten. They come back if Snowball is lost again or if the new kitten runs away.

b) The sad feeling go away only if Snowball returns. If Snowball doesn't come back, B will always be sad.

c) Sad feelings don't go away at all or they go away when B forgets about Snowball. Here the forgetting is a passive process, outside of B's control.

d) Sad feelings go away if someone gives B something she/he needs or wants (i.e. a kiss, a drink, a present). Only score 1 if this soothing, external presence is unsolicited and appears magically to drive the sad feelings away. The sad feelings return in response to another sad event, usually the loss of the new kitten.

e) Sad feelings go away when the happy feelings come back without further elaboration.
In summary, the sad feelings are rigidly bound to the event which gave rise to them (loss of Snowball) such that only Snowball's return or the new kitten will alleviate the distress. The new kitten is immediately accepted as a substitute. There is no sense that B must go through the process of establishing a relationship with the new cat before he can be truly happy. A reversal of feelings states immediately follows upon a change in circumstances.

1. **Puppy Story**: Similarly the answers to the probes about what makes mad feelings come and go yields several constellations that are scored 1.

   a) The angry feelings go away only if Pepper makes reparation for his bad deeds and/or does something M wants him to do. The anger comes back if Pepper wrecks the plane/painting again or if he does something bad or wrong.

   b) The angry feelings go away only if Pepper replaces the damaged plane/paintings. If he doesn’t do this, M will always be angry.

   c) Angry feelings don’t go away at all (i.e. M doesn’t get over his mad feelings). Or they go away when M forgets about the plane/painting, here the forgetting is a passive process, outside M’s control. Once forgotten about, the anger doesn’t come back.

   d) Angry feelings go away when someone is nice to M or takes him someplace special. Only score 1 if this external presence is an unsolicited distraction that helps him forget his anger with no effort on M’s part. Anger returns when Pepper does something bad again.

   e) M can do nothing to make his angry feelings go away except wait for Pepper or some other external agent to calm him down by being nice or giving him a special treat.

In summary, mad feelings are bound to the events which gave rise to them (i.e. Pepper’s destroying the toy) so that often only a reparative act by Pepper (i.e. Pepper’s being nice to M, getting him a new plane) will make the mad feelings go away. However, other external events (i.e. mommy taking M someplace special) can also make the mad feelings go away. Mad feelings come back in response to Pepper’s being bad or to M’s being provoked by an event. M can exert no control over his angry feelings. A reversal in feeling states follows upon a change in circumstance.
2) Although negative feelings still come and go largely in response to external events and circumstances, there is a beginning awareness that thoughts and memories also affect the ebb and flow of feeling states. The child is in transition between seeing his feelings solely as responses to provocative events and seeing them as related to his own internal processes as well. This transition is manifest in a number of ways. First, feelings lose their embeddedness in the event which gave rise to them and become more flexibly related to a wider range of both provocative and ameliorative events. Second the child begins to associate thoughts with feelings, albeit in a somewhat simplistic fashion. For example he states that B's sad feelings will go away when he forgets about Snowball and come back when he remembers her. However, at this point B is seen as a passive responder to these evocative memories over which he can exert no conscious control. Finally, the child begins to take a more active stance in relationship to his feelings. For example, he believes that M can dispel his angry feelings by not thinking about them or by distracting himself in someway. However, at this point M can only use strategies of avoidance to get over his angry feelings. He cannot as yet think his way out of a negative feeling.

2. Kitten Story: In answer to the probes about what makes sad feelings come and go there are several constellations which are scored 2. Since this is a transition score, elements of 1 and 3 scores may be noted. The balance between constellations determines a 2 score.

a) A simplistic understanding of what makes sad feelings go away is combined with a recognition that memories or thoughts elicit sad feelings. B's sad feelings will go away if he gets a new kitten or is in response to some external event (scored 1) but they will come back if he remembers Snowball (often a 3 score). Often the statement about B's thoughts is very sparse and simplistic, (i.e. What makes sad feeling come back? He remembers Snowball) in contrast to the more elaborate descriptions of how B might be reminded of Snowball characteristic of 3 scores.

b) A complex understanding of what makes sad feelings go away is combined with a simplistic conception of what makes sad feelings come back. B's sad feelings will go away once he has established a caring relationship with the new kitten (usually scored 3) but will come back only in response to a distressing event (scored 1). Some children will note that there are things that B can do to make his sad feelings go away (i.e. like read a book or do something that he really likes). Usually this sense of personal control is a hallmark of a 3 score. However, if the subject spoils this answer by claiming either that sad feelings don't come back or that they come back only in response to events, a score of 2 is given.
c) Feelings are related to thoughts in simple, one to one fashion without any sense of personal control over either thoughts or feelings. B's sad feelings go away when he forgets about Snowball and return when he remembers her. Since B is a passive participant in this process of remembering and forgetting, there is nothing he can do to make his sad feelings go away.

d) Children scored at 2 can recognise that B's sad feelings go away when he plays with or gets used to his new kitten. But they do not see B as making an active choice in attaching himself to the new kitten as a way of attenuating his sad feelings over the loss of Snowball.

2. Puppy Story: a score of 2 implies that the child is in transition of his understanding of what makes angry feelings go away. He no longer believes that anger goes away solely in response to reparative events (i.e. Pepper being nice to M, mommy giving him a present). But he does not as yet relate anger to thoughts over which he can exert some control. Several constellations which combine elements of level 3 scores are scored 2:

a) A simplistic understanding of what makes mad feelings go away is combined with the recognition that a child can exert control over his angry feelings via avoidance. The child asserts that M's angry feelings will go away only if Pepper does something reparative (score 1). While also stating that there are things that kids or M can do to make their angry feelings go away. However, the strategies employed to get over angry feelings all involve avoiding them. M can make his mad feelings go away by trying not to think about the plane (willed forgetting), by making himself a new one (self reparation), by playing with his friends (distraction) or by being by himself and avoiding Pepper. These strategies of avoidance stand in contrast to strategies which involve coming to terms with angry feelings in one's mind. If M gets over his angry feeling by forgiving Pepper or by thinking or talking his way out of his angry feelings, a score of 3 is given.

b) Sorry or guilty feelings make the mad feeling go away. A score of 2 is given only if these sorry feelings sweep away the mad feelings without M actively forgiving or otherwise thinking about Pepper. If guilt leads to forgiveness, a score of 3 is given.

c) M's angry feelings will come back when he remembers the plane. A score of 2 is given only if this remembering is seen as part of a passive process over which M has no control. For example, if M's mad feelings come back when he remembers the plane within a context where there is nothing he can do to make his mad feelings go away except wait for a reparative external event, a score of 2 is given.
3) Negative feelings come and go largely in response to memories, thoughts and attitudes. When feelings are seen as elicited by inner processes, the child is in an ambiguous position. On one hand he is aware that his well being is imperilled by the welling up of unhappy memories and/or bad thoughts. For example, now B's sad feelings are evoked not only by the actual loss of Snowball but also by a multiple of possible memories of her. On the other hand, the child is now in a position to take a more active stance in relationship to his feelings. He believes that he can exert some conscious control over the fluctuations in his feeling states by literally thinking his way out of a negative feeling. For example, M can dispel his angry feeling by remembering how much he really loved Pepper and then forgiving him. This process occurs internally in M regardless of how Pepper behaves. The children mention various strategies to make sad and angry feelings go away. They include willed forgetting, distraction, catharsis, rumination and talking it out. However, there is a difference in children's understanding of what makes sad versus angry feelings come back. All children who are scored 3 believe that B's sad feeling return when he remembers Snowball. While some children note that remembering the incident (i.e. the wrecked toy) will bring back M's mad feelings, others believe that anger returns only when provoked by an event. This belief prevails even though they understand that anger can go away in response to shifts in thinking. It is not clear whether this difference is an artefact of the particular stories used or if it reflects a true difference in how sad versus angry feelings are perceived and handled.

3. **Kitten Story**: A score of 3 has several components. Although the child's answer to the probes about what makes sad feelings come and go does not need to include all the components mentioned below, some combination is usually present.

a) B's sad feelings go away when he establishes a relationship with his new kitten. As B cares for and gets used to his new kitten, she becomes a substitute for Snowball. Establishing this relationship is a gradual process that requires B's active participation. The sad feelings go away as the relationship with the new kitten develops. A score of 1 is given when the new kitten is simply a replacement of Snowball. A score of 2 involves the rudimentary recognition that playing with the new kitten helps dispel sad feelings. A score of 3 is given when the process of making a relationship with the new kitten is seen as paramount to making sad feelings go away.

b) However, some children also recognise the doubled edged aspect of this relationship. Since the gift of a new kitten can evoke painful memories of Snowball as well as assuage the loss, it may or may not make B's sad feelings go away.
c) Children express a general sense that life goes on in spite of losses and that time and the process of living itself leads to the attenuation of sad feelings. Just as B can get used to the new kitten, he can also get used to the loss of Snowball. (A child who grasps this would be scored 3, even if he claimed that B could do nothing to make his sad feelings go away).

d) B is able to exert some control over his sad feelings. He can make them go away by establishing a relationship with the new kitten, by trying not to think about Snowball, by talking to people about it, and/or by coming to terms with the loss in his mind.

e) B's sad feelings come back when he thinks about Snowball. However, unlike a score of 2 where B's thoughts of Snowball are related to a simple passive process of remembering and forgetting, a score of 3 is given when the process of remembering is more complex. For example, B feels sad when the new kitten does something that reminds him of Snowball, when someone says something to remind him of Snowball, or just when his thoughts remind him of the good times that they have had together.

f) Although all statements that mention "remembering Snowball" are not scored 3, a subject does not receive a 3 unless he recognises that sad feelings return in response to thoughts. When the data is sparse but memories and thoughts are noted, a score of 3 is given by default.

In summary, sad feelings are related to thoughts over which B can exert some control. B's sad feelings will diminish as he establishes a relationship with his new kitten or when he employs the strategies of willed forgetting, distraction, talking it out and rumination. B's sad feelings will return whenever he is reminded of Snowball. A reversal in feeling states occurs largely in response to shifts in thoughts, memories or attitudes. Some children note that the sad feelings over a particular event diminishes with time.
3. **Puppy Story.** A score of 3 implies that M is actively trying to think his way out of his angry feelings. This process can be expressed in several ways. Although the child's answers to the probes do not need to include all the components listed, often it combines several of them. The child may or may not suggest that angry feelings come back in response to thoughts and memories.

a) M's mad feelings go away after he has forgiven Pepper. This includes simple statements like he forgives him as well as descriptions of how M will make up to Pepper to restore the relationship.

b) M will remember how he loved Pepper in the morning or what a good dog he really is. These memories assuage the angry feelings and restore their relationship.

c) M goes through an inner, ruminative process whereby he tries to control his anger either through resigning himself to the loss of the plane (i.e. there is nothing he can do about it) or through realising that it was an accident. This includes more complex ruminative process whereby M tries to figure out why he was so angry and whether or not he should forgive Pepper.

d) In addition to controlling his angry feelings by avoiding them through willed forgetting and distraction which can also characterise a 2 score, M tries to dispel his anger in a more active and confrontative fashion. M gets over his anger by screaming it out (catharsis), (i.e. ruminating as described in c above).

e) The passage of time attenuates angry feelings.

f) M gets mad when he remembers the incident, when he sees a plane similar to the one Pepper destroyed or when she starts making her paintings again.

In summary, angry feelings are related to thoughts in such a way that M can think or talk his way out of his angry feelings. He uses a number of ruminative processes to do this. He forgives his dog. He resigns himself to the lost plane and realises that it was just an accident. He reflects on his angry feelings. Angry feelings go away largely in response to a conscious shift in M's attitude toward Pepper (i.e. from mad to forgiving). Angry feelings come back in response to both events and memories.
APPENDIX 5

The Puppy Story and The Twins Story: Interviewing Procedure for the Second Study

INTRODUCTION TO THE PROCEDURE

I am going to play two short tape recorded stories about a boy(s)/girl(s) your age. We'll hear one of the stories today and the other story the next time I visit. Each story has two parts. I will stop the tape recorder after each part and ask you to tell me that part of the story in your own words. Then I will ask you some questions about how you think the boy(s)/girl(s) in the story is/are feeling. There aren't any right or wrong answers to the questions so you shouldn't worry about making a mistake. I just want to know what you think about the boy(s)/girl(s) in the story. You don't have to answer a question if you don't want to. Nobody else will know what answer you or any of the other students (children) give*. What you say will be between just you and me*. It is important that you understand each story. If I ask you a question and you don't remember something in the story, please tell me, and I'll be happy to tell you the story or that part of the story again.

Do you understand what we are going to do?

Good, I'm going to tape record what we say so that it will be easier to remember later OK? I'm also going to video record you to make sure I hear and see all your answers to the questions.

DEBRIEFING (Spoken at end of Procedure)

You have done a very good job helping me understand how Mike/Molly and Roland/Rosie and Colin/Caroline feel. You have also told me about some of your feelings. Although we have talked about some bad feelings, like feeling very sad or being angry at someone, I don't think you are a bad or angry person in anyway. In fact, I think you're a really nice person. Children have lots of feelings. Sometimes they feel angry, sometimes sad, sometimes happy. We all have lots of different feelings. I am interested in how children at different ages think about their feelings. You have helped me to understand this. As I said in the beginning – everything you said is just between you and me*. Would you like to ask me some questions before you leave? You can be the teacher and I'll answer your questions.

(*Omitted with SLI subjects in the third study: The Puppy Story and The Kitten Story. See Appendix 7, SLI study: Ethical considerations).
METHODOLOGY

The Puppy Story (ambivalent emotions: Anger-Love)

This follows exactly the methodology reproduced in Appendix 1 and used in the first study.

The Twins Story (linguistic ambiguity: pronoun confusion)

Part 1

Roland/Rosie and Colin/Caroline are twins. Roland/Rosie likes playing on his/her roller-blades. Colin/Caroline enjoys computer games best. It will soon be Christmas. Roland/Rosie wants some new roller-blades and Colin/Caroline wants some new computer games. However, the twins' parents say that they will buy an expensive present for only one twin this Christmas because they can't afford two expensive presents. They promise instead to buy the other twin an expensive present when it's his/her birthday, as well as an inexpensive present for Christmas.

Ask the subject to repeat this part of the story in his/her own words.

Would you tell me the part of the story you just heard?

If the child has difficulty doing this, ask him/her the following comprehension questions:

Who are Roland/Rosie and Colin/Caroline?
What's coming soon?
What's going to happen then?

Do not begin the interview until the subject clearly understands Part 1 of the story. Help the child sort out whatever confuses him/her. If necessary, read the story to him/her again.
The Twins Story: Part 1 Questions


2. How do Roland/Rosie and Caroline/Colin feel about Christmas?

3. (If worry/sadness about who gets the present is not mentioned) Do Roland/Rosie and Colin/Caroline feel worried/sad about Christmas?

4. How would Roland/Rosie and Colin/Caroline show their worry/sadness? How would Roland/Rosie and Colin/Caroline act? How would Roland/Rosie and Colin/Caroline look? How else could you tell that Roland/Rosie and Colin/Caroline were feeling _____?

Part 2 (which introduces the linguistic ambiguity)

It is Christmas Eve and Roland/Rosie and Colin/Caroline are in bed. Very quietly s/he gets out of bed and creeps downstairs. Everyone else is asleep. S/he has his/her slippers on so that his/her footsteps can’t be heard. The family presents are piled up under the tree but s/he finds a present without a name on it. Although it’s not Christmas day, s/he opens the present and finds a pair of roller-blades.

Ask the subject to repeat the second part of the story in his/her own words.

Would you tell me what happened in this part of the story?

If the child has difficulty doing this, ask him/her the following comprehension questions:

What time is it?
What did one of the twins do while the other was asleep?
What did they find?
What did they do then?

Do not proceed until the subject clearly understands Part 2.
The Twins Story: Part 2 Questions

1. Where are Roland/Rosie and Colin/Caroline?

2. How do you think Roland/Rose and Colin/Caroline feel now?

3. How does the character in the story feel when s/he opens the present?

Scenario A: If the child spontaneously mentions the ambiguity inquire:

4a. So you can't tell who opens the present? Can you tell me more about that?

5a. Why would you need to know who opened the present?

6a. Does it help that we are told what is in the present?

   (If yes, it does help, inquire): How does it help us to know what's in the present?

7a. Does it make any difference that the twins are both boys/girls?

   (If the child says yes inquire:) Why does it make a difference that the twins are both boys/girls?

8a. What would help you know who opens the present?

   Can you say more about that?

9a. Is the story confusing?

10a. Can you tell me a little bit more about what's confusing in the story?

11a. Where does the story become confusing?

   How could you make the story less confusing?

12a. Would Roland/Rosie and Colin/Caroline have felt the same or different just before they opened the present?

   Why is that?

13a. Would Roland/Rosie and Colin/Caroline feel the same or different after they had opened the present?

   Why is that?

14a. Did Roland/Rosie and Colin/Caroline feel that same or different in the first part of the story?
**Scenario B** (if the child fails to identify the ambiguity in the story)

4b. How do you know it was ______ who opened the present?

5b. What difference would it have made if ______ (other twin) had opened the present?

6b. Can you tell me where in the story it said ______ opened the present?

7b. What makes you think ______ opened the present?

8b. If it was ______ (other twin) who opened the present would the feelings be different?

9b. Is the story confusing?

   (if the child says yes inquire:) Can you tell me more about that?

10b. Would Roland/Rosie and Colin/Caroline have felt the same or different just before they opened the present?

   Why is that?

11b. Would Roland/Rosie and Colin/Caroline feel the same or different after they had opened the present?

   Why is that?

12b. Did Roland/Rosie and Colin/Caroline feel the same or different in the first part of the story?

13b. Will Roland/Rosie and Colin/Caroline always feel as they do now?

14b. When might they feel the same? (birthday)
APPENDIX 6

Examples of language normal subjects’ use of cognitive-linguistic devices

Devices

Responses from subjects were classified in terms of the devices or “tools” they used in their replies to questions. The following five categories were identified:

- mental role play

This is where the subject answered the question in the character of the protagonist in the story. This role play may or may not be accompanied by vocal intonation and facial expression.

Example 1:

Researcher asks the subject if Mike (the story protagonist) will still feel love towards the puppy when he sees his plane being wrecked:

K.C. (nods head) Mmm. Yeah. (nods head)

R: That would stay there as well. OK.

K.C.: ‘Cos if he didn’t he will say {Shoo} (mimes with hand + vocal intonation)

R: Right. (laugh)

K.C.: Go away. Go. In the bushes. (+ intonation)

{R: Right. And what.}

K.C.: Can’t sleep in my bed tonight.

(The Puppy Story male subject age 7–8 years)

The above is classed as one example of mental role play even though this extends over more than one exchange between researcher and subject. The above extract also includes one example of mime (see later).
Example 2

Researcher asks the subject how Molly, the protagonist in the story feels when she sees the Puppy has destroyed her paintings:

AH: She could either go with the dog and say *Never mind I can do them again* (no intonation)  

{R: Right.}  
AH: ...or she can be really really angry at the dog because she chewed up her favourite paintings.

(*The Puppy Story* female subject age 10-11 years)

Example 3

The researcher asks the subject how the twin would feel who has opened the present:

AH: And she was all the time saying um.. *Wow look at my new um.. blades* ..  

{R: Mmm}  
AH: ..and she was just gonna be boasting to her sister or something..

(*The Twins Story* female subject age 10 – 11 years)

Example 4

In the first part of *The Twins Story* the researcher asks the subject how the twins are feeling in the story:

DC: Uh..they'll feel..a bit..very excited until the Mum said..to..the twin that..um..you'll..you'll..*I'm only going to get you a 'spensive present*..(intake of breath) *Christmas and not the other twin.*

(*The Twins Story* male subject age 7-8 years)

This extract contains one example of mental role play.
• mime

This is either where the subject replies to a question through an action only and no words are spoken, or mime is used to support a verbal reply to a question.

Example 1:

Researcher asks the subject what Mike will do when he sees his plane wrecked by the puppy:

KC: Mmm. Well...he might make another one.
R: Mmm...mmm. That's true.
KC: Or..'cos it was a little puppy he..i(+glottal stoup)..puppies can't..chew {mimes chewing with hand to mouth} that much..
R: No.
KC: ..(**obscure) Mike could fix it in a way
(The Puppy Story male subject age 7-8 years)

Example 2:

In the first part of The Puppy Story the researcher asks the subject how Mike would look at his puppy who has just found a lost toy:

KC: Like that {mimes happy/smiling/loving face}
R: (laugh) That's a good one.
KC: Happy
R: Yeah.
KC: Maybe if it's a rainy day maybe {mimes sad facial expression} sad and..and..miserable..
R: (obscure ***)
KC: ..or when he gets told off.
R: Oh yeah..yeah. But when he looks at Pepper..
KC: Um.. excited. He might jump up and down.

R: (laugh)

KC: And when they play ball games they can go (mimes crouching down and go like that).

R: Yeah.

KC: ...and say (mimes throwing ball) Fetch Pepper. Go fetch. (with vocal intonation).

(The Puppy Story male subject age 7-8 years)

This section contains 4 examples of mime and 1 example of mental role play where the subject speaks in the character of Mike, the story protagonist.

Example 3:

In part 2 of The Puppy Story, the researcher asks the subject how Mike will feel when the puppy destroys the toy plane:

KC: Well... 'cos he.. chewed up the aeroplane he might feel happy and sad.

R: Mmm.. mmm.

{KC: 'Cos chewing up things is like.. giving love and he might think it was food.. or a soft toy.

R: I understand. Right. So.. he might feel a bit happy if he thought Pepper was doing..

{KC: Yeah and sad.

R: And sad as well. OK.

KC: Together.

R: Together.

KC: {mimes a sad face and then mimes a happy face}

R: (laugh) Yeah that's hard isn't it to feel (__) (laugh)

KC: Put a smile on your face and cry. (gestures to face with hands)
R: And cry at the same time.

KC: Mmm. Hard.

(The Puppy Story male subject age 7-8 years)
The above extract contains one example of mime

Example 4

In the first part of The Twins Story the researcher asks the subject how the twins will be feeling as they wait for Christmas to come:

KC: Well.. I'd say that um.. one of them would do like \{mimes sad face\} feeling like its getting sad and he.. at school he'll be walking round the playground and the other one might do walk around the playground and.. if they.. 'cos the other one plays outside..

R: Mmm.. mmm.

KC: .. there was Roland with his roller blades just walking around \{mimes walking\}

R: Very well said.

{KC: And the other one 'cos he wanted computer game he would just go \(\text{mimes sad body language}\).

R: (laugh)

KC: Instead of being \{mimes body language and facial expression of being happy and mimes playing a computer game\}

R: Yes. That's really well explained. So how do you think their faces would look.. when they're feeling worried or \(\_\_\)?

KC: \{mimes a worried face\}

R: Mmm. (laugh)

KC: Or.. (laugh) \{mimes sad feelings\}

R: Mmm.

(The Twins Story male subject age 7-8 years)
The above extract contains 6 examples of mime.
- metaphor

This is where the subject replies to questions by analogy (metaphor, simile, imagery).

Example 1

In the third part of The Puppy Story the subject is asked what makes the story protagonist’s angry feelings go away:

MT: ..Um..I don’t know..um..he’d played with Pepper a lot so wh’..when he’d done one thing..he’ll remember it for a long time..and then..ah once he’s got over it he’ll forget it..and then they’ll just..you know like disappear.

(The Puppy Story male subject age 10-11 years)

Here the subject employs a visual image.

Example 2

In the second part of The Twin Story the researcher asks the subject if the twins will feel different once the present has been opened:

DC: Different..

R: They’d feel different. How would they feel different?

DC: They’..half different and half same wouldn’t they?

(The Twins Story male subject age 7-8 years)

Here the subject employs a spatial image.

Example 3

In the second part of The Puppy Story the researcher asks the subject about ambivalent emotion:

R: OK. Do you think that Molly could feel both love and anger towards Pepper?

HD: ..Sometimes.
R: Sometimes. How would that work? How would..( _) What would happen to make that..

    {HD: ..um..I can't really describe it..(***obscure)

R: .It's a bit hard

    {HD: ..it might..um..work by..um..saying ("that" – barely articulated)
    she's got a cold heart on one side of her..

    {R: ..mmm..mmm..

HD: ..body and the other warm hearted on the other side so it might be..um..nice.

(The Puppy Story female subject age 7-8 years)

Here the subject uses spatial metaphor to keep the conflicting emotions distinct and physically separate. The subject then goes on to separate them temporally (although this time without the use of metaphor):

R: OK. Do you think that Molly would feel the love and the anger at the same time..or first one and then another?

HD: (intake of breath)..first one and then the other.

Example 4

In the first part of The Twins Story the subject is asked how the twins would be feeling in the story, and she replies:

J: Their faces all curled up

(The Twins Story female subject age 7-8 years)

Here the subject employs imagery to describe the facial expressions, and hence feelings of the story characters.
personal experience

This is where the subject draws on personal experience when answering a question about the protagonist.

Example 1

In the first part of *The Twins Story* the researcher asks the subject how the twins will show their feelings:

R: Well done. Um..how do you think Rosie and Caroline would show that they're worried or anxious?

AH: I think..I think they'd try and hide it from their parents..

{R: Mmm..mmm

AH: ..but they'd share it with each other.

R: I see. Yeah. Yeah.

AH: 'Cos like..I do it. I tell my..I tell my cousin but I don't tell my Mum. (laughs)

(The Twins Story female subject age 10-11 years)

Example 2

In the first part of *The Twins Story* the researcher asks how the twins will feel as they wait for Christmas:

LD: ..They'll be feeling like (sigh)..they'll argue I think a lot.

R: Yeah.

LD: Thinking they're going to get the most expensive present 'cos..

{R: Mmm.

LD: ..they're more important than like (⊔)

R: Right.

LD: (very rapid) *Cos I know some twins.*

R: Do you?
LD: (rapid) But... and one likes... Pokemon and the other one likes computer games.

R: Yeah.

LD: But they get exactly the same.

R: They get exactly the same.

LD: Yeah.

R: But if they.. were having different for Christmas.(_) 

LD: ..Yeah.

R: They would.. argue?

{LD: Yeah they would argue.

(The Twins Story male subject age 10-11 years)

The above extract contains one example of personal experience.

Example 3

In the third part of The Puppy Story the researcher asks the subject what makes the story protagonist's angry feelings go away:

R: ..um.. what makes the angry feelings go away?

LD: ..uh.(sigh).. I dunno.. um......(sigh).. I dunno..

R: (laugh)

LD: (laugh). ..when.. what makes him angry (sub voce) ... when I've thought about what I've done.. that's when my angry feelings go away.

(The Puppy Story male subject age 10-11 years)

Example 4

In the second part of The Puppy Story the researcher asks the subject if Mike, the story protagonist could feel love and anger towards the puppy:

DC: Yeah.
R: You do. How do you think that works? How would that... happen?

DC: When my Dad gets angry with me if I do something naughty..

R: Yeah.

DC: ... he still loves me but he gets angry.

R: But you know he still loves you?

DC: Yeah.

(The Puppy Story male subject age 7-8 years)

The above extract contains one example of personal experience used to help in the response to a question.

- folk psychology

This is where the subject refers to a body of commonly held knowledge about how and why people feel and act as they do.

Example 1

In the second part of The Puppy Story the researcher asks the subject how Molly, the story protagonist, will feel when the puppy destroys her paintings:

LH: Well she’s feeling angry because he ruined her work but..

R: Mmm... mmm.

LH: ... like.. you could still love somebody if they do something wrong.

R: OK

LH: ‘Cos everybody does something wrong.

(The Puppy Story female subject age 10-11 years)

This extract contains one example of folk psychology.
Example 2

R: And can you tell me a little bit more about what it's like to feel kind of anger and love mixed together?

AJ: Well..you're angry at someone just say I was angry at my Mum but I still really loved her a'..but everyone gets angry and then..then st'..they'll still love people at the same time.

R: Mmm

AJ: So if you argue with someone you love you'd still be angry with them but you still love them.

(The Puppy Story female subject age 10-11 years)

This extract contains one example of folk psychology.

Example 3

In part 2 of The Puppy Story the researcher asks the subject about conflicting emotion:

R: Does. do you think Molly remembers her loving feelings in the moment when she sees her wrecked paintings?

J: ( )

R: What do you think?

J: She starts ge'..probably getting into an angry mood..

R: Mmm.

J: ..but in her heart..she still..loves him.

R: Oh that's..very..

{J: But she's not..she's not feeling it on the outside or saying it but she really means it while she's talking.

R: Right. So she doesn't feel it on the outside..but she means it..

{J: Because..people say..people who you have ( ) you're like..are mean to sometimes you really really love and really like.
R: That's true. You do sometimes don't you? That is very true.

J: It’s just you say that so no one else knows.

R: Yeah.

J: 'Cos you don’t want them to feel or know about it.

(The Puppy Story female subject age 7-8 years)

This extract contains one example of folk psychology (and two spatial metaphors "in her heart" and "outside").

Example 4

In part three of The Puppy Story the subject is asked if she thinks the story protagonist will get over the angry and the loving feelings she has towards the puppy:

R: You said that Molly will get over her angry feelings. Will she get over her loving feelings as well?

J: ....I don't think so..

R: Mmm

J: ..'cos..if something happens to it like he gets killed or badly wounded..she'll still love him but she wouldn't probably feel more love..at it..then..because people says wrong things..happen to people if you’re happy because they don't really..they don't like those things.

R: Right. OK.

(The Puppy Story female subject age 7-8 years)
APPENDIX 7

CHAPTER 3: LANGUAGE NORMAL STUDY

Ethical considerations

Similar ethical considerations were applied to this second study as detailed in the first stage of the research (see Chapter 2). However, as this second study involved slightly different protocols such as the inclusion of video as well as audio recording of subjects and formal language assessment, a further application was made to the Local Ethics and Research Committee (LERC). This follows National Health Service (NHS) guidelines for research. The Researcher sent to the LERC an outline of the research proposal, its theoretical context and methodology and possible benefits to the NHS, as well as copies of all the materials to be used and letters giving information to parents, parental consent forms and initial contact letters. Only minor adjustments were made to these letters, for example inclusion of information on the video taping, formal language assessment of subjects, and the increase in sessions with each child that this would entail.

The parent information sheet continued to stress that the child had been selected because of his/her good language skills and sound emotional development. Despite this, a parent of one of the younger subjects (7 - 8 years old) did become upset on receiving the letter believing that his child had previously, unknown to him, been identified with a speech and language impairment and was now required to take part in a research project. He did not contact the researcher but telephoned the school and requested an appointment with the Head Teacher who then pointed out to him the wording of the letter. This parent, who was also a governor at the school, was then happy to give his permission for his daughter to take part in the research providing the family could then watch the video recording. This was agreed with the child and the researcher.

No other similar reactions occurred with other parents. All parents were given the opportunity to meet with the researcher in person or to talk to the researcher over the telephone if they required further information regarding the study. The parents of three subjects spoke to the researcher over the telephone and were then happy to give permission for their child to take part in the research.

The same measures as used in the first study were built in to the recruitment protocols to ensure that child subjects gave informed consent to participate. Both parent and child were asked to sign the consent form. In addition the researcher spoke to each child at the beginning of each session, explained what would happen and asked if the child was happy to continue. The child was told that s/he could stop the session at any point and that s/he did not have to take part in subsequent sessions if s/he didn't want to. The American researchers original interviewing and debriefing procedures designed to protect the emotional well being of the children in the study were also included.
Parents and subjects were given the results of the formal language assessment if requested. It was stressed to the parents that the video was made in confidence with the child and that the child’s permission for showing the video would be sought. Only one set of parents, as detailed above, wished to view the video. They also wished to know their daughter’s scores for the language assessment. Both of these requests were discussed with the child prior to commencing the study and who then gave her consent for the video to be watched by her parents. As the information elicited during the interview sessions did not relate to personal experience it was not felt that this would unduly constrain this subject’s responses. This subject then watched the video with her parents at a session arranged at The Speech and Language Therapy Clinic where the researcher was based. This was to allow time for discussion which might have been difficult at the school due to time constraints on using school rooms. Three of the older (10 – 11 years of age) and four of the younger (7 – 8 years of age) subjects asked to know their language scores. One of the younger subjects was shown the video recording at her request. This took place in school.

Two of the older male subjects (10 - 11 years of age) asked the researcher at the end of the second sessions if they could discuss, in confidence, issues which were worrying them and which while not directly related to the research had been triggered by the interview questions. The interviewer told the subjects that they could do this but if they revealed any information suggesting they were at risk of harm then the researcher would have to report this to a member of the school teaching staff. Both boys then independently discussed problems relating to close family members. The issues related to ambivalent feelings the boys were experiencing but did not constitute risk of serious harm: physical, sexual or emotional, as laid down in NHS Child Protection guidelines. In view of possible disclosures by subjects which would constitute serious harm, it is recommended that the introduction which prefaces the beginning of the interviews (written by Donaldson and Westerman see Appendix 1) should also include a statement to the effect that any information obtained during the sessions which indicates possible harm to the child will be reported by the interviewer.

One set of parents of an older subject (10 – 11 years of age) did not reply to the initial letter requesting permission for their child to take part in the study. The school volunteered to contact this parent to discuss their lack of response. However, this offer was declined as the researcher felt the parents had a right not to reply and that contact by school staff could constitute unacceptable pressure to comply with the request.
CHAPTER 4: SLI STUDY

Ethical considerations

Subjects for this third study were recruited from two Health Authorities: Exeter and Mid Devon and Torbay (South Devon). Ethical approval had been granted by Exeter Local Ethics and Research and Committee (LERC) for the previous two studies (Chapters 2 and 3). A further application with amended protocols was then made explaining that NHS patients were to be recruited and that this third study would include additional language assessment of subjects as well as interviews with parents and school staff. This was accepted and approval granted. Conditions stipulated that copies of all letters, consent forms and test results should be included in the patient’s notes. This is in line with national NHS policy and was adhered to by the researcher.

A successful application was also made to Torbay Local Ethics and Research Committee explaining the nature of the research, its possible benefits to the NHS, and submitting copies of all forms and documents to be used in the study. This application was made once a possible subject had been identified by a South Devon Speech and Language Therapist but before the researcher approached the patient’s family.

Subjects were identified by Speech and Language Therapists from their clinical caseloads. At their request, all the therapists discussed the possibility of the patient taking part in the study with the parent (mother) before passing the name to researcher. The parents of suitable subjects were then approached by the researcher by letter. An information sheet and consent form was included with the letter. Parents were invited to contact the researcher if they required further information concerning the research. All the parents contacted telephoned and spoke to the researcher in person. They then all gave their consent for their child to take part in the study. Permission to examine the children’s clinical notes was granted by the respective Heads of the Speech and Language Therapy Services.

The initial parent contact letter explained that it would be useful if the researcher could meet with the parent(s) and then a staff member of the child’s school to obtain information regarding the child’s social skills. Parents and school staff were also asked to fill out questionnaires regarding the child’s general presentation and social interaction. However, these aspects of the research were left to the parents’ discretion. Only one parent did not fully comply with these requests. This parent did not want to fill out the questionnaires (The Pragmatics Profile and Parent’s Report Form) although she was happy to talk informally about her child’s social skills and emotional development. She was also happy for the child’s teacher to be contacted and for the teacher to complete the Achenbach Teacher’s Report Form. This parent also gave her permission for the child’s teacher to complete The Pragmatics Profile of Everyday Communication Skills in School-Age Children as this questionnaire has been designed for use with parents or teachers.
Although all the parents gave their permission for the child's school to be contacted for information regarding the child's social and emotional behaviours one South Devon High School did not reply either to telephone contact or letters sent by the researcher. The Achenbach Teacher's Report Form sent to this school with a covering letter was not returned.

All parents were given the choice of where their child was seen, either at a local Speech and Language Therapy Clinic or the child's school. Two parents wished their child to be seen in clinic during school holidays as they did not wish their child to be singled out in school as they felt this could result in adverse comments from peers. All parents were given access to the language assessment results and research results, all of which were discussed in detail with the researcher. Verbal consent was given for this by the subjects. Each subject's language level was taken into consideration when requesting their permission.

Parents were given the option of being present during their child's language assessment but not during the experimental tasks which were video recorded. This was to ensure that the child had the opportunity to answer the interview questions in confidence and was consistent with the conditions of the language normal study. The option of parents being present at their child's clinical language assessments is a condition of the NHS. However, none of the parents wished to be present during their child's language assessments as they all felt that the child would perform better on their own.

Following completion of the experimental tasks all parents requested to see the video of their child and this was agreed by the researcher with the individual children. The researcher had made all the children aware before recording took place that their parent may wish to see the video but that the child would have to agree to this. This was different to the protocols used in the original American research. The American subjects, and the subjects in the British replication study and the language normal study, had been expressly told by the interviewer that their answers were confidential:

Nobody else will know what answer you or any of the other children give. What you say will be between just you and me.

Interviewing Procedures (Introduction) see Appendix 1

The change in this protocol represented an uneasy compromise between the rights and needs of the parent(s) to information concerning their child which is related to their known clinical disability (language disorder) and the rights and needs of the child to confidentiality. Although the child's permission was sought before the parents watched the videos it is possible parents could pressurise their children into agreeing. Two fathers who telephoned the researcher to discuss viewing the videos both said that while they appreciated the researcher had to obtain their child's consent their children would do as they were told by their parents. It is also acknowledged that the children's responses to the interview questions could have been influenced by the knowledge that their parents might watch the videos. However, this seemed unlikely. All four children spontaneously said they would be happy for their
parents to watch the videos and appeared relaxed and unconcerned when
told by the researcher that their parents may wish to see the video recordings.
Two children asked to be allowed to see the videos with their parent(s) and
this was agreed.

All the parents and the children gave written consent to their taking part in the
research. The child’s verbal permission was also sought at the beginning of
each session. As in the language normal study the child was told that he
could stop the session at any point and that he did not have to continue with
subsequent sessions if he didn’t want to. The American researchers’
interviewing and debriefing procedures designed to protect the emotional well
being of subjects were also included (see Appendix 1). Three out of the four
children and their parents gave their written consent for the videos to be used
at conferences or for training purposes. Due to the young age of the children
a proviso was written into this consent by the researcher stating that this
permission could be revoked in the future if the researcher was informed.

The American researchers’ protocols and procedures had been designed for
use with typically developing children as young as 4 years. Nevertheless,
each SLI subject’s individual language comprehension difficulties were taken
into account when presenting explanations or the debriefing procedures.
However, it did become apparent at the end of the first experimental session
with the oldest child in the study that there was still considerable confusion
about what was expected of him which had caused some anxiety for the child.
At the end of this first session the child still presented as tense, even after the
audio tape and video recorder had been switched off. Questioning by the
researcher elicited the fact that the child had been studying vivisection at
school. When his parents had talked to him about taking part in research he
had associated this with some of the practices he had seen on a video
showing research on animals and consequently expected to be given
injections as part of the procedures. Once this had been clarified the child
noticeably relaxed and was happy to come back to complete the experimental
tasks. It is therefore recommended that when talking to SLI subjects the
nature of the research and what they will and will not be expected to do is
made very explicit.

One other ethical issue was considered by the researcher. The research
could raise parents’ awareness and concerns regarding their child’s social
and emotional development without providing any practical support or help.
However, the parents of all four SLI subjects already had concerns regarding
their child’s emotional development which the research confirmed rather than
created. All four parents thanked the researcher for giving them the
opportunity to discuss their concerns and for those concerns to be recognised
and validated. One parent requested that information obtained through the
research was shared with school staff to help solve behavioural difficulties
experienced by her son. (See Chapter 5). The research therefore appeared
to decrease rather than increase parental anxiety.
APPENDIX 8
Examples of Discourse Errors

The following are examples of subjects’ errors according to Damico’s (1985) classification system for discourse analysis outlined in Chapter 3.

Quantity category

- Failure to provide significant/sufficient information to listener.

Example:
R: *What will make the loving feelings come back?*
AB: *Um..well maybe..the dog might do something kind towards her like um..for her like..um he might like..um..might like go downstairs for her shoes might be crying and um..he might've cooled down and fink (sic phono.)...and then she might know that he feels sorry for her and then she might think..he didn’t mean to do it.*

Clarification is needed to understand who/what is doing the crying (the girl Molly in the story, or the puppy) and then whether the masculine pronoun he (underlined in the above transcript) is correct (in relation to the puppy) or incorrect and should really refer to the girl.

- Use of non-specific vocabulary (e.g. use of vague words such as *stuff*), or deitics (e.g. *this, that*, pronouns) where no antecedent or referent is available in the verbal or nonverbal context.

Example:
*By playing with her and being..giving her food and making nice stuff for her.*

Use of vague word *stuff*

*and she’ll still be disa..ppointed and stuff*

Use of vague word *stuff*

Use of the word *like* as a filler (where no meaning is added to the sentence by using the word) is also considered as non-specific vocabulary:

Example:
*She feels..a bit disappointed..’cos he’s like been so good all the time and now he’s just been a bit..now he’s being not so good.*

Other non-specific vocabulary includes the words *thing, something.*
Use of non-specific deitics:

*because dogs can’t always tell if things are like that* (things counted as non-specific vocabulary)

In the above example no antecedent or referent is given by the subject for the use of the word *that*.

- **Informational redundancy** (speaker continues to stress a point or return to a topic that has been covered).

No examples of this error type were found in the data.

- **Need for repetition** (child requires frequent repetition of information in order to participate in the interview).

This occurred when the subject required the support of the researcher repeating questions to help keep the question in focus in order to answer it appropriately.

Example:

*R*: would Roland and Colin have felt the same or different just before they opened the present?

*AA*: ..Different.

*R*: And why..why..can you say a bit more about that?

*AA*: Because..mm..mm...(shakes head) don’t....

*R*: Shall I ask you again?

*AA*: (Nods head)

*R*: Is that alright? Yes. It’s hard to remember some of these. Do you think..Roland and Colin..would have felt the same or different just before they opened the present?

*AA*: Different because it’s going to be for the other..per..son..

{R: Mmm..mmmm.

*AA*: ..like..might be for Roland instead of Colin.

*R*: Mmm..mmm.
AA: And he's going to feel "oh it's not for me" and the other will feel "It's for me. Yes".

R: But if they don't know what's in the present 'cos they can't see it yet. They haven't opened it. It could be anything. They don't know what's in there. Do you think they'll feel the same then or different?

AA: ..The same because they're gonna both think "its going to be mine" or ()

R: That's right. Or..it might not be or something. (Laughter)

AA: They'll both think it's..going to be..each others.

R: Yeah. Yeah. That's right. Brilliant. OK And..would Roland and Colin feel the same or different after they'd opened the present?

AA: Different.

R; That's right.

This subject required both repetition of the question (Do you think Roland and Colin would have felt the same or different just before they opened the present) as well as further explanation of the meaning of the question (But if they don't know what's in the present 'cos they can't see it yet. They haven't opened it. It could be anything. They don't know what's in there. Do you think they'll feel the same then or different?) before he can demonstrate his understanding.

This subject scored 2 errors in the Need for Repetition category. These were the only examples of this type of error found in the data. This indicated the ease with which typically developing children interpreted even the most complex of the interview questions.

Relation Category

- Poor topic maintenance (speaker makes rapid and inappropriate changes in topic without providing transitional cues to the listener).

Example:
So she'd has bad feelings about her friend. Because..she's like blaming her for..his. I've been in my friend's house and there was a horrible friend in there as well as her and they..um..fell out
At the beginning of this sentence the subject was referring to the character Molly in *The Puppy Story*. There was then a rapid, unmarked shift to the subject's personal experience (*I've been in my friend's house*)

- Inappropriate responses (includes illogical, incoherent utterances, or associative type responses).

Errors considered in this category included subject's responses which were so fragmented as to be unintelligible.

Example:

*R: Is there any other way you could tell that Molly loved Pepper?*

*J: ...'Cos you can tell... 'cos... if you like play the games and... you keep going and s'... and like... wh' things are... den*

*R: Mmm... mmm*

In this example the whole utterance of the subject J is classed as incoherent. The word *things* is therefore not counted as an additional example of non-specific vocabulary, but part of the general unintelligibility of the utterance.

Utterances where the subject was struggling to maintain the internal logic of the utterance and its appropriateness to the question asked were also classified in this category:

Example:

*R: You said that Molly will get over her angry feelings. Will she get over her loving feelings as well?*

*J: ...I don't think so..*

*R: Mmm*

*J: ...'cos... if something happens to it like he gets killed or badly wounded... she'll still love him but she wouldn't probably feel more love... as it... then... because people says wrong things... happen to people if you're... happy because they don't really... they don't like those things.*

*R: Right. OK.*

- Failure to ask relevant questions (the individual does not seek clarification of information that is unclear).

No examples of this error type were found in the data.
Manner Category

- Linguistic nonfluency (repetitions, unusual pauses, and hesitations).

Example:
*I think they might be a bit worried and they might be a bit angry if it’s the other person and they won’t..and they won’t tell it or they won’t..um.. show it they’ll just like..they’ll just go somewhere private to tell it and show it.

(Words in bold denote vocal stress)

This sentence contains two repetitions:
and they won’t..and they won’t tell it (one repetition)
they’ll just like..they’ll just go somewhere (one repetition)

Unusual pauses occurred within words at syllable boundaries.

Example:
..she would have..**un**..done the shoe laces

Example:
**she’ll still be disa**..ppointed

Example:
..um I think they might be..um..a bit um..like..um..(sigh x 2)..um..uh..like a bit nervous as well

This sentence contains 8 hesitations (5 x um 1 x uh 2 x sigh) and one repetition:
they might be..um..a bit um..like..um..(sigh x 2)..um..uh..like a bit nervous

- Revision (false starts and interruptions; speaker comes to a dead-end in a maze and must begin again).

Example:
**she wanted computer games so she..I expect she would have smashed** (hits hands together) **them up**

This sentence contains one revision:
so she..**I expect** she

Example:
**Well she can f’..she knows about it but she’s not actually..doesn’t want other people to know about it because it’s her secret love.**
This sentence contains two revisions:

she can f'..she knows
she's not actually..doesn't want other people

- Delays before responding (inordinately long pauses at turn-switching points).

Example:
R: And how do you think Molly feels towards Pepper?
J: ........That its good that she has it.

Transcript conventions:

Continuous dots represent seconds of time i.e. the notation ... represents a delay of at least three seconds. A pause was counted as a delay if it lasted for 3 or more seconds. This follows the protocol developed in the analysis system devised by Naremore, Densmore and Harman (1997), an adaptation of a conversational analysis system developed by Bishop and Adams (1989) and which is similar to the one developed independently by Damico (1991).

- Gaze inefficiency (identification of occasions when eye contact is lost related to expressive language difficulties).

- Inappropriate intonational contour (mismatch between pitch levels, vocal intensity, inflectional contours and the overt meaning of the utterance).

Video and audio tape analysis was used to identify examples of both of the above performance errors.
The following give examples of linguistic/phonological performance errors:

- **Lexical**

These errors occurred when the subject used an incorrect label (word) where previously and subsequently the correct label was accessed. For example, where the child had been correctly calling the puppy Pepper but then retrieved the more familiar Pippa. Likewise a subject may suddenly refer to the story character they are discussing by the name of a character in the previous story. Incorrect pronouns were also accessed. For example, one of the younger subjects established with the researcher the sex of the puppy:

J: Is Pippa a girl.. Pepper a girl or is a boy?

R: Mm... I don’t know actually. What do you think?

J: A boy I was thinking.

A: A boy? Yeah. I think it’s probably a boy. I’m not sure. Yeah. I think he is a boy. Sort of.. sort of a boyish name isn’t it?

J: (Nods head)

(In this example Pippa is not classed as an error since the exchange is not part of the interview protocol).

This subject then consistently referred to the puppy using the masculine pronoun apart from 5 occasions, all of which occurred in parts 2 and 3, the most demanding parts of the story:

Example:
J: .. ‘cos you wouldn’t think.. she would do some’.. he would do something like that.

Example:
J: And.. know.. what you’re saying to people and stuff but she didn’t like sense that part. Because.. they have very good noses dogs.. so like.. she’s.. hasn’t actually decided that.. if it’s something.. good or something bad. (2 instances of pronoun confusion)

Example:
J: Pepper won’t feel it ‘cos he’ll just start following her and if he shouts at her.. and if she shouts at him she’ll just.. he’ll just keep following her.

Example:
J: Or she might shout at Pepper all the time and smack her or something..
• **Syntactic/Morphological errors**

These errors referred to deviations from age appropriate acceptable spoken sentence structures and grammatical structures. For example:

Example:
J: *Something happens bad again.*
(incorrect word order)

Example:
R: So what do you think happened to all those warm loving feelings?

HD: ..Um..they might have just disappeared into another person.

   R: Right.

HD: ..so they might have gone into another person not another person so she might feel cold hearted on Pepper she might feel warm hearted on another friend.
(omission of adversative connective *but*)

Example:
HD: *Because..uh..then they're trying to tell their parent that I'm the goodest*  
(Rregularisation of irregular superlative)

• **Phonological**

These error types included vowel distortions, voicing, final consonant deletion, stopping, cluster reduction. These errors did not affect the intelligibility of the child's utterance, and tended to occur singly (i.e. one per utterance). Phonological errors which occurred together with a pervasive fragmentation (multiple hesitations and revisions), and resulted in an inability to transcribe the data were classed under the Relation category (inappropriate responses, which included incoherent utterances). Such errors were in marked contrast to the subjects' good phonological skills noted in informal conversation outside of the interview framework.

• **Semantic**

These errors related to a confusion of word meaning.

Example:
R: *How does Molly feel about Pepper now?* (After Pepper the puppy had destroyed some paintings Molly has spent a long time on).
HD: *um.. a bit destractive.. or.. som'.. um.. like she might not want Pepper.. like she might not want Pepper as a best best best best friend. She might just want him as a friend.*

Here the word *destractive* appears to be a conflation of *destructive* and *distracted*. The idea of destruction and destructiveness pervades and interferes with the retrieval of further word meaning.

This conflation of word meaning occurred later in this subject's data:

Example:
R: *How would you feel if you were Molly and your favourite dog wrecked something that you had made and liked a lot? How would you feel about it?*

HD: *I w'.. I.. would feel rather.. um.. again destractive.*
APPENDIX 9 The Kitten Story: Part 1

Part 1.1

Part 1.2

Part 1.3
Part 1.7

The Kitten Story: Part 2

Part 2.1

Part 2.2
Part 2.6

Part 2.7
Interview (The Kitten Story) Facial Expression Cards

- happy
- sad
- angry
- confused
- o.k.
Pictures to support interview question: *Would Bill feel angry and sad at the same time or first one and then the other?*

[Diagram showing different emotions]
Pictures to support interview question: Do the angry feelings mix together with the sad feelings or do they stay separate?
Pictures to support interview question: Would Bill feel happy and sad at the same time, or first one and then the other?
Pictures to support interview question: Do the sad feelings mix together with the happy feelings or do they stay separate?
Picture to support interview question: *When Bill is angry, do the sad feelings go away?*
APPENDIX 10

TEACHER/SCHOOL REPORT FORM
(based on Achenbach rating scales)

Name of subject:

Age: Parent's work:

School:

Name of Interviewee:

Position of interviewee in school:

Questionnaire

How long have you known the pupil?

How well do you know him?

Not well Moderately well Very well

How much time does he spend in your class/group per week?

What kind of class/group is it?

Has he ever had to repeat a year at school?

What, if any, additional support for learning does he receive at school:

Current school performance:

Far below year group

Somewhat below year group

Level with year group

Somewhat above year level

Far above year level

(If different for different academic subjects please specify)
(Use the following scales to answer the questions. Please feel free to add any additional comments)

1. Much less  2. Somewhat less  3. Slightly less
4. About average  5. Slightly more  6. Somewhat more
7. Much more

Compared to typical pupils of the same age:

1. How hard is he working?
2. How appropriately is he behaving?
3. How much is he learning?
4. How happy is he?

What, if anything, concerns you most about this pupil?

Please describe the best things about this pupil:

Please comment generally on this pupil’s:

Work:

Behaviour:

Potential:
Please use the following scales to comment on the questions below. You may also write additional comments if you feel this would be helpful.

0 = Not True (as far as you know)  1 = Somewhat or Sometimes True

2 = Very True or Often True

Acts too young for his age
Hums or makes other odd noises in class
Argues a lot
Fails to finish things he starts
Defiant, talks back to staff
Bragging, boasting
Can’t concentrate, can’t pay attention for long
Can’t get his mind off certain thoughts; obsessions (describe)

Can’t sit still, restless or hyperactive
Dependent on adults (give example)

Complains of having few friends
Confused or seems to be in a fog
Cries a lot
Fidgets
Cruelty, bullying or meanness to others
Daydreams or gets lost in his thoughts
Deliberately self harms
Demands a lot of attention
Destroys his own things
Destroys property belonging to others

Difficulty in following directions/rules/instructions (describe)

Disobedient at school

Disturbs other pupils

 Doesn’t get on with other pupils

Doesn’t seems to feel guilty after misbehaving

Easily jealous

Fears/dislikes certain animals, situations or places other than school (describe)

Fears/dislikes going to school

Fears/dislikes change (describe)

Fears he might think or do something wrong

Feels he has to be perfect/get work, answers, correct

Feels no one likes him

Feels others are out to get him

Feels worthless or inferior

Gets hurt a lot, accident-prone

Gets into many fights

Gets teased a lot/sometimes

Hangs around with others who get in trouble

Impulsive or acts without thinking

Is often on his own

Lies/cheats

Bites finger nails

Nervous, high-strung, or tense
Nervous movements or twitching (describe)

Would rather be alone than with others
Overconforms to rules
Not liked by other pupils (describe)

Has difficulty learning
Too fearful or anxious
Feels guilty
Talks out of turn
Presents as overtired
Physically attacks people
Sleeps in class
Apathetic or unmotivated
Poor school work
Poorly coordinated or clumsy
Prefers being with older children or youths
Prefers being with younger children
Will refuse to talk
Repeats certain acts/phrases over and over; compulsions (describe)

Self conscious or easily embarrassed
Messy work
Behaves irresponsibly (describe)
Showing off or clowning
Shy or timid
Explosive and unpredictable behaviour
Demand must be met immediately, easily frustrated
Inattentive, easily distracted
Finds it difficult to wait his turn
Stares blankly
Feels hurt when criticised
Steals
Stores up things he doesn’t need (describe)

Strange behaviour (describe)

Strange ideas/thoughts/words (describe)

Stubborn, sullen or irritable
Sudden changes in mood or feelings
Sulks a lot
Suspicious
Swearing or obscene language
Talks about hurting himself
Teases a lot
Temper tantrums or hot temper
Threatens people
Tardy or late to school or class
Poor organisational skills (describe)

Too concerned with neatness or cleanliness
Fails to carry out assigned tasks
Truancy or unexplained absence
Underactive, slow moving, or lacking energy
Unhappy, sad or depressed
Unusually loud
Overly anxious to please
Dislikes school
Is afraid of making mistakes
Whining
Unclean personal appearance
Withdraws, doesn't get involved with others (describe)

Worries

Please describe any problems the pupil has and were not listed above:
Social Skills Checklist

1 = Almost always  2 = Often  3 = Sometimes  4 = Almost never

1. Makes eye contact when speaking/listening
2. Enters activities with other children (describe)
3. Initiates conversation with other children
4. Responds to conversation of other children
5. Shares things with other children
6. Offers to help others
7. Spontaneously helps others
8. Allows others to interrupt conversation
9. Refrains from interrupting others’ conversation
10. Praises others
11. Maintains topic of conversation
12. Refrains from showing offensive habits
13. Speaks at an acceptable volume level
14. Apologises for social transgressions
15. Avoids displays of strange or bizarre mannerisms
16. Disagrees without arguing
17. Uses positive over negative criticism
18. Avoids bossing others
19. Ignores provocative social stimuli
20. Initiates or works at tasks without outside help
PARENT REPORT FORM
(based on Achenbach rating scales)

Name of child:

Age:

School:

Parent's work:

Questionnaire

School:

Has your child ever had to repeat a year at school?

What, if any, additional support for learning does he receive at school:

Current school performance:

Far below year group

Somewhat below year group

Level with year group

Somewhat above year level

Far above year level

(If different for different academic subjects please specify)
(Use the following scales to answer the questions. Please feel free to add any additional comments)

1. Much less 2. Somewhat less 3. Slightly less
4. About average 5. Slightly more 6. Somewhat more
7. Much more

Compared to typical children of the same age:

1. How hard is he working?

2. How appropriately is he behaving?

3. How much is he learning?

4. How happy is he?

What, if anything, concerns you most about your child at school:

at home:
What do you think your child does best?

Please comment generally on your child's:

Attitude to Work:

Behaviour:

Potential:
Please use the following scales to comment on the questions below. You may also write additional comments if you feel this would be helpful.

0 = Not True (as far as you know)  1 = Somewhat or Sometimes True

2 = Very True or Often True

Acts too young for his age

Hums or makes other odd noises

Argues a lot

Fails to finish things he starts

Defiant, talks back

Bragging, boasting

Can't concentrate, can't pay attention for long

Can't get his mind off certain thoughts; obsessions (describe)

Can't sit still, restless or hyperactive

Dependent on adults (give example)
Complains of having few friends

Confused or seems to be in a fog

Cries a lot

Fidgets

Cruelty, bullying or meanness to others

Daydreams or gets lost in his thoughts

Deliberately self harms

Demands a lot of attention

 Destroys his own things

Destroys property belonging to others

Difficulty in following directions/rules/instructions (describe)

Disobedient at school
Doesn’t get on with other children (describe)

Doesn’t seems to feel guilty after misbehaving

Easily jealous

Fears/dislikes certain animals, situations or places other than school (describe)

Fears/dislikes going to school

Fears/dislikes change (describe)

Fears he might think or do something wrong

Feels he has to be perfect/get work, answers, correct

Feels no one likes him

Feels others are out to get him

Feels worthless or inferior

Gets hurt a lot, accident-prone
Gets into many fights

Gets teased a lot/sometimes

Hangs around with others who get in trouble

Impulsive or acts without thinking

Is often on his own

Lies/cheats

Bites finger nails

Nervous, high-strung, or tense

Nervous movements or twitching (describe)

Would rather be alone than with others

Over conforms to rules

Not liked by other children (describe)
Has difficulty learning

Too fearful or anxious

Feels guilty

Talks out of turn

Presents as overtired

Physically attacks people

Apathetic or unmotivated

Poor school work

Poorly coordinated or clumsy

Prefers being with older children or youths

Prefers being with younger children

Will refuse to talk

Repeats certain acts/phrases over and over; compulsions (describe)
Self conscious or easily embarrassed

Messy work

Behaves irresponsibly (describe)

Showing off or clowning

Shy or timid

Explosive and unpredictable behaviour

Demand must be met immediately, easily frustrated

Inattentive, easily distracted

Finds it difficult to wait his turn

Stares blankly

Feels hurt when criticised

Steals
Stores up things he doesn’t need (describe)

Strange behaviour (describe)

Strange ideas/thoughts/words (describe)

Stubborn, sullen or irritable

Sudden changes in mood or feelings

Sulks a lot

Suspicious

Swearing or obscene language

Talks about hurting himself

Teases a lot

Temper tantrums or hot temper
Threatens people

Tardy or late to school

Poor organisational skills (describe)

Too concerned with neatness or cleanliness

Fails to carry out assigned tasks

Truancy or unexplained absence at school

Underactive, slow moving, or lacking energy

Unhappy, sad or depressed

Unusually loud

Overly anxious to please

Dislikes school

Is afraid of making mistakes

Whining
Unclean personal appearance

Withdraws, doesn’t get involved with others (describe)

Worries (describe)

Please describe any problems your child has that were not listed above:
Social Skills Checklist

*Use the following scale to help answer the questions. Please feel free to add any additional comments.*

1 = Almost always  2 = Often  3 = Sometimes  4 = Almost never

1. Makes eye contact when speaking/listening
2. Enters activities with other children (describe)
3. Initiates conversation with other children
4. Responds to conversation of other children
5. Shares things with other children
6. Offers to help others
7. Spontaneously helps others
8. Allows others to interrupt conversation
9. Refrains from interrupting others’ conversation
10. Praises others
11. Maintains topic of conversation
12. Refrains from showing offensive habits
13. Speaks at an acceptable volume level
14. Apologises for social transgressions
15. Avoids displays of strange or bizarre mannerisms
16. Disagrees without arguing
17. Uses positive over negative criticism
18. Avoids bossing others
19. Ignores provocative social stimuli
20. Initiates or works at tasks without outside help
The following extract is taken from Part 3 of ER's interview for *The Puppy Story*. The extract contains examples of 3 of the 4 cognitive-linguistic devices: *mime, metaphor and mental role play*. Numbers in brackets relate to the position of the utterance on the audio tape recording. Words in bold indicate vocal emphasis.

R: OK. Right. We've been talking about how Mike feels angry and loving. Now I'd like you just think about the angry feelings. Alright? How could you tell that Mike was angry at Pepper? When Pepper had destroyed his plane.

ER: Like fearless.

R: Fearless?

ER: Yeah. **MIME** {fierce – arms outstretched and with wide spread clenched fingers and clenched teeth}

R: Yes. Oh..oh right. (laugh) How would he act towards Pepper? When he's angry?

ER: Act *(said to self)*..oh..like really real *(anger? phnon – manga xx obscure)* like a giant. **METAPHOR**

R: Like a giant?

ER: Yeah. *(nods head)*

R: So really like a giant.

ER: Yeah. And he..Mike could eat him.

R: Mike would eat him?

ER: Yeah. (laugh) *(nods head)*

R: (laugh) How would he look at Pepper?

ER: ...Kind of..grumpy.

R: Grumpy?

ER: *(nods head slightly)*

R: Yes. Grumpy. And how else would Mike show his angry feelings?

ER: Angry feelings..um like *(to self 285)*......... Ss'sad. because um..dog could cry and..and sa'..and dogs mi'.could dry *(phono. 290)* and um..Mike
said sorry to say that but I'm not allowed to say that and...oh....they will be friends. MRP (goes into role - tone of voice/intonation alters)

R: And they'd be friends?

ER: Yeah. (nods head)

R: {Yeah. OK. Is there any way that you could tell that Mike also loved Pepper when he's angry at him?

ER: Nmm (shakes head)

R: No? OK. How do you think Mike would feel if a neighbour's dog had wrecked his plane?

ER: He will be angry. (thinks about question - then very certain response - nods head +++ and smiles)

R: He'd be angry?

ER: (laugh) Yes. (nods head+++)

R: (laugh) Really angry?

ER: Yeah. (nods head)

R: Really angry. Would he act differently than he did towards Pepper?

ER: ... (nods head slightly)

R: Yeah?

ER: Um.. (hand obscures face and mouth)

R: {And how would...how would he act differently?

ER: ..Pepper..Pepper could be ha..ppy and the other dog could be fearless..to..

R: {Right.

ER: ..Mike.

R: So..

ER: {Because Mike does like him.

R: Who does Mike like? Mike likes Pepper?

ER: A'..yeah Mike like Pepper but..Mike doesn't like the next door's n'neighbour dog.
Quotations from the SLI children's transcribed interviews:

Subject: JD  
Age: 13 years 2 months

(JD1)

R: OK. How do you think Mike would feel if a neighbour's dog had wrecked his plane?

JD: Um..he would be (_ ) A dog?

R: Yeah. So a neighbour's..

JD: {Um..

R: ..{dog had wrecked the plane.

JD: Um..he would..probably go over to the next door..

R: Mmm..mmm.

JD: ..and talk to the adult.

R: Right.

JD: And then the adult will probably tell off the..dog. And that would be the end of that.

R: And that would be the end of that. That's right. Do you think he'd act differently than he did towards Pepper?

JD: Yeah. (definite) (nods head++)

R: Yeah. And how would he act differently?

JD: Because..its not his dog is it and he can't shout at other dogs.

R: Right. I see. Yeah. So he could shout at Pepper..

JD: {Yeah.

R: ..'cos its..

JD: Yeah. 'Cos it's his own dog.

R: Yeah. But he couldn't do that at the other one.

JD: No.
R: I see. Do you think the feelings would be the same?

JD: Um.. a bit.

R: Mmm?

JD: (nods head)

(JD2)

R: ( ) So.. will.. will the loving feelings that have gone away will they ever come back?

JD: Probably.

R: They will. And what do you think might make the loving feelings come back?

JD: Um.. Mike could hit another ball over.

R: Yeah.

JD: {In the garden.

R: Yes. And then Pepper could find it..

JD: {Yeah.

R: .. or something.

JD: Yeah. (nods head++)

R: Any.. any other.. things that might make these feelings come back? Mike's loving feelings?

JD: No. (shakes head++) I don't know (relaxed body posture and facial expression)

R: No?

JD: No.
R: OK. Do you think that Mike could feel both love and anger towards Pepper?

JD: Yeah. (definite) (nods head+++)

R: Yeah. How..how do you think that works?

JD: Um..because..in the morning..Mike loved her..

R: {Mmm..mmm.

JD: ..like getting the ball and then..and then Pepper chewed it up..his plane so it could be..um..the same really. (some struggle behaviour)

R: Yeah.

JD: Could be like normal.

R: Yes. Be like normal.

JD: (nods head++)

R: (JD4)

R: How do you think Bill feels about the new kitten?

JD: (looks at facial expression cards & then towards the end of the utterance looks at the story picture cards) Um..he could be..OK with it because he still got feelings for..Snowball..um but he’s..but he’s can’t like con’.like compare ‘em for each one. (struggle) (very brief gesture with hands as if indicating 2 kittens in two different spaces)

R: That’s right. (xx obscure) So..when he feels..when he thinks about the new kitten..how did you say he’d feel..he feels (__)?

JD: He feels OK. (OK said as if in inverted commas – not OK + happy/fine – rather flat – OK as if a mid point between happy/sad)

R: He feels OK.

JD: Because he’s (__)..because the new..a new kitten would be..happy for him..

R: {Mmm..mmm.
JD: .. (looking at story picture cards) but he still got feelings for the..other cat that is so he..so he's in the middle. (METAPHOR)

(JD5)

R: (________) Last question just about. (laugh) (JD smiles) How would you feel if you were given a kitten for your birthday after losing one that you'd loved?

JD: (looking at/scanning facial expression cards) I would be..I'll be OK (intonation pattern as earlier)

R: You'd be OK?

JD: Yeah. (nods head briefly)

R: Yeah. So do you think you'd feel the same as Bill or different?

JD: The same as Bill.

(JD6)

R: Yeah. Well done. Yeah. And so..do you think these sad feelings will go away?

JD: Yeah. (nods head) (quiet, low voice)

R: Yeah. They would. And what do you think makes sad feelings go away?

JD: (appears to look at end pictures of story) Um..if you go out for a day out.

R: Yeah. Yes.

JD: And..then you'll just..then he'll just forget..about his bad times.

R: Yeah. Yeah.

JD: And he'll be happy.

R: Yeah. Is there anything else children can do to make sad feelings go away?

JD: ...(sigh) Don't know. (shakes head+++)

R: That's lovely. Will the sad feelings come back again?
JD: Probably.

R: Mmm...mmm.

JD: If he sees like another cat or summut like that.

R: Right. Right. So is there anything else that might make them come back?

JD: ..Don't know. *(shakes head+++)*

**Subject: AB**

**Age: 11 years 9 months**

* (AB1)*

R: OK. How do you think Mike would show his loving feelings to Pepper?

AB: ..Uh...Can't think. *(shakes head)*

R: Mmm. OK.

AB: {Don't know.

R: How would he act towards Pepper do you think?

AB: *(no eye contact)* Uh..uh.....I don't know.

R: No. That's alright. How do you think Mike would look at Pepper?

AB: ..Uh..like just look it. *(laugh)*

R: What do you think his face..

AB: {Look..

R: ..would look like?

AB: ..normal.

R: Normal. OK. Lovely. Any other way that you could tell that Mike loved Pepper?

AB: Uh..that he got the ball.

R: That he got the ball. Well done. That's fantastic. Right that's all those questions. So this is the second part of the story now alright?

AB: OK.
R: (   ) Um....how..sorry..how did Mike feel towards Pepper in the morning when Pepper had found the ball?

AB: ..Uh..really really happy because he did.

R: That's right. And..do you remember..I think you said that Mike loved Pepper..

AB: {Yeah. (nods head slightly)

R: ..then. That's right. And now he feels?

AB: That he doesn't love him anymore. (shakes head)

R: Doesn't love him anymore. That's right. Um..what happened to the loving feelings?

AB: Uh..they just went and..they just went.

R: They just went. That's right. Did they all go?

AB: Uh..some of them. Probably.

R: {S'ss..Some of them went.

AB: Yeah.

R: Yeah. Um..will they ever come back again?

AB: Uh..if..if the dog's nice. (laugh)

R: If the dog's nice. (laugh) Right. (laugh) So the..the loving feelings that Mike has toward Pepper..towards Pepper..will come back if Pepper's nice?

AB: Yeah. (nods head)

R: To Mike. Um..is there anything else that might bring them back? The loving feelings?

AB: Uh..that..that if he.. if he helped the boy like get the ball or..get..or like (laugh) ..and then haven't bursted it but yeah.

R: So..if he helped him get the..the ball or did something for him..

AB: {Yeah. (nods head++)
R: ..do you think?

AB: That's what I mean. Yeah.

R: Yeah. Uh..what happens if Pepper didn't do any of those things? Uh..

AB: {Uh..that he'd take him somewhere else. Take him somewhere else to another (__) to the shop or (\_)

R: Mike would take..him somewhere else?

AB: Or the..to a family maybe.

R: Oh right to another family?

AB: (nods head) Yeah (very definite)

(AB3)

R: ( ) Will Bill think about Snowball when he sees the new kitten?

AB: Yeah. (definite - nods head)

R: He will. And..(cough) what..what will Bill think?

AB: Uh..that when..um..that he'll remember..when..when he's got that kitten..

R: {Mmm..mmm.

AB: ..he'll remember about Snowball..when he was trying to find him.

R: Yeah. That's right.

AB: On his I take it eleventh birthday

R: {(laugh)

AB: Or when he's twelve. (laugh)

R: (laugh) That's right. Yes. Um..if Bill thinks..about Snowball will he stay happy?

AB: Yeah. (definite) (nods head)
(AB4)

R: ( ) When Bill is happy do the sad feelings go away?

AB: (looks at picture laid on table by R.) No. (shakes head) I think they still stay.

(AB5)

R: ( ) Would Bill feel happy and sad at the same time? Or would he feel first one and then another?

AB: (looks at pictures as R. lays them on table) Uh..the same.

R: At the same time?

AB: (nods head+) Yeah.

R: OK. Well done. Do the sort of sad feelings about losing Snowball mix together with the happy feelings? Or do they stay separate?

AB: (looks at picture cards R. lays on table) I think both.

R: Mmm. That's a hard one isn't it? Which..which do you think would be the best if you had to..say?

AB: (looks at pictures) That one. (pointing to picture)

R: They'd stay separate?

AB: Yeah. (very definite)

R: The sad and happy feeling would stay separate?

AB: Yeah.
**Subject:** GG  
**Age:** 9 years 10 months

(GG1)

R: Did the loving feelings go away?

GG: Yeah. *(definite – nods head)*

R: Yeah. Um..and are they all gone?

GG: ..No. *(definite)*

R: No. Um..so..some of them have gone away and some of them will stay.

GG: *(nods head)* Mmm.

R: What uh..what will make all the loving feelings come back again?

GG: Um..if Pepper..um..done someth’ for him...again?

R: Yeah. Yes. If he does something. Um..if Pepper doesn’t do anything for Mike again will Mike stop loving him?

GG: .....um..yeah. Probably.

(GG2)

R: How would you know..that Mike still loved Pepper even though he was angry at him?

GG: ‘Cos he would still have that feeling in his head. *(METAPHOR)*

R: He would have that feeling in his head. And how would you know that he’s got that feeling in his head?

GG: ..Because you ima’..imagine it?
Subject: ER
Age: 9 years 3 months

(ER1)

R: ( ) So how do you think Mike feels about Pepper now?

ER: ..A bit sad?

R: Yes. I think he..

    ER: {Bit sad. (said very quietly to self)

R: ..does. I think he does feel sad. Do you want to pull your chair round a little bit?

ER: Sorry.

R: No that’s OK you’re doing fine. And why does he feel sad now?

ER: Um..because he made that today. And it’s..that’s a big waste.

R: He made it today and it’s a big waste.

    ER: {Yeah.

R: That’s right. Um..could Mike feel anything else along with being sad?

ER: …..He forgive him.

R: Do you think he forgave..

    ER: {Yeah if ( ) he could forgive him. And he give..he could give..give him one more chance. (shuts eyes)

R: And you think he give him one more chance?

ER: Yeah. (nods head++)

R: Right. So Mike feels..sad.

ER: Yeah. And he could forgive him. (closes eyes)

R: But he forgive him. Do you think he’d be angry as well?

ER: Kind of.

R: Kind of.
ER: Yeah.

R: Yeah. Kind of angry? Mmm. Not so..sure about that one?

ER: Not sure. *(shakes head)*

R: But you think he'd forgive..

ER: {Yeah. *(nods head)* And give him one more chance.}

R: And give him one more chance. Um..I mean some children have told me that Mike was really angry at Pepper for breaking his plane. How..how do you think that would be?

ER: Um..Quite annoyed.

R: Quite annoyed.

ER: Yeah.

R: Yeah. OK. So..Mike feels sad and he feels a bit annoyed but you think he'd forgive Pepper?

ER: Yeah. *(nods head)*

(ER2)

R: OK. Could Beel..Bill feel both angry and sad?

ER: Pardon? *(very puzzled facial expression and intonation)*

R: Could Bill feel angry and sad?

ER: ..B't'..on that one both together? *(points to end of story picture sequence i.e. last picture in sequence)*

R: Yeah.

ER: Yeah. *(uncertain intonation)*

R: Yeah? And how..how can that happen?

ER: Me don't know. *(shakes head)*

R: Don't know?

ER: No. *(shakes head)* He's sad. *(points to sad picture)* Just sad.
R: He's just sad?

ER: Yeah. (nods head) On that one.

R: You think at the end where he's just sad?

ER: (nods head)

R: Yeah?

ER: Yeah (definite intonation)

R: Um..but you think..you think he could feel sad and angry at the same time?

ER: No. (very uncertain)

R: No?

ER: (shakes head) Yeah. (watches R. intently and changes his mind when questioned)

R: (laugh) Its up to you. There's no right answers.

ER: I don't know

R: {What do you think?

ER: I don't really know that. There is no answer? What's the answer?

R: There isn't an answer.

ER: Tell me.

R: Look. There isn't an answer. Look. There's no answers down here look. See?

ER: What..where's the question? (looking at R.'s interview script)

R: (reading out question) Would Bill feel mad..or angry and sad at the same time? Would Bill feel both sad and angry?

ER: One and then the other (reading question) I don't really know that.

R: That's OK.

ER: I was thinking of ( )

R: Well have a think. Let me ask the question. Um..

ER: No. (shakes head)
R: OK Um..what's going to happen to those angry feelings?

ER: ....Maybe uh..Mike will c'cry and he'll forgive him.

R: You think Mike'll cry?

ER: Yeah.

R: And then he'll forgive Pepper?

ER: Yeah.

R: Yeah.

ER: {And like in the first time..um he will be angry..

R: {Mmm.

ER: ..and the dog..and Pepper will go.

R: {Mmm..mmm.

ER: ..and den um..Mike saw him and he will cry and..and they could be friends again.  (uses hands but very non-specific gesture – just emphasising words)

(ER4)

R: ( ) How do you think Mike would feel if a neighbour's dog had wrecked his plane?

ER: He will be angry.  (thinks about question – then very certain response – nods head +++ and smiles)

R: He'd be angry?

ER: (laugh) Yes.  (nods head+++)

R: (laugh) Really angry?

ER: Yeah.  (nods head)

R: Really angry. Would he act differently than he did towards Pepper?

ER: ... (nods head slightly)
R: Yeah?

ER: Um.. *(hand obscures face and mouth)*

R: {And how would..how would he act differently?}

ER: ..Pepper..Pepper could be haa..ppy and the other dog could be fear..less..to..

R: {Right.

ER: ..Mike.

R: So..

ER: {Because Mike does like him.

R: Who does Mike like? Mike likes Pepper?

ER: A'..yeah Mike like Pepper but..Mike doesn't like the next door's n'neighbour dog.

(ER5)

R: *( ) Would Mike feel love and anger at the same time or first one and then the other?*

ER: One and then the other. *(very quick response)*

R: One and then the other. Well done. Do you think the angry feelings mix together with the angry feelings or stay separate?

ER: Stay separate. *(definite)*

(ER6)

R: *( ) What do you thinks going to happen to..Bill's mixed up feelings?*

ER: ..They could um..the sad could come again? *(vowel distortion so "sad" sounded like "same")*

R: The same could come again?
ER: {No. No. The happy could come again when he sees the um..Snowball and they'll have (_) and then Billy will have two cats.

R: Oh but he doesn't..

ER: {And then he'll be happy.

R: He doesn't find Snowball again. So..

ER: {Oh.

R: ..do you think the mixed up (_) what would happen to them?

ER: Urm..one of them will go away ?

R: One of them will go away?

ER: Yes.

R: Yeah. Which one do you think?

ER: Oh..erm..the sad?

R: The sad? (ER nods) Yeah. Well done.

(ER7)

R: ( ) Is there anything that children can do to make their angry feelings go away?

ER: Um..oh yeah um Mike could do the dog's writing.

R: He could do the dog's (_)?

ER: Writing. Den um like he..the dog could do {painting with his paws}. MIME (painting with his paws – hands pressing down on desk)

R: Yes. That'd be nice.

ER: {And he will do a picture and he will..the dog will forgive.. Mike.

R: The dog will forgive Mike?

ER: Yeah and they'll be friends.

R: And they'll be friends. Do you think Mike will forgive the dog?
ER: Yeah. *(nods head +++*)

(ER8)
R: Um..what can make sad feelings go away?
ER: ...
R: Could anything make sad feelings go away?
ER: {The cat could do some tricks.
R: (xx x obscure)
ER: {And he..and he think he's the better than the other one.

(ER9)
R: ( ) Is there anything that children..children can do to make their..

*(looks up at story picture cards laid out on table)*
R: ..sad feelings go away?
ER: What's the children?
ER: What is it again?
R: Is there anything that children can do to make their sad feelings go away?
ER: Um..not really. I don’t know. No'not really.
APPENDIX 12

Summary of information obtained from the parent interviews and parent and school questionnaires

Subject name: JD
Chronological age: 13 years 2 months

Summary of information obtained from mother. The Pragmatics Profile of Everyday Communication Skills in School-Age Children and the Parents Report Form were both completed and returned to the researcher by the mother. On the advice of the school’s SENCo. the Achenbach Teacher’s Report Form was completed by the child’s Teaching Assistant who had known him for 2 years 10 months.

Parent interview
JD’s mother (Mrs. D.) felt the videos were an accurate reflection of her son’s abilities both in terms of language development and social and emotional development. She felt her son was delayed in his emotional maturity and placed him at around the 8 - 9 year old level for social and emotional skills. She felt that because he was so good at football he was able to socialise on an equal level with peers during sporting activities. However, her main concern was his social immaturity and the effect this had on adults inside and outside school and on peer relationships outside of sports. She considered persisting social immaturity as her biggest worry in terms of JD’s future as she felt this could affect both employment and personal relationships. She hoped JD would receive the necessary opportunities and support in school to develop his social skills. She felt that he was making progress in this area and felt very proud of how much he had achieved since first being diagnosed with a severe language disorder and attending the Language Unit. Mrs. D rated JD’s general level of happiness and well being as about average.

The Pragmatics Profile of Everyday Communication Skills in School-Age Children
Mrs. D felt that JD had a young sense of humour which mainly involved slapstick and practical jokes. He found indirect requests and implied or inferred information very difficult to understand. He tended to monopolise conversations, and when talking didn’t give enough information so that it could be difficult to follow what he meant.

Parent’s Report Form
Mrs. D felt that JD’s current school performance was somewhat below his year group. He found it difficult to concentrate and his listening skills were poor. He could become disruptive if bored. He liked to have an adult as a "prop" to give him confidence but could become over reliant and dependent on their help. Generally Mrs. D felt he was working somewhat less than typical children of the same age. The appropriateness of his behaviour and the amount he was learning was also less than typical children of the same
age. He was easily upset and could cry a lot if not coping with a situation. He tended to over conform to rules and could feel anxious and guilty. JD was a worrier who wouldn’t take risks, if he thought he would fail at something he would refuse to try. He felt he had to be perfect and get work and answers correct. His anxiety could affect his sleep and cause bad dreams. He could be demanding of attention and very moody if things didn’t go his way, often impulsive and acted without thinking. His demands had to be met immediately and he was easily frustrated. He found it difficult to wait his turn. He could say things at inappropriate times and was sometimes teased at school. As a young child he displayed severe temper tantrums and these could sometimes still occur. He has had poor organisational and self help skills although these were beginning to improve. He often had difficulty following directions or instructions. He was obsessed with time and time was very important to him – he must never be late. He found it difficult to cope with change or the unexpected. During the parent interview Mrs. D gave the example of helping JD cope with going to school on his own by bus when he had started secondary school. They had rehearsed this together and also gone through possible “emergency” situations such as the bus not turning up or JD getting off at the wrong stop. Mrs. D always made sure she had her mobile phone with her and although JD was not allowed to take a mobile phone to school they had rehearsed how he could find a phone in order to contact her.

JD usually made eye contact when listening and speaking. He entered activities with other children if football was involved. He would initiate conversation with other children provided he knew them. He was becoming more independent, and had just started going out to play with friends unaccompanied. JD often interrupted conversations but only sometimes allowed other’s to interrupt his. His speaking voice could be inappropriately loud. He could sometimes maintain a topic of conversation if he was interested in it. He rarely if ever spontaneously helped others although would sometimes offer to do so. He rarely if ever apologised for social transgressions and found it difficult to disagree without arguing. He was often bossy with adults and peers and could not ignore provocative social stimuli which could get him into trouble at school, both in the classroom and outside in the playground.

Information obtained from the Achenbach Teacher’s Report Form and completed by the child’s Teaching Assistant (Mrs. C)

Generally the responses to this form showed a high level of agreement with those received from JD’s mother. As to be expected there was more detailed information regarding JD’s performance and presentation at school. This, together with the Teaching Assistant’s own perception of JD is now given below.

Mrs. C supported JD in all lessons except P.E. Maths and French. His academic performance was far below his year group in History, Geography,
Art (which he disliked) and French. English, Science, Design and Technology and Music were somewhat below his year group. JD performed on a level with his year group for Information Technology and Drama. His performance in Maths had been level with his peers but that had recently begun to decline. He was somewhat above year level for all aspects of P.E. and especially football.

Mrs. C felt JD worked more than typical pupils of the same age for subjects he enjoyed but somewhat less for those he was not interested in. If he enjoyed a subject then he was able to learn slightly less or about average for his age. However, for those subjects he was not interested in he was learning much less than his peers. Mrs. C felt that JD presented generally as slightly happier than other pupils of his age group.

Mrs. C felt that JD acted young for his age but that if this was taken into account then his general behaviour could be termed good. He was generally a delightful, friendly boy and Mrs. C felt JD trusted her. JD was very sensitive and could make others feel good. However, JD's social and emotional immaturity did impact adversely on his presentation and performance in school. Mrs. C's main concern was JD's ability to irritate his peers and deliberately antagonise other vulnerable children. He could become moody if not understanding a lesson or not interested in it. He would then use distraction strategies to get out of activities or work such as saying he had a headache, going to the toilet, pretending to go to sleep or often showing off and clowning around. Conversely he could often become very self-conscious and easily embarrassed. JD was very jealous of another special needs pupil in the same year group, also supported by Mrs. C. JD was unable to ignore this pupil and often teased this child provoking him into displays of aggression and violence. (This violence and aggression reported to this researcher by the SENCo.). JD would often apologise for these social transgressions although he did not appear to fully understand or accept the role he had played in creating them. For the past year JD had been attending a weekly social skills group run by the SENCo. and a Teaching Assistant.
Subject name: AB
Chronological age: 11 years 9 months

Summary of information obtained from both parents (Mr. and Mrs. B). The Pragmatics Profile of Everyday Communication Skills in School-Age Children and the Parents Report Form were both completed and returned to the researcher by the mother. Although the parents gave their permission for the researcher to contact school staff no response to either telephone calls or letters was received from the school. There is therefore no information available from the Achenbach Teacher’s Report Form.

Parent interview
Both parents felt the videos were an accurate reflection of their son’s language skills and level of social and emotional maturity. Mrs. B commented on how much AB had enjoyed taking part in the research and looked forward to coming to the sessions. This included the sessions of language assessment. All the sessions took place during the school holidays when AB finds it difficult to occupy his time. Mr. and Mrs. B both felt their son was very immature for his age. Mrs. B said she would regard him at about 6 - 7 years of age for emotional development. She gave the example of AB choosing a Winnie the Pooh lunch box and flask to take to secondary school. Mrs. B also explained the difficulties of school holidays. AB found it difficult to find things to do and it was necessary for her to have an organised plan of activities. However family outings could be problematic as it could be difficult to arrange activities which catered both for AB and his older brother. The family usually went to theme parks or events which appealed to a wide age range of interests.

Both parents were extremely concerned about their son’s level of social and emotional immaturity. Mr. B acknowledged that AB had made very significant progress with his language skills and he did not feel concerned about AB’s academic progress. However, Mr. B did not understand why, given his good language progress, AB still presented like a "little boy". No one had been able to explain this to them. Mrs. B had been concerned that their parenting skills caused AB to act like a much younger child. She worried that she had been too over protective of him because of his earlier language difficulties. Mrs. B said she tired to encourage AB to be independent. Mrs. B also described how AB expressed affection for her by hugging, kissing and “hanging on to her”. She tried to give him what she felt were more age appropriate ways of expressing affection.

Both parents had sought help and advice from professionals including the school’s Educational Psychologist, teaching staff and school staff with designated responsibility for special needs and vulnerable pupils. They described themselves as “frustrated” by not having their concerns acknowledged or taken seriously and they had not received any advice. They felt that this research AB had taken part in was the first time his continuing emotional needs and difficulties had been recognised. Mr. B said he felt that once AB’s language had improved everyone they talked to thought AB was now OK and no one saw AB’s immaturity as something to be concerned
about. However, both parents felt that the school did support AB as much as they were able to. AB was regarded as a vulnerable boy at risk of bullying. In order to prevent this AB had recently been given the job of helping the school Librarian during lunch time. This had been presented to AB by school as a special reward for his good behaviour and AB was very proud of this. In fact the job had been designed so that AB was not exposed to the possibility of bullying in the playground during the long lunch hour.

Mrs. B commented that although she had realised how behind her son was in his emotional development it had still been a shock to watch him on the video and to realise that he didn’t even seem to understand the difference between very basic emotions such as being angry and being sad. Mrs. B said she felt very concerned when she thought of AB’s future and wondered how he would manage with employment and personal relationships. Both parents said they put a lot of effort into talking to AB about social and emotional issues, trying to explain why people might do or say things and also trying to explain AB’s own feelings to him. When AB was very upset he could develop severe temper tantrums and had to be left on his own to calm down but Mrs. B always made a point of talking to AB about what had happened. These temper tantrums were decreasing in frequency.

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Mrs. B’s report of AB’s communication skills indicated a child with a range of pragmatic difficulties. In conversations about school or something not known to his parents AB would not give enough information for parents to understand the topic. He assumed the listener knew more than they did. When parents said they couldn’t understand what AB was talking about AB would keep repeating the information and believed that the breakdown in communication was his parent’s fault. He would interrupt when someone else was speaking. AB could continue a topic for too long and it was sometimes necessary for parents to terminate the conversation. When giving instructions, sequences and aims were muddled. When describing a narrative, such as a book or television programme, events and characters were not sufficiently identified and the sequence jumbled.

Mrs. B reported that AB did not seem to have a very good sense of humour. His attempt at humour would be doing something he thought was funny such as hiding and then appearing. He found slapstick, visual jokes funny and would laugh at silly rhymes. If someone used sarcasm he would contradict them, having taken the meaning literally.

AB preferred to socialise with close family members: brother, parents, cousin. At school AB had one particular friend he liked to be with. Apart from this he preferred to talk and be with adults. AB would join in with other children and with enjoyment but would try and dominate the play if allowed. His language around play would consist of making up rules and organising the other children. AB was always polite and said *please* and *thank you*. AB was polite to adults and teachers and *nice* children. He would comment on other people’s rudeness and could not seem to understand or work out why people said or did such things.
Parent Report Form
AB was provided with his own Teaching Assistant who supported him for half his time in school (0.5 allocation). Mrs. B felt AB's current school performance was somewhat above year level. She felt he worked much harder that typical children of the same age and also behaved a lot more appropriately (i.e. he was polite to adults/teachers and not disruptive in class). Mrs. B felt AB was learning a lot more than his peer group and that he was somewhat happier than the majority of children his age. Her main concern at school was bullying from peers and at home she felt he needed to relax more. Mrs. B felt AB had a lot of potential which he would achieve with parental support.

Mrs. B stated that AB acted too young for his age and argued a lot. He was often defiant and talked aback. He had obsessive thoughts and thought a lot about past events which had no bearing on the present. He did present with strange behaviours such as still twiddling his mother's ears and squeezing her too tight. He hoarded items he didn’t need. He felt he had to be perfect and get work and answers correct. He was often impulsive and acted without thinking. He was often on his own which he preferred. He would play with younger children. He was often stubborn, sullen or irritable and had sudden changes in mood or feelings. His voice was often unusually loud and he was overly anxious to please.

AB almost never allowed others to interrupt his conversation but he was unable to refrain from interrupting the conversation of other people. He was sometimes able to maintain a topic of conversation. He could sometimes apologise for social transgressions if proved to be in the wrong. He was unable to disagree without arguing and liked to be in charge. He was unable to ignore provocative social stimuli.

Information obtained from the Achenbach Teacher's Report Form
No information received from school.
Subject name: GG  
Chronological age: 9 years 10 months

Mrs. G was happy to discuss her son GG after viewing the video of the research sessions. Mrs. G also gave permission for the researcher to contact GG’s class teacher, however she did not wish to complete The Pragmatics Profile of Everyday Communication Skills in School-Age Children or the Parent Report Form. Mrs. G did allow the class teacher to answer those questions which were applicable from The Pragmatics Profile.

Parent interview

Mrs. G felt the videos were an accurate reflection of her son’s emotional understanding and language abilities. She did feel that he presented as very nervous in the first session (The Puppy Story). GG blinked repeatedly throughout this session. He had said it was due to an allergy but Mrs. G had not seen him do this before and felt it was due to anxiety. There was no blinking during the second video (The Kitten Story) and Mrs. G felt GG was generally much more relaxed during this session. Mrs. G said she felt her son did sometimes present as young for his age (about aged 7 - 8 years) but this was variable and sometimes she felt he could be quite mature. Mrs. G was mainly concerned about GG’s literacy development which she felt could hinder his education. However, she felt GG was good at practical skills and thought he would do well in these areas in the future. She felt GG was happy at school and had friends.

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This was completed by Ms M (class teacher). Ms. M felt GG presented as a younger child. In class he appeared very passive and required constant reassurance in order to complete a task. GG would continually seek out Ms M for support which she found difficult to cope with. When trying to obtain help GG found it difficult to put his request into a meaningful context. When giving explanations or instructions sequences and aims quickly became muddled and GG’s story telling skills were poor. GG did not understand implied information, indirect requests or sarcasm. GG did not make jokes and did not always understand jokes especially those reliant on puns and word play. Humour had to be very obvious such as slapstick or visual jokes. Generally GG presented as impervious to what was happening around him and he took a minimal part in classroom life. He did talk to one other child in the class who was considered a very able child but did not take part in group discussions and took no notice of the other children around him. He did play with a friend at break times and liked attention from adults. He was a very polite and kind boy who was good at art.

Information obtained from the Achenbach Teacher’s Report Form and completed by the child’s Class Teacher (Ms M)

GG’s school performance was somewhat below his year group and he was in the bottom group for literacy skills. Ms M’s main concern related to GG’s lack of independence in learning and his constant need of re-assurance. Listening and attention were very difficult for GG who mostly presented as if he was in a trance and required constant prompting by adults. GG did demonstrate a
potential for practical well structured tasks and could show good imagination in his writing. However his ability to predict and hypothesise was limited. GG often failed to finish tasks, found it difficult to follow directions or instructions and appeared to day dream or be lost in his own thoughts. In class he was inattentive and easily distracted. GG did not wait for appropriate times before interrupting and when conversing could get too close physically. He quickly lost the thread of a conversation and found it difficult to move on. He needed to have his demands met quickly, and like a much younger child would pester adults to achieve this.
Subject name: ER  
Chronological age: 9 years 3 months

Parent information obtained mainly from Mrs. R (mother). Mr. R (father) did not watch the videos of his son and appeared only occasionally during the parent interview and made minimal contributions. *The Pragmatics Profile of Everyday Communication Skills in School-Age Children* and the *Parent's Report Form* were both completed and returned to the researcher by the mother. Parents gave permission for the researcher to contact school staff who talked to the researcher when she visited school to make the video recordings and also competed and returned the *Achenbach Teacher's Report Form*.

**Parent interview**

Parents felt that the videos were an accurate reflection of their son's emotional maturity and language abilities. Mrs. R felt that her son's behaviour during the second video recording (distraction strategies) was due to not coping with the complex questions. Mrs. R felt ER often acted young for his age although he could also sometimes surprise her with his level of maturity. She said she was therefore unable place an actual age level on his social and emotional behaviour but he could present with extremes of variation within these areas. Mrs. R's main concern was regarding ER's social skills and social interaction she was worried at how he would cope as he got older and especially at secondary school. Mr. R commented that he realised ER would continue to have significant problems in the future because of his language difficulties.

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In conversation ER tended to jump from topic to topic. If the topic or event was not known to the listener then he would not give enough information to make it understandable. He assumed that you knew more than you did and would mention people and events without giving any context. If the conversation broke down the fault would be the other persons. He prefers to talk about the here and now. If he wanted to join a conversation he would hover nearby until included. When giving instructions the sequence and aims would be muddied. When re-telling a narrative events and characters were not identified sufficiently for the listener to follow.

ER could understand and respond to indirect requests but sometimes had difficulties with idioms. He would either take these literally or recognise them as strange and ask what they meant. Mrs. R gave the example of being in a shoe shop and ER selecting a pair of shoes that were not suitable. Mrs. R said: *Well that's that out of the window* at which point ER went to the window and asked what she meant. ER was confused by sarcasm.

If ER was really pleased about something he would get noisy and excited. If he was hurt or upset he would cry but would also try and explain why he was upset and how he felt. He found slapstick and visual jokes funny and also silly rhymes. If telling a joke he would either omit the punch-line or not really understand what was funny about it.
ER experienced difficulties with peer interactions. He found it difficult to negotiate and would tend to get involved in lengthy arguments or ask an adult to sort out the situation. He was a sociable boy but generally uncomfortable with his peer group. He interacted with adults he knew well. He was polite to adults but could be over familiar and too trusting with people he had only just met. ER was usually silent when playing.

**Parent's Report Form**
ER was provided with his own Teaching Assistant who supported him in school five mornings a week (0.5 allocation). Mrs. R felt that ER was working somewhat below his year group but that he worked harder than typical children of his age. He was generally learning somewhat less than his peers. Mrs. R was most concerned about social interaction at school. At home she was most concerned that ER was unable to entertain himself and also with ER's interaction with adults and siblings. ER almost never apologised for social transgressions. Mrs. R felt ER was a bright boy hindered by his language disorder and especially his expressive language difficulties.

ER was dependent on adults for help with his school work. He found listening and attention very difficult and couldn't concentrate for long. He had problems following instructions and could not follow complex instructions. He over conformed to rules and could take things to heart if criticised. He was somewhat afraid of making mistakes and changes in routine although he was able to adapt to these. He could be impulsive although this was improving. He could be stubborn and sullen when reprimanded. He could be a worrier. Mrs. R explained that ER was good at sport and selected to play football for the area Youth Team. ER was very worried about when and where he would get his team T shirt and where he would be able to put it on. He was completely unconcerned about playing in a tournament and had no difficulties with nerves before a match. Mrs. R felt that ER presented as equally happy in comparison with typically developing children of his age.

**Information obtained from the Achenbach Teacher's Report Form and completed by one of the child's teachers (Mrs. T)**

Generally the responses to this form showed a high level of agreement with those received from ER's mother. The form was completed by one of his class teachers (the position was a job share with one other member of staff). The teacher completing the form had known ER for 8 months and was also the school's Head teacher.

Mrs. T felt that ER was performing somewhat below his year group. She felt he was working much harder that his peers and was learning a lot more. She felt he generally behaved somewhat better than his peers and was a polite and good natured boy. She felt he was slightly happier than typical children of his age. His school work was well presented and showed considerable effort.

Mrs. T said ER was dependent on adults for support and in order to achieve well in school. ER disliked change such a moving to a new school or class. He was afraid that he would think or do something wrong and would over
conform to rules. He felt hurt when criticised and was overly anxious to please. In school he almost always apologised for social transgressions. He would often initiate conversation with other children and would take part in activities with other children in class (group work) and in the playground. He often spontaneously helped others and gave praise. He often responded to the conversation of other children and shared things with them. His voice could be loud but he could sometimes monitor this and speak at an acceptable volume. He was a thoughtful boy and was willing to take on responsibility, look after his friends and have fun.
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